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SUBMISSION ACCEPTED FOR THE DEGREE OF
DOCTOR OF SCIENCE IN MEDICINE
FACULTY OF HEALTH SCIENCES
UNIVERSITY OF CAPE TOWN

MENOPAUSE AND ITS MANAGEMENT
THE PHYSIOPATHOLOGIC FOUNDATION

VOLUME I

A detailed synopsis of the contents of the work
including a statement on the nature
and the value of the contribution

University of Cape Town

Cape Town, South Africa, and Cleveland, Ohio, USA
Graduation, December 10, 2007

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University of Cape Town

DEDICATION

To Moira for years of love, support, and sacrifice
To Brett and Lara and the pride we have in your achievements

To my colleagues worldwide with whom I have collaborated, debated,
and defined so many issues of importance to enhancing the health
and quality of life for women through and beyond menopause.

To the thousands of women who have honored me with their trust and opinions
as either patients or research volunteers.

"History is the only laboratory we have in which to test the consequences of thought".
Etienne Gilson

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VOLUME 2

Bound in 2 Parts

PART 1

PART 2

PROLOGUE

"Life is a journey, not a destination."
Anonymous

A sequence of exceptional clinical, teaching and research appointments between 1967 and the present have provided me with the unique opportunity of developing a body of work over these past 40 years that has, I believe, made a seminal contribution to two areas of women's health, namely, infertility and the menopause. The latter contribution will be the subject for this submission. Fortunately, my academic career has afforded me the opportunity to introduce my observations into clinical practice and thereby to influence menopause management worldwide. It is this body of my work and the activities around it that I humbly submit for consideration for the degree of Doctor of Science in Medicine at the University of Cape Town.

In the following sections of this submission, I will detail the nature of the work, its role in defining the menopause, its medical management, and the recognition of menopause as a lifecycle milestone that can serve as a catalyst for preventive health care. Given the impact of this body of work on the enhancement of overall and health-related quality of life for women worldwide, I hope the work will be regarded as seminal and justify the award of the degree.

Two unusual assignments during my training years determined the path of my life's work. In 1965, as a registrar in Obstetrics and Gynaecology at the Queen Victoria Maternity Hospital in Johannesburg, I was assigned a review article to summarize and present at the departmental journal club. The paper, entitled "The fate of the nontreated postmenopausal woman: A plea for maintenance of adequate estrogen from the puberty to the grave" (Wilson RA, Wilson TA, *Am Geriatr Soc* 11:347, 1963), triggered my interest. Menopause, in textbooks at that time, never merited more than one line, usually stating that "menopause is physiological amenorrhea". Certainly the subject was

not further addressed in textbooks, nor was it part of the medical school curriculum or of registrar training in any specialty. The second assignment was given to me after I transferred to the University of Cape Town and Groote Schuur Hospital in 1966 to complete my registrarship in obstetrics and gynaecology. That assignment was to produce a poster on the demographics of the population explosion and the need for family planning. I was forcefully struck, not by the postwar population of baby boomers, but rather by the wave that would move inevitably forward in the next 20 to 30 years through the menopause transition and beyond.

The consistent purpose of the studies conducted throughout this period of time has been to establish a scientific foundation for menopause, and to provide the factual substantiation for evidence-based guidelines for an extremely emotive subject. Initial data were gathered between 1967 and 1976 at a Menopause Clinic especially established for research purpose at the Groote Schuur Hospital and University of Cape Town. This was to become recognized as the first such unit of its type worldwide. Subsequent studies have been performed through the University Hospitals of Cleveland and Case Western Reserve University, and my clinical research center in Cleveland, Rapid Medical Research. Where collaborations have been undertaken with other researchers at other institutions, this is recognized in the citations and the body of the text. When referring to work undertaken with collaborators, I will utilize the collective term “we” in the text.

This career-long body of work is described in several sections in which I have described the detailed nature of the publications and the reasons why it might be considered sufficiently seminal for the award of this degree. Because work in process was often simultaneous, or one question answered would often raise another, this presentation is given in a scientifically logical sequence that is not necessarily chronological with the publication dates of the papers. The list of publications presented in Section 4, and set of copies of these publications reproduced in Volume 2, has been re-ordered for a logical flow that is not chronological. State of the art reviews and clinical recommendations are listed separately, but considered of no less value than the bench-type or clinical research, and will be referred to in the body of the text below. My complete list of publications by date of publication is listed in the full curriculum vitae presented in Section 8, which also includes my non-menopause-related contributions to medical science.

Studies were initially directed toward determining the specific clinical and metabolic effects of spontaneous menopause and of bilateral oophorectomy in the human female. Further studies have investigated clinical and metabolic responses to a wide range of exogenous hormones and pharmaceutical products after menopause and oophorectomy. The ultimate purpose of this research has been to determine the nature of menopause and its optimal clinical management in order to enhance the overall and health-related quality of life for women through and beyond menopause. The outcome is that key contributions have been made in virtually all areas relating to the female menopause.

SECTION 1

ABBREVIATED RESUME

Wulf H. Utian is the Arthur H. Bill Professor Emeritus of Reproductive Biology, Case Western Reserve School of Medicine; the Executive Director and Honorary Founding President of The North American Menopause Society (NAMS); Consultant in Gynecology and Women's Health, The Cleveland Clinic Foundation; and Chairman of the Advisory Board of Rapid Medical Research, where he is an active research investigator. Previously he was Director of Obstetrics and Gynecology at University Hospitals of Cleveland and Chairman of Reproductive Biology at Case Western Reserve University. Professor Utian is considered to be one of the most significant authorities on menopause and women's health issues.

Professor Utian received his medical degree (MB.BCh) from the University of the Witwatersrand, Johannesburg, South Africa, and his PhD from the University of Cape Town, South Africa. He is Board Certified in Obstetrics and Gynecology and Reproductive Endocrinology, and is a Fellow of the Royal College of Obstetricians and Gynaecologists, the American College of Obstetrics and Gynecology, and the International College of Surgeons. He is a credentialed NAMS Menopause Practitioner, and is certified in Clinical Densitometry. He is the recipient of multiple research grants.

Professor Utian has served on the NAMS Board of Trustees since he founded the Society in 1989. He is also one of the three original Founders of the International Menopause Society in 1976, of which he is Honorary Past President, and serves on a number of national and international committees.

He has been a pioneer in women's health issues and an innovator in several aspects of advanced reproductive technology. He has studied the metabolic and psychosocial aspects of hormones and menopause for 40 years. In 1967, he established the Groote Schuur Menopause Research Clinic in Cape Town, South Africa, the world's first such clinic. One of the early innovators of infertility microsurgery in the United States, he also developed one of the world's first successful in vitro fertilization centers. He performed the world's first surrogate IVF procedure in 1984. During his career, he has written over 200 papers related to women's health, and has authored five books on menopause. He is the Editor of *Menopause*, NAMS official journal and *Menopause Management*, a NAMS-endorsed publication.

A dedicated advocate for women's health, Professor Utian has achieved national and international recognition for his work. He is the recipient of numerous national and international honors and awards.

SECTION 2

A statement affirming that the work is the original work of the applicant. Where the work is of a joint nature, this has been indicated.

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March 26, 2007

This statement is to affirm that the work herewith submitted is my own work. Where work has been undertaken in collaboration with co-investigators, this is clearly notated in the document, and appropriately acknowledged in the relevant publications.

Wulf H. Utian

SECTION 3

A statement that this work has not been submitted for consideration for an equivalent degree at this or any other university.

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I hereby affirm that I have not submitted this work for an equivalent degree at this or any other University.

Wulf H. Utian

SECTION 4

LIST OF PAPERS (THE WORK) SUBMITTED FOR THE DEGREE

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NON-HORMONE THERAPY

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SECTION 5

LIST OF BOOKS AUTHORED BY THE APPLICANT
(COPIES NOT INCLUDED)

The Menopause Manual - A Woman's Guide to the Menopause
Wulf H. Utian
ISBN: 0-85200-044-8
Published: November 1978
MTP Press
Lancaster

Menopause in Modern Perspective
Wulf H. Utian
ISBN: 0-0385-6297-3
RGI86.S87 618.l'75 79-18135
Appleton-Century-Crofts, 1980

Your Middle Years: A Doctor's Guide for Today's Woman
Wulf H. Utian
ISBN: 0-8385-9937-9 Paperback
ISBN: 0-8385-9938-0 Case
Appleton-Century-Crofts, 1980

German Edition
Wechsel Jahre
Wulf H. Utian
ISBN: 3-437-00347-X
Gustan Fischer Verlag
Stuttgart, New York, 1981

The Premenstrual Syndrome
Pieter van Keep, Wulf H. Utian
ISBN: 0-85200-387-0
MTP Press, Lancs. 1981

The Controversial Climacteric
Pieter van Keep, Wulf H. Utian, Alex Vermuelen
ISBN: 0-85200-410-9
MTP Press, Lancs. 1982

Multidisciplinary Perspectives on Menopause
Marcha Flint, Fredi Kronenberg, Wulf Utian
ISBN: 0-89766-595-3 (cloth)
0-89766-595-1 (paper)
ISSN: 0077-8923
Annals of the New York Academy of Sciences, Volume 592, June 13, 1990

Managing Your Menopause
Published July 23, 1990
Wulf H. Utian and Ruth S. Jacobowitz
ISBN: 0-13-582362-5
Prentice Hall Press, New York, 1990

South African Edition
Published February 1991
ISBN: 0-86978-520-6
Struik-Timmins, Cape Town, 1991

Paperback Edition
Published July 4, 1991
ISBN: 0-13-546268-1
Prentice Hall Press, New York, 1991

Italian Edition
Vivere Bone La Menopausa
Published March 1992
ISBN: 88-200-1267-7
Sperling and Kupfer Editori, Milan, 1992

First Fireside Edition, 1992
ISBN: 0-671-76655-4
Fireside - Simon & Schuster, New York, 1992

Italian Edition - Paperback
Vivere Bene La Menopausa
Published December 1996
Wulf H. Utian and Ruth Jacobowitz
ISBN 8-7824-684-0
Sperling Paperback

The Menopause and Hormonal Replacement Therapy - Facts and Controversies
Published September 3, 1991
Regine Sitruk-Ware and Wulf H. Utian
ISBN 0-8247-8564-9
Marcel Dekker, Inc., New York, 1991

French Edition
Menopause et Traitement Hormonal Substitutit
Published December, 1994
Regine Sitruk-Ware and Wulf H. Utian
ISBN 2-87671-084-6
Frison-Roche, Paris, 1994

Spanish Edition
Menopausia y Tratamiento hormonal sustitutivo
Hechos y Controversias
Published May, 1995
Regine Sitruk Ware and Wulf H. Utian
ISBN 84-7537-138-8
Ancora SA, Barcelona, 1993

SECTION 6

A DETAILED SYNOPSIS OF THE CONTENTS OF THE WORK INCLUDING A STATEMENT ON THE NATURE AND VALUE OF THE CONTRIBUTION

The detailed synopsis of the contents of the work and the statement on the nature and the value of these contributions will be presented in the following logical sequence:

6.1 History
6.2 Terminology and definitions
6.3 Research methodology, techniques and instruments
6.4 Physiology and mechanisms
6.5 Characterizing menopause, specific symptoms and chronic conditions
6.6 New drugs and delivery systems
6.7 Sexual function
6.8 Body weight
6.9 Quality of life
6.10 Population surveys
6.11 Cost-effectiveness analysis and pharmacoeconomics
6.12 Healthcare delivery and menopause clinics
6.13 Clinical practice guidelines
6.14 Contribution to international practice through state of the art reviews, editorials and clinical recommendations
6.15 Seminal impact on world medicine through establishment of national/international menopause organizations, medical journals and a competency examination.

I do take the opportunity of thanking the examiners for the time and effort they will take in the review of this submission.

SEMINAL CONTRIBUTIONS

6.1 HISTORY

"Those who cannot learn from history are doomed to repeat it."
George Santayana

An historical survey of all issues relating to the menopause was considered integral to understanding attitudes and the existing state of knowledge at the time of my planning and designing my initial investigations. While the research literature up to late 1966 was essentially narrative in nature, there were many indirect areas of research that could help define both the level of existing knowledge as well as attitudes and perceptions at that time. Above all, by understanding and documenting a comprehensive historical survey, it became possible to define the pertinent questions that needed answers. Key papers in which I documented the history and summarized the state of the art at that time are references 1-5, 107, 109, and my monograph, "*Menopause in Modern Perspective* (Appleton, Century, Crofts, New York, 1979).

I can best summarize the background to my future studies by quoting from my first published analysis of the literature in 1968.[107] The critical review opened with the observation that "*most of what is published is based on emotional and philosophical premises; the 'change of life' is an emotional subject not only to women, but to men and doctors."* The purpose of the review was then listed as:
"1. To analyse the current thoughts regarding the menopause.
2. To draw attention to the paucity of authoritative research and published data.
3. To serve as an indication for the urgent need for research, particularly into the nature of the menopause and the methods for the relief of menopausal symptoms and disorders; the process of 'ageing' and, in particular, the occurrence of osteoporosis and atherosclerosis in postmenopausal women; and the metabolic and vascular changes following acute hormone withdrawal, e.g. after bilateral oophorectomy in the pre- and postmenopausal female."

The conclusions of that 1968 critical review determined my future career path:
"*Several questions urgently require answers:*

1. *Is the climacteric a normal physiologic stage in the life of the human female, or is it a simple result of ovarian failure and oestrogen deficiency?*
2. *Are the manifestations of ageing directly related to diminution of circulating sex hormones?*
3. *Can the administration of exogenous oestrogen or other sex hormones prevent the manifestations of ageing?*
4. *Are the oestrogens at present available for administration equivalent in effect to circulating endogenous oestrogens?*
5. *Does long-term oestrogen administration result in an increased incidence of breast or uterine carcinoma?*
6. *Do oestrogens have a direct effect on the psychological state and sense of well-being in the postmenopausal patient?*

To these ends the development of more precise diagnostic techniques and methods of evaluation is vital." [107]

As my initial investigations progressed, I became quite vocal in my conclusions and recommendations. Given the major controversy that has been raging world wide, particularly since the initial publication of the Women's Health Initiative findings by the National Institutes of Health in the United States in 2002, it is quite remarkable that I summarized the state of the art of postmenopausal hormone therapy as follows in another critical review of 1969: [131]

"*The possible major disadvantages of long- term therapy on the one hand are a fear of carcinogenesis and thrombogenesis. These risks if valid are extremely rare. On the other hand, the possible advantages of long-term therapy are also as yet unproven.*

Exogenous oestrogens are of undoubted value in the relief of symptoms such as hot flushes, the associated bouts of perspiration, and atrophic vaginitis.

Their use in the prevention of coronary arterial disease and the problems of osteoporosis hold definite promise but the results of long-term prospective studies must be awaited before their routine use for the prevention of these disorders can be advocated. Certainly, an important contribution of the gynaecologist would be a more conservative approach to the removal of normal ovaries from the pre-menopausal female. Endogenous oestrogen appears to have a definitive protective effect on the human female. Where bilateral oophorectomy in the young woman is considered necessary, the long-term use of oestrogens is probably justified in view of the risks of coronary arterial disease and osteoporosis.

The prophylactic use of long-term exogenous oestrogen therapy in the prevention of aging has not been established…….It is therefore suggested that only specific problems be treated and that the routine use of oestrogens in all women after the menopause cannot be recommended at this time." [131]

In summary then, the key questions defined and for which I believe I was able to develop some answers in subsequent years were:

1. What is the human female menopause and climacteric? Specifically, does it represent a potential endocrinopathy and a possible health-related issue?
2. What impact do the climacteric and its treatment have on individual health, aging, quality of life, and society in general?
3. What are the appropriate solutions – medical and general?
4. What is the role of hormone replacement therapy with regard to safety and efficacy?
5. How do we disseminate knowledge and appropriate quality care at all levels?

6.1.1 DEVELOPMENT OF MENOPAUSE-RELATED SCIENTIFIC ORGANIZATIONS

The following personal history is presented as biographical background to some of my seminal contributions that will be described in later sections.

Menopause-related research in the late 1960's and early 1970's was a relatively lonely endeavor. There were few investigators worldwide with any interest in the subject. Those that did were more concentrated on a specific aspect such as osteoporosis or cardiovascular disease. It was therefore serendipitous that I received a letter in April 1973 from one Pieter van Keep, MD, PhD, Director-General of The International Health Foundation (IHF) based in Geneva, Switzerland, expressing interest in my early medical publications, telling me of his early social studies on menopause, and inviting my research collaboration. At that time my research in Cape Town was focused solely on the clinical and metabolic effects of menopause and hormone replacement therapy (HRT). I had heard neither of him or the IHF, but was delighted to discover another "menopausologist", and intrigued by his early social studies. By coincidence, I was about to travel to Europe the next month, and responded suggesting we meet in Geneva.

Pieter met me at the Geneva airport, explained that he had a light day at the office, would show me Geneva, and then we would meet Guus, his wife, for dinner. The day turned out uniquely. It was, when the full history of menopausology gets written, a true milestone. The germinal ideas for much of organized menopause-related medicine had its origin on that day in May 1973. It was also the beginning of an instant and remarkable friendship that lasted until Pieter's premature death in 1991.

We wandered from pub to pub through old Geneva, getting more animated and excited in our conversation as the day wore on and also, perhaps, less than fully sober. During the course of that brainstorming day we conceptualized the idea of a menopause club, a friendly organization that would draw together the few people worldwide interested in the subject to a series of meetings we planned to be held in Geneva under the auspices of the IHF. This club was later to become the International Menopause Society (IMS). We also felt there was a need for some sort of newsletter or journal to act as a vehicle for news and new findings; this was the original concept later to become *Maturitas,* the first medical journal devoted to menopause, and of which we were destined to become the first medical editors. We spoke of holding gatherings in exotic places such as the Bahamas, Sri Lanka, or Hawaii; the meetings ultimately were to be the IMS congresses. Above all, my basic and clinical science research approach melded well with Pieter's psychosocial interests. We spoke of a new concept of healthy women care, an idea for enhanced quality years for women by primary preventive health care, utilizing menopause as a positive entry point. By the evening we had run out of ideas, of soberness, and in great convivial mood joined Guus for dinner. She was not impressed, but eventually she too was caught up in our excitement, "even though I was from South Africa".

Over the next 3 years we conducted three closed workshops in Geneva, Switzerland – many ideas were discussed, and as interest increased, expanded the concept of an International Menopause Congress, and the establishment of an "International Society for the Study of the Climacteric and Postmenopause." Those 3 years were difficult ones for me and my personal career. An adversarial event with the apartheid South African government had made several people advise me that my continuing academic career in South Africa was jeopardized and in 1976, just before the Soweto riots, despite attempts by Pieter van Keep, who had now moved to Holland, to attract me there, I relocated to the United States.

In considering the first organizing committee for the meeting to be held in Montpellier, France, as well as later in selecting the first IMS founding signers, we agreed that given the political reputation of South Africa at that time, it would not be politically correct for my name and country to appear. The Chairs for the 1st International Menopause Congress were therefore Pieter, Professor Robert Greenblatt from the USA, providing co-sponsorship of the American Geriatric Society, and Professor M. Albeaux-Fernet of France, providing co-sponsorship of the University of Montpellier.

In June 1976, 165 professionals of varying disciplines and backgrounds, but all with the common interest of menopause, gathered in the resort town of LaGrande Motte in France, to attend the First International Congress on the Menopause. The year 1976 also coincided with the development of a major controversy regarding hormone treatment after menopause. The "estrogen forever" attitude of the late 1960s and early 1970s had been transformed to a fear of uterine cancer after publications in late 1975. The research world was also confused, and this was evidenced at the conference. It was clear to all attendees that better information and forums for presenting data were necessary, and that an International Menopause Society was essential. We therefore worked aggressively over the subsequent 2 years, and the IMS was formally launched in November 1978 after the Second International Menopause Congress in Jerusalem in June 1978.

In retrospect, it seems remarkable to me that in the short space of time between 1973 and 1978 so much could have happened – notably, the founding of IMS, the launch of *Maturitas*, the impetus for national menopause societies, and the recognition and development of meaningful menopause-related research; all being progress that Pieter and I could barely have hoped for at that fateful meeting back in 1973.

During the following years, interest in national menopause societies escalated, and I was privileged to be involved in the planning or launch of almost 30 national societies, worldwide.

The North American Menopause Society (NAMS) was established as a result of my own personal embarrassment. By the time of the Fifth International Congress in 1987 in Sorrento, Italy, I was repeatedly asked by non-North American friends about the large organization we presumably had in the United States. In fact, we had none. On my return to Cleveland, I contacted an attorney, Kenneth Kleinman Esq., and based on the

charter of the IMS, a preliminary charter was developed. NAMS was incorporated as a nonprofit scientific organization on November 29, 1988, with myself, Fredi Kronenberg PhD, of Columbia University in New York City, and Isaac Schiff MD, of Harvard University in Boston, as the founding Trustees. The organization was designed as North American to include Canada and Mexico. It was officially launched at a co-sponsored meeting held under the auspices of the New York Academy of Sciences on September 21-23, 1989, in New York City. The proceedings are historically recorded in a full edition of the Annals of the New York Academy of Sciences (*Annals N.Y. Acad. Sci*. vol. 592, 1990).

Today NAMS is an extremely large organization, based in Cleveland, Ohio, with over 2500 members in 50 countries, and responsible for major scientific meetings, peer-reviewed medical journals (e.g. *Menopause, The Journal of The North American Menopause Society)*, a Web site with over 5 million hits per month, a national competency certification exam in menopause medicine, and multiple professional and consumer teaching activities. Further information will be provided in Section 2.15.

SUMMARY - SEMINAL CONTRIBUTION #1

1. My first significant contribution to medical science was the recognition of the female menopause as being a health-related issue beyond simple loss of menstruation. In drawing attention to this issue, I was also one of the pioneers in identifying the key questions for future research.
2. Another major pioneering contribution to medical science and women's healthcare was to recognize the need to establish national and international scientific organizations, peer-reviewed medical journals, and mechanisms both for researchers to share and interact in the search for scientific progress, and for clinicians to be apprised of current standards and recommendations for evidence-based medical practice.

6.2 TERMINOLOGY AND DEFINITIONS

Right from the beginning of my research it became apparent that there was confusion in terminology relating to the time of transition from the reproductive to the post-reproductive years in a woman's life cycle. Even the word menopause was defined in different ways. There was an obvious need for consistency in terminology so that research data from published studies would be comparable. But achieving agreement on appropriately defined terminology turned out to be more difficult than anticipated.

The concept of defining the terminology and stages of the menopause transition has been addressed specifically on only a few occasions. I was responsible for convening the first of the meetings and, bar one, significantly involved in all the others. The first effort to develop internationally acceptable definitions was co chaired by myself and the late Professor David Serr, of the University of Tel Aviv in Israel, (coincidentally, one of

the external examiners for my PhD from the University of Cape Town in 1970), at a workshop convened during the First International Menopause (IMS) Congress at LaGrande Motte in France in 1976.[6] The definitions attempted to provide an explanation for the protean clinical presentation during and after menopause.

Development of the first IMS definitions also highlighted the fact that appropriate definitions needed to incorporate a staging system that needs to be multidimensional. The 1976 IMS definition, in attempting to explain the protean associations with menopause, represented an early attempt at multidimensional staging. The first level is chronological – the entire process labeled "climacteric" and the final menstrual period (FMP=menopause) being time specific. The second dimension addresses physical changes or symptoms. The third dimension involves integration of functional changes.

A World Health Organization (WHO) Scientific Group on Research in the Menopause met in 1980 and published recommendations in 1981 (*Research on the Menopause. Report of a WHO Scientific Group, Geneva, World Health Organization, WHO Technical Report Series 670, Geneva, Switzerland, 1981*). These definitions were revisited in 1994 and published in 1996 (*WHO Scientific Group on Research on the Menopause in the 1990's. WHO Technical Report Series 866. Geneva, Switzerland, 1994).* These scientific definitions were largely uni-dimensional with specific definitions for the phases of the life cycle being presented. The 1994 WHO Scientific Group on Research in the Menopause, of which I was a member, expanded on the relationship between different time periods surrounding the menopause, retained most of the 1980 definitions, but failed to make recommendations about staging the reproductive transition.

In 1992, I published the first attempt at developing the third dimension of integrating functional changes.[7] A potential fourth dimension was also recognized, namely, the possibility of addressing therapy through staging and definitions. Based on the premise that the existing definitions did not take any potential residual ovarian activity into account and were thus of reduced value in describing populations either being considered for clinical study or for clarifying indications for postmenopausal hormone therapies, I proposed an ovarian function, therapy-oriented definition of the postmenopause in 1992 and expanded on this concept in1994.[7,8]

The definition proposed was based on whether the postmenopausal ovary demonstrated lack of activity (type A), or functional ability (type B), or whether there was congenital absence of both ovaries (type C) or iatrogenic loss of ovarian function (type D), and in part was presented as follows:

"This functional background allows integration into the definition a possible indication for hormone therapy ("estrogen dependent"), or a compensated type of climacteric (residual ovarian function) without clear indication for hormone replacement ("estrogen independent"). The suggested classification is thus as follows:
***Type A** – Spontaneous estrogen-dependent climacteric (ovaries intact) (i.e., no ovarian compensation).*

Type B *– Spontaneous estrogen-independent climacteric (ovaries intact) (i.e., ovarian compensation).*
Type C *– Ovarian agenesis estrogen-dependent climacteric (ovaries absent).*
Type D *– Iatrogenic estrogen-dependent climacteric (ovaries removed) (i.e., surgical menopause, chemotherapy)."*

In 1998, I was invited by the IMS to convene a working group through its internationally representative organ, the Council of Affiliated Menopause Societies, to define the terminology. This group reported in 1999.[9] While the previous definitions were refined, the group did not reach consensus on a staging system.

The research community involved in the area of the human female menopause continued to recognize the need for both universality in utilization of menopause-related terminology, and some form of a logical division of the last 10 to 15 years of hypothalamic-pituitary-ovarian function into stages that could be primarily relevant to the research community, but that could have clinical relevance as well. I was thus fortunate to be integral in jointly developing a consensus conference with the National Institutes of Health (NIH), the North American Menopause Society (NAMS), and the American Society for Reproductive Medicine (ASRM). The meeting was held in Park City, Utah in late July 2001 titled the STRAW meeting, that is, the **St**aging System for **R**eproductive **A**ging in **W**omen.

The experts at the closed meeting recognized that the prime objective for developing a staging system for reproductive aging is to allow researchers worldwide to enroll comparative populations in research studies. The first step in development of such a staging system for reproductive aging necessitates correct use of menopause-related terminology. The majority of published clinical studies did not clearly define their studied populations and conclusions drawn are therefore often of limited utility. For example, "menopause" is variously utilized to correctly refer to the final menstrual period (FMP) or incorrectly to the entire menopause-related transition. Another example is "perimenopause" where late perimenopause is utilized by some investigators to refer to the final years of reproductive age, and others to the first 12 months after the FMP.

The July 2001 joint working group (STRAW) convened by the NIH, NAMS, and ASRM to attempt to develop a workable staging system for reproductive aging carefully considered all the menopause-related terminology, and utilized it in the staging system that resulted from the meeting. This is a workable system that relies on investigators worldwide to utilize correct definitions. In particular, perimenopause (unless dropped from our lexicon) was redefined so that it is synonymous with climacteric.[10,11]

This new staging system is but one phase in an ongoing process. For the moment, it should provide a basis for researchers to be more uniform in population selection. Clinicians may find it of value in explaining the reproductive aging process to women.

With utilization of the scale should inevitably come greater detail of each of the stages, and ultimately refinement and perhaps even development of an enhanced system.

Hopefully, as this process unfolds, we will eventually have a system that addresses all four dimensions: chronology, symptoms/physical changes, variance of functional groups, and finally, therapy orientation. Above all, there is now no excuse for investigators not to use correct terminology in selecting and describing their patient populations.

SUMMARY - SEMINAL CONTRIBUTION #2

Over a period of 30 years I was the first to introduce a standard set of definitions on menopause-related terminology, and then to work with international working groups and medical organizations to further develop this process. By helping standardize the semantics and the staging of reproductive aging, this represents a significant achievement in comparative research and evaluating clinical standards of care.

6.3 RESEARCH METHODOLOGY, TECHNIQUES, AND INSTRUMENTS

Beyond the initial problems of inaccurate use of language, necessitating defining semantics and staging, another issue that I identified very early in my investigations was the lack of specific instruments for measuring subjective parameters like sense of well-being or sexual dysfunction, or objective parameters like bone density or bone quality. There was also a need for the substantiation of the value of biomarkers like the vaginal maturation index as a biomeasure of estrogenicity. Thus, a considerable amount of my energy over these years has been to work on developing or confirming instruments and methodologies that provide reproducible and quantifiable measures for such parameters. Review of references 12 through 25 will attest to the diversity of problems addressed. A review of some of the technical related issues is included in references 12 and 17.

6.3.1 ROLE OF VAGINAL SMEAR IN ASSESSMENT OF ESTROGENIC STATUS OF THE POSTMENOPAUSAL WOMAN

Studies were undertaken to determine the relationship between ovarian function and menopausal status, and, particularly, the impact of exogenous hormonal therapy on the various cells of the vaginal epithelium.[12,13,14] It was determined that the parabasal cell index was an exquisite measure of estrogenicity, and further studies demonstrated a strong correlation between the incidence of vasomotor symptoms and the vaginal parabasal cell index.[16] This finding had immediate clinical application, as an in-office saline swab test could be undertaken for the presence or absence of parabasal cells, and the patient's estrogenic status and possible need for estrogen replacement could be immediately diagnosed without resource to expensive blood measures.

6.3.2 PLASMA CALCIUM LEVELS AS A PROPOSED TEST OF ESTROGENIC POTENCY

In the 1970's and 1980's attempts at prevention of bone loss leading to osteoporosis and fractures were hampered by both a lack of diagnostic tools and of any bone markers that could be utilized to either evaluate the efficacy of new drugs under investigation, or of patient response to the use of then currently available medications. It was therefore useful as a clinical diagnostic tool that in a series of studies I identified the fact that estrogen therapy could be extremely effective in reducing plasma calcium levels.[12,15] This finding was also a milestone in estrogen-related research as it also demonstrated that different estrogens could have different effects. Prevailing opinion at that time was that an estrogen was an estrogen, and any differences in effect were due to dose response rather than inherent variations between different estrogens. Thus, these studies, for example, demonstrated conjugated equine estrogens to have a significant effect in reducing plasma calcium levels whereas estradiol valerate, in a bioequivalent dose, was ineffective. Thus, an adequate screening test of the potential therapeutic value of an estrogen in the prevention of osteoporosis would be its effect on fasting plasma calcium and urinary calcium levels over a period of time. A calcium-lowering effect would be significant. It is unlikely that even the currently available telepeptide markers are much more sensitive than this test.

6.3.3 RADIOLOGICAL TESTS OF BONE DENSITY

At the time of my initial studies there were three imprecise, time-consuming, expensive, and often unavailable, methods for measuring bone mass change. These were whole-body neutron activation, radiodensitometry, and radio grametry. All also suffered from severe sensitivity and specificity problems. A new technique was developing, namely single photon absorptiometry, and I was fortunate in being able to obtain a prototype of a single photon absorptiometer. This allowed a simple and noninvasive measure of bone density at the wrist through use of a radioisotopic source (Americium^{241}) and a scintillation detector measuring radio transmission across the area of interest. Later CAT scanning became a possible tool, and single photon techniques were enhanced by the introduction of dual photon absorptiometry, but all of these methods involved either excess doses of radiation or the need to deal with isotopes, or both. The next advance was the introduction of dual energy X-ray absorptiometry (DEXA). The pioneer in this technology was Richard Mazess PHD, from Milwaukee, and we utilized my clinical research center in Cleveland as one of the ß-sites for the testing of the prototypes, and ultimately the commercial models . Working with several colleagues across the country we attempted to define the place of this technology.[18,19] Indeed, DEXA is now considered the gold standard for measuring bone density.

As an item of interest, through this collegial association, over 20 years later in Cape Town, when the Groote Schuur Hospital's only DEXA machine became irreparable, I was able to obtain a new state-of-the-art machine from GE-Lunar as a gift, and that is the system currently being utilized for all clinical departments at the hospital.

My early involvement as a gynecologist was a factor in this technology being widely adapted by that specialty for evaluation of women transiting through and beyond menopause.

6.3.4 THE DEVELOPMENT OF THE UQOL, A VALIDATED INSTRUMENT TO MEASURE SENSE OF WELL-BEING (GLOBAL QUALITY OF LIFE)

Up to 1967 there were suggestions that exogenous estrogens had mood-enhancing effects, but no direct research had been conducted to confirm or refute these theories. The problem was the lack of any precise methodology to actually measure sense of well-being or so called global quality of life. Indirect parameters were usually applied, and I certainly did utilize tests such as the Beck Depression Inventory and checklists of psychiatric symptoms, given the lack of any direct instruments.[48] Unfortunately, the study subjects were not usually depressed, nor did they have major psychiatric disease, and those early studies can now only be recognized as pioneering attempts.

In order to try to more accurately measure sense of well-being, in 1967 I devised an instrument for both patient self-completion and for investigator assessment with questions that more accurately reflected what I was attempting to measure. Unfortunately, again, at that time mechanisms for validation of such instruments were poorly understood or not even developed, and my early studies have inevitably to be regarded as pilot studies.[12, 46-49] Fortunately, in Cleveland, as academic Chairman, I created in my department a division of behavioral medicine, staffed by a psychiatrist and a psychologist. What we believed would be a simple process of validation of my early sense-of-well-being instrument, became almost 6 years of work, but the end result is a validated instrument capable of measuring global quality of life in women aged 45 to 65 that is of research value and clinically aplicable.[20,22,23] The Utian Quality of Life Scale (UQOL) has been widely accepted as a well-validated clinically useful tool that can complement a symptom inventory to provide a broad overview of menopausal status.

The UQOL is a 23-item questionnaire with a stable factor structure, demonstrating four separate, intercorrelated domains: Occupational QOL (e.g. “I feel challenged by my work”); Health QOL (e.g. “My diet is not nutritionally sound”); Sexual QOL (e.g. “I am content with my romantic life”); and Emotional QOL (e.g. “My mood is generally depressed”). It has been demonstrated to be a practical and psychometrically sound instrument for measuring quality of life.

6.3.5 MODEL FOR STUDY OF SEX STEROID REGULATION OF NORMAL ECTOCERVICAL EPITHELIAL CELLS

Despite clinical studies yielding considerable information regarding pathological processes in the cervix, little has been known about the underlying mechanisms responsible for these changes. Part of the difficulty was the absence of an adequate human ectocervical epithelial cell culture system. We established conditions for growing human ectocervical epithelial cells (ECE), proved that they were indeed ECE cells phenotypically different from epidermal keratinocytes and endocervical cells, and that they retained a high degree of differentiated function. Thus, they can be regulated by physiological levels of the appropriate sex steroid hormones. We considered this

system, therefore, to be useful for future studies on the effects of a variety of agents, including the sex steroids, on the female ectocervix.[32]

6.3.6 OTHER INSTRUMENTS

Hot flashes are the most frequent menopause-related symptoms, and the likelihood of impairing activities is related to the number, frequency, and intensity over any specific time period. This was not initially recognized, and only received adequate attention as studies were undertaken to determine the impact of therapies on these parameters. This was another area I have been involved in quantifying, indirectly with meetings with the Food and Drug Administration (FDA) in the United States as they developed their Guidance for the pharmaceutical industry for pharmaceutical studies, and also as I was involved in randomized placebo-controlled drug studies.[12, 21,24] The preceding references are examples of this work, which will be dealt with in greater detail later.

Sexual dysfunction is also impacted by the menopause transition. It too has been an area of poor mechanisms of clinical evaluation and quantification until recent years. In this instance, while directly involved in clinical study for measuring impact of natural and surgical menopause on sexual function, I have only superficially been involved in the development of structured diagnostic methods that can be used to diagnose female sexual dysfunction and its subtypes in postmenopausal women.[25] We did develop a structured diagnostic method (SDM) to enable diagnosis of female sexual dysfunction (FSD) in postmenopausal women by healthcare professionals who are not FSD experts. We were able to demonstrate that the method had good convergent validity and excellent intrarater reliability and so to conclude that our SDM can reliably diagnose FSD status and FSD subtypes in postmenopausal women.

SUMMARY - SEMINAL CONTRIBUTION #3

Faced with a lack of methods to quantify the potential physical and clinical impact of the menopause transition, I was forced to develop techniques for accurate quantification of change. The areas I have made a contribution to, in this respect, include:

1. Documenting the role of the parabasal cells of the vaginal smear as being adequately reflective of the level of estrogenicity of the postmenopausal woman. Thus, a simple vaginal smear was recognized as a good clinical instrument in determining therapeutic indications for estrogen therapy.
2. Identifying the relationship between plasma calcium levels and estrogenicity presented an early potential marker of change in bone metabolism.
3. Involvement in the evaluation and determination of the role of successive technologies for measurement of bone density.
4. The development and validation of a precise instrument for measuring and following global quality of life. The UQOL is established in contemporary research as a good instrument for following four inter-related domains of quality of life.

5. Development of a laboratory cell line of ectocervical epithelial cells that can serve as a system for studying the effects of a variety of agents, including the sex steroids, on the female ectocervix.
6. Helping develop and test instruments to measure vasomotor symptoms and domains of sexual function.

6.4 PHYSIOLOGY AND MECHANISMS

I have never been a bench researcher. However, in attempting to elucidate endocrinological effects of the menopause transition, and the clinical and metabolic effects of exogenous hormone treatment, I have worked closely with researchers in proposing and testing theories and mechanisms. Therefore, in this section, unless I have been solely responsible for a specific study, I use the collective term “we” in acknowledging the colleagues with whom I have had a close working relationship. Some of these were at other institutions, and some have been my research staff or Fellows in training in my own institution. The latter without exception have gone on to outstanding personal academic careers. In this section, I particularly recognize the collaboration of George Gorodeski MD PHD, now Professor of Reproductive Biology at Case Western Reserve University, who joined my department in 1984, completed his PHD with me, and remained on my staff as a member of my faculty.

6.4.1 DIFFERENT ESTROGENS HAVE DIFFERENT EFFECTS

Despite prevailing dogma that all estrogens were the same, and that any variation in affect was dose related, I designed a series of studies to test the hypothesis. In comparative randomized-controlled studies, different estrogens in bioequivalent dose, actually demonstrated a remarkable degree of variance in impact on metabolic effects.[12, 26,27.] For example, conjugated equine estrogens (CEE), but not an equivalent dose of estradiol valerate, were extremely effective in reducing the plasma calcium levels of oophorectomized women ($p < 0.0025$).[26] This suggested that such therapy might be of value in preventing osteoporosis, at least if administered to premenopausal women undergoing oophorectomy. On the other hand, administration of estradiol valerate continuously for 6 months to 50 oophorectomized females resulted in a decrease of the total serum cholesterol value of possible significance ($p < 0.05$), whereas CEE administration had no or little effect on the cholesterol values.[27]

Further confirmation of this variation in effect was demonstrated in a later randomized placebo-controlled study comparing a nonsteroidal estrogenic product P1496, against CEE. The P1496 was demonstrated to have a statistically significant advantage over the CEE in reducing plasma calcium and cholesterol, and in doing so might in fact also represent the first study of a SERM (selective estrogen-receptor modulator).[55]

6.4.2 PITUITARY GONADOTROPIN IMPACT OF ESTROGEN ADMINISTRATION

There was a prevailing dogma that exogenous estrogen administration after menopause should reduce gonadotropin levels back to premenopausal values. The idea was that postmenopausal estrogen dose requirements could be titrated to follicle stimulating

hormone (FSH) or even luteinizing hormone levels (LH). We tested this hypothesis in a series of clinical studies. An initial study demonstrated significant depression of LH levels in postmenopausal women on doses of 1.25 and 2.5 mg CEE.[28] The higher dose had no advantage over the lower dose, but both are high therapeutic doses. A subsequent study was therefore undertaken to serially measure FSH, LH and estradiol (E_2) levels in premenopausal patients before and after hysterectomy with oophorectomy, and then to determine the incremental impact of CEE administration starting with the low dose of 0.3 mg per day, increasing to 0.625, 1.25, and finally 2.5 mg per day, on these plasma levels. In only one instance did CEE succeed in reducing FSH to premenopausal levels, and that was at a dosage of 2.5mg, in which instance the estradiol level was higher than the premenopausal level. Thus this study indicated that CEE alone in dosages up to 2.5 mg per day was unable to reproduce in postmenopausal women the gonadotropin and E_2 levels shown to exist prior to oophorectomy. It was concluded that usual CEE treatment after menopause does not in itself represent physiologic “hormone replacement therapy” (HRT), if defined as the dosage required to maintain premenopausal circulating concentrations of reproductive hormones.[29] This study presaged the advent of low dose hormone therapy, and the fact that there was no need to try and emulate in postmenopausal women, the hormone profiles of premenopausal women.

6.4.3 CELLULAR PHYSIOLOGY

It was not until the early 1900’s that the modern conception of ovarian physiology took shape. Estimation of the estrogenic effect on vaginal smears is based on an observation by Stockard and Papanicolaou that the vaginal epithelium of rodents becomes cornified at the onset of estrus (Stockard CR, Papanicolaou GN. The existence of a typical oestrus cycle in the guinea pig with a study of its histological and physiological changes. *Am J Anat* 1917;22:225). We set out in a series of experiments to explain the changes in human vaginal and cervical epithelium at a molecular biological level. The first step was to develop a useful model for the study of sex steroid regulation of normal ectocervical epithelial cell (ECE) function, reporting the methodology in 1990.[32]

Our first results investigating the function of ECE cells suggested that:[33]

1. in vivo, ectocervical cell squame formation is regulated by the direct action of estrogens, progestins, glucocorticoids, and retinoids; and
2. envelope formation is not regulated by changes in the cellular content of the envelope precursor, involucrin.

We tested this hypothesis directly by making detailed dose-response curves and concluded:[34]

1. Differentiation-enhancing actions of glucocorticoids and estrogens can be antagonized by either progestins or retinoids.
2. Glucocorticoids and retinoids are likely to determine the ECE cell-differentiation set point in vivo, with the sex steroids directly modulating the phenotype of the ECE cells around this set point during the menstrual cycle.

3. These results appear to explain some of the clinical descriptions of changes in ectocervical cell morphology resulting from hyper- and hypoestrogenic stimulation.

Finally, we looked at the interaction between growth factors and sex steroids in regulating human endometrial stromal cell growth and differentiation. None of the growth factors tested (epidermal growth factor, basic fibroblast growth factor, insulin, insulin-like growth factor-I, IGF-II, or platelet derived growth factor) stimulated the growth of human endometrial stromal cells grown in progestin-free medium. Growth of progestin-treated cultures was dramatically increased by some growth factors, and estrogen could not substitute for progesterone in this protocol. Thus, we concluded that human endometrial stromal cell growth is:[35]

1. regulated by a discrete set of growth factors, only a subset of which regulates stromal cell differentiation; and
2. regulation of stromal cell growth and stromal cell differentiation by growth factors is progestin dependent.

These studies have continued over the subsequent years, but my interest had taken a different course, and my role as a coinvestigator in this area ended.

6.4.4 MECHANISMS INTO THE DEVELOPMENT OF CARDIOVASCULAR DISEASE

Multiple reports prior to 1970 linked changes of plasma cholesterol levels with bilateral oophorectomy in humans and experimental animals. Exogenous estrogens were also demonstrated to have effects on cholesterol metabolism. But in no instance were identical population groups studied and compared before and after oophorectomy and after estrogen therapy. In 1972, I reported on a prospective investigation into the effects of bilateral oophorectomy and subsequent estrogen therapy on serum cholesterol values in identical and statistically comparable groups of women. Oophorectomy was not shown to be associated with any significant increase in serum cholesterol levels. Moreover, exogenous estrogen was shown to have only a minimal impact on depressing serum cholesterol values, and of interest this property was not present in all estrogens tested. The conclusion of the study was that *“these findings are considered sufficient evidence for questioning the empirical use of estrogenic hormones for the prevention of ischemic heart disease in postmenopausal women”.*[27]

Little was known about the actual mechanism of cholesterol agglomeration, particularly the role of unesterified cholesterol in atherogenesis, and most information was derived from studies that focused on the esterified form of cholesterol. In fact, unesterified cholesterol constitutes the major part of the total cholesterol mass of degraded low density lipoprotein (LDL). As this was most likely to play a role in lipid accumulation in peripheral tissues, notably in extracellular tissues of arterial walls, we therefore investigated the unesterified cholesterol aggregates in human arteries. The objective was to localize and characterize unesterified deposits in human arteries and to correlate this with the severity of the atherosclerotic lesion. We reported an order of age-related progressive severity of the atherosclerotic lesion that allowed us to formulate a working

hypothesis with respect to a possible physical aspect of unesterified cholesterol deposition in the arterial wall. The two-stage hypothesis involved a first stage in which there is small particle aggregation, but which is reversible. In the second stage, there is more massive agglomeration of irregularly shaped particles containing unesterified cholesterol and calcium phosphate. In this stage the cholesterol has made a transition to a post crystallization solid state, and the process is irreversible.[36] These findings are particularly important because of the current suggestion from clinical studies that exogenous estrogen therapy commenced early in the process of atherogenesis in postmenopausal women may be cardioprotective, whereas therapy started several years after menopause may in fact be deleterious and result in increased risk of heart attack. That is, our earlier studies on postmortem aortas provide plausibility to contemporary thinking regarding the chronology of risk for coronary vascular disease in postmenopausal women.

Recognizing that the risk of coronary artery disease in women before menopause is much lower than men of the same age, but increases steeply after menopause, we hypothesized that this could probably be a disorder of microvascular reactivity. Support for this idea is added by findings that women have less occlusive vascular disease than men of the same age, but a higher incidence of angina pectoris with normal coronary angiograms (i.e. syndrome X). Our earlier experiments had demonstrated modulation effects by sex hormones on flow velocity in the parametrial artery of pregnant rats.[37] Accordingly, we designed a series of experiments in rabbits to test the hypothesis that estrogen diminishes coronary vascular resistance and thereby increases coronary blood flow. Estrogen or its vehicle was administered in different groups either intramuscularly or transdermally for varying periods of time. In all instances, coronary blood flow was increased by an order of about 50%. Moreover, in all groups of experiments, the increments in coronary blood flow evoked by estrogen were virtually abolished by N^G-nitro-L-arginine, an inhibitor of nitric oxide synthase, leading us to conclude that estrogen regulates coronary blood flow, in part by upregulating nitric oxide synthase in the coronary vasculature.[39]

We were also puzzled by our observations in pregnant rats that estrogen and progesterone may have opposing effects on blood flow.[37] Narrative descriptions in the literature had also suggested that migraine headache, a vascular-related problem, had a relationship to the menstrual cycle, and that various combinations of estrogens and progestogens could induce symptoms of syndrome X. The question was whether the progesterone or progesterone-like substances (progestogens) were responsible for attenuating the blood flow enhancing effect of the estrogen. In our first experiment, utilizing a Langendorff isolated perfused heart model of ovariectomized normal adult rabbits, we demonstrated that in the female rabbit progesterone may significantly attenuate the estrogen-related decrease of coronary vascular resistance.[38] We then, in a further series of experiments, tested the impact of progesterone and several progestogens (megestrol acetate, norethindrone, medroxyprogesterone acetate) on the regulation of coronary flow in female rabbits. We confirmed again that estradiol decreases coronary vascular resistance, and hence increases coronary flow. Treatment of the animals with progestogens alone had little effect on coronary flow. However,

when administered with estradiol, all progestogens and progesterone abrogated the estradiol-related increase in coronary flow.[40] In later years, there were clinical studies suggesting that administration of combined estrogen and progestogen might be associated with an increased risk of heart attack in the first year of therapy. These earlier studies may be evidence of a potential mechanism.

We were further intrigued by reports suggesting that estrogens might act directly on the cardiac myocytes and in this way affect the mechanical performance of the heart. To clarify these findings, we tested the hypothesis that the overall influence of estrogen on the coronary circulation and its influence on the contractile function of the heart would combine synergistically to exert a cardioprotective effect. Adult female rabbits were treated with either estradiol or with the vehicle (control) and the hearts subjected to the Langendorff perfusion technique. Cardiac stunning was achieved by halting of the perfusion of the coronary vasculature for four successive periods of 1, 3, 5, and 15 minutes, followed by reperfusion between nonperfusion periods. In summary, short-term treatment of adult female rabbits with doses of estrogen that are physiologic for the rabbit exerted a protective effect on cardiac contractility and relaxation from repetitive flow deprivation and reperfusion. The results confirmed that estrogens are cardioprotective agents in females.[43] The molecular mechanisms by which estrogens protect the heart from the detrimental consequences of ischemia and reperfusion are unclear. A possible protective mechanism is the nitric oxide (NO) system because NO may act as a scavenger of free radicals, and, as described above, estrogens tend to increase NO activity in the coronary vasculature. Another possible explanation could be modulation of endothelial permeability.

In view of the foregoing, we designed studies to determine the effects of estrogen on transendothelial paracellular permeability in women. Cultured human umbilical vein endothelial cells (HUVEC) form tight junctions. Estrogens were shown to increase the cation selectivity across HUVEC cultures. That is, we reported from these experiments that HUVEC's form a confluent epithelium on filters and that the endothelial cells form intercellular connections which restrict free movement of anions, relative to cations, through the paracellular pathway. Our results also indicated that estrogens increase the cation selectivity of the paracellular pathway, and suggest that the effect of estrogen is mediated by an estrogen receptor. These effects may be important for vascular protection in cases of sudden changes of ion levels across the capillary wall, such as ischemia or reperfusion.[41] We then designed a series of experiments to test the hypothesis that the effects of estrogen on HUVEC permeability are mediated by NO-related mechanisms. In summary, we presented results in HUVEC that revealed a dual modification of endothelial paracellular permeability by estrogen:
1. An eNOS-, NO-, cGMP-dependent decrease in permeability activated by nanomolar concentrations of estradiol resulting in enhanced Cl^- influx and increased cell size, and
2. An iNOS- and NO-dependent increase in permeability activated by micromolar concentrations of estradiol resulting in enhanced Cl^- efflux and decreased cell size.
The net effect on transendothelial permeability will depend on the relative contributions of each of these two systems. Understanding the mechanisms by which estrogens modulate endothelial permeability may be important for development of drugs that can

target the specific mechanisms involved in the actions of estrogen and may provide the pharmacological means to selectively regulate the permeability.[42]

SUMMARY - SEMINAL CONTRIBUTION #4

Working alone or with coinvestigators I have been able to contribute some significant basic research findings toward explaining the fundamental physiology and mechanisms of disease, and the pharmacologic function of female hormones. These contributions include:

1. I was the first investigator to suggest that different estrogens demonstrate different properties and effects. Studies with the nonsteroidal estrogenic product P1496 might also represent the first study with a SERM.
2. The prevailing dogma that hormone replacement therapy dosage should be titrated to gonadotropin levels was shown to be incorrect. Moreover, low dosages of estrogen were shown to be potentially effective, presaging the advent of low-dose hormone therapy.
3. We were amongst the first investigators to explain changes in human vaginal and cervical epithelium at a molecular biological level.
4. Through a series of studies and experiments, a window has been opened into explaining the role of estrogens and progestogens in potential protection from and pathogenesis of cardiovascular disease.
    1) The impact of bilateral oophorectomy and replacement estrogen was studied and *"these findings considered sufficient evidence for questioning the empirical use of estrogenic hormones for the prevention of ischemic heart disease in postmenopausal women".*[27]
    2) Our studies of unesterified deposits in human arteries demonstrated correlation with the severity of the atherosclerotic lesion. This allowed a working two-stage hypothesis involving a reversible first stage in which there is small particle aggregation, and a second irreversible stage with more massive agglomeration of irregularly shaped particles containing unesterified cholesterol and calcium phosphate. These findings are particularly important because of the current suggestion from clinical studies that exogenous estrogen therapy commenced early in the process of atherogenesis in postmenopausal women may be cardioprotective, whereas therapy started several years after menopause may in fact be deleterious and result in increased risk of heart attack.
    3) Our early experiments demonstrated modulation effects by sex hormones on flow velocity in the parametrial artery of pregnant rats.[37] Following on this we showed coronary blood flow to increase by an order of about 50% and to be virtually abolished by N^G-nitro-L-arginine, an inhibitor of nitric oxide synthase. We were able to conclude that estrogen regulates coronary blood flow, in part by upregulating nitric oxide synthase in the coronary vasculature.
    4) Puzzled by our observations in pregnant rats that estrogen and progesterone may have opposing effects on blood flow, we were the first to prove that when administered with estradiol, all progestogens and

progesterone abrogated the estradiol-related increase in coronary flow.[40] These studies may be evidence of a potential mechanism to explain later clinical studies suggesting that administration of combined estrogen and progestogen might be associated with an increased risk of heart attack in the first year of therapy.

5) To investigate whether estrogens might act directly on the cardiac myocytes and in this way affect the mechanical performance of the heart, we demonstrated that the overall influence of estrogen on the coronary circulation and its influence on the contractile function of the heart combine synergistically to exert a cardioprotective effect. The results confirmed that estrogens are cardioprotective agents in females.
6) Because that cardioprotective effect could result from modulation of endothelial permeability, we investigated and effectively demonstrated that the *net* effect on transendothelial permeability depends on the relative contributions of each of two systems. This has current relevance because understanding the mechanisms by which estrogens modulate endothelial permeability may be important for development of drugs that can target the specific mechanisms involved in the actions of estrogen and may provide the pharmacological means to selectively regulate the permeability.

In summary then, my seminal contribution in investigating the potential relationship between female hormones, ovarian function, and heart disease has been to identify areas in need of study, and to work closely with colleagues in attempting to clarify those relationships. The outcome has been to provide a further impetus to elucidating the basic biological mechanisms of this important component of women's health.

6.5 CHARACTERIZING MENOPAUSE, SPECIFIC SYMPTOMS, AND CHRONIC CONDITIONS

It is quite extraordinary how frequently in medicine a finding published three, four, or more decades ago languishes in obscurity until the observation is rediscovered and that idea then becomes the newly accepted dogma. An example of this phenomenon is the summary statement from the March 21-23, 2005, National Institutes of Health (NIH) State-of-the-Science Conference, titled "Management of Menopause-Related Symptoms." (NIH State-of-the-Science Panel. National Institutes of Health State-of-the-Science Conference Statement: Management of Menopause-Related Symptoms. *Annals Int. Med.* 2005;142:1003-1013).

In 1972, I published a paper based on several years of PhD thesis work at the University of Cape Town titled "The True Clinical Features of Postmenopause and Oophorectomy and Their Response to Oestrogen Therapy."[12,46] The summary read, in part, as follows: *"The true clinical effects of endogenous oestrogen withdrawal following bilateral oophorectomy and menopause were assessed….The subsequent response of these effects to exogenous oestrogen therapy was determined, and true hormonal*

effects differentiated from simple placebo responses. It was found that the only symptoms directly associated with the menopause and occurring specifically after oophorectomy are those related to hot flushes and atrophic vaginitis. In turn, these symptoms are the only ones to be specifically relieved by exogenous oestrogen therapy….The symptoms of depression, irritability, angina pectoris, insomnia, and palpitations responded significantly to placebo therapy and are, therefore, most likely of psychological origin….the use of indiscriminate oestrogen therapy as a panacea against any 'postmenopausal symptom' other than hot flushes or atrophic vaginitis is condemned."

These findings formed the basis of a 1976 report from an international task force, chaired by the late David Serr and me, convened at the time of the First International Congress on Menopause in France, to classify the symptomatology associated with menopause. The key summary statement published read as follows:
"*Climacteric symptoms and complaints are derived from 3 main components:*
1. Decreased ovarian activity with subsequent hormonal deficiency resulting in early symptoms (hot flushes, perspiration, and atrophic vaginitis) and late symptoms related to the metabolic change in the end organ affected.
2. Sociocultural factors determined by the woman's environment.
3. Psychologic factors, dependent on the structure of the woman's character."[6]

Twenty-eight years later, these findings were confirmed in Melbourne, Australia. Dennerstein et al concluded from a longitudinal, prospective, population-based study of menopausal symptoms in 438 women observed for 7 years, during which time 172 advanced from premenopause to perimenopause or postmenopause, that: "*Although middle-aged women are highly symptomatic, the symptoms that appear to be specifically related to hormone changes of the menopausal transition are vasomotor symptoms, vaginal dryness, and breast tenderness. Insomnia reflected bothersome hot flushes and psycho-social factors."* (Dennerstein L, Dudley EC, et al. A prospective population-based study of menopausal symptoms. *Obstet. Gynecol* 2000;96:351-358).

The NIH meeting, 33 years after my original report, confirmed in their summary statement that there is strong evidence that menopause causes vasomotor symptoms and vaginal dryness, moderate evidence that menopause is the cause of sleep disturbance in some women, and an absence of evidence showing that menopause might be a cause of depression, anxiety, and/or irritability. They also stated that there was insufficient information to conclude any causal relationship between the menopausal transition and difficulty thinking, forgetfulness, or other cognitive disturbances. Other than a definite relationship between painful intercourse from vaginal atrophy and dryness, a causal relationship between menopause and libido was considered to have not been established.

Clearly then, despite the fact that these reports originate from four continents and vary vastly in date reported and methodology used to address the question, they all are in agreement in defining true menopause-related symptoms during the peri- and early postmenopausal years, and confirm the validity of my original studies. Moreover, the

NIH State-of-the-Science Panel confirmed my other studies into the lack of confirmation of any impact of menopause or bilateral oophorectomy in premenopausal women on minor or major psychiatric symptoms. [47-50]

As a result of my combined studies, the menopause transition was identified as a potential endocrinopathy. These studies really set the foundation for defining the symptoms and physical signs related to the changes in endocrine profiles. Specifically, I was able to demonstrate that the early direct symptoms of menopause are few, that the response by women to those symptoms are impacted by psycho-socio-cultural factors, and that long-term problems may result from metabolic changes, for example, bone loss leading to osteoporosis or cardiovascular changes increasing the risk of cardiovascular disease.[44,45,51-54]

Of further significance was the demonstration that symptoms responsive to estrogen replacement therapy could be differentiated from symptoms responding to general supportive and placebo therapy. Indeed, so well recognized are these findings at the present time, they form the basis of evidence-based guidelines identifying the specific symptom-indications for hormone therapy after menopause that have been published by various national and international scientific organizations worldwide.

These studies have also demonstrated that while the treatment of the postmenopausal women with estrogens may alleviate true menopause-related symptoms, they may also induce a pharmacologic effect such as enhancing the sense of well-being.[47,49,50] In this respect, my 1972 paper on the “mental tonic effect of oestrogens administered to oophorectomized females” was a pioneering paper and the first in the medical literature to prove this relationship with appropriate clinical research.[47] The papers of 1972 were also the first to reveal the placebo effect of hormones administered to postmenopausal women.[46,47]

Finally, as part of these studies, it was possible to determine the clinical response to removal or conservation of ovaries at the time of hysterectomy in women of reproductive age. Retained ovaries were demonstrated to remain fully functional for at least 2 years after surgery.[12,13,15,26,27,44-46] It was therefore possible to “*make a plea for the conservation of functional ovaries at the time of hysterectomy”*[12] in women of reproductive age, something that was foreign to general clinical practice at that time. Previously the general consensus was that ovaries were of little value post surgery, and representing an unacceptable cancer threat, justified excision.

SUMMARY - SEMINAL CONTRIBUTION #5

1. The menopause transition was shown to represent a potential endocrinopathy.
2. The definitive symptoms and physical signs directly related to the change in endocrine profiles were defined and classified.
3. Those symptoms responsive to estrogen replacement therapy were differentiated from those responding to general supportive and placebo therapy. This finding

has formed the foundation for national and international evidence-based guidelines for symptomatic indications for estrogens after menopause.
4. The mental tonic effect of estrogens, or ability to produce a feeling of well-being, was scientifically documented and established for the first time.
5. The significant response of vasomotor symptoms to placebo in randomized placebo-controlled clinical research studies of estrogen therapy was recognized and reported for the first time.
6. The continued function of ovaries conserved at the time of hysterectomy in premenopausal women was confirmed, and a plea made for their conservation at a time during which routine ablation of the ovaries concomitant with hysterectomy was standard practice.

6.6 NEW DRUGS AND DELIVERY SYSTEMS

My early research, such as that referred to above, had convinced me that the available exogenous sex steroids generated different clinical and metabolic effects. Indeed, I had demonstrated a remarkable variance even between steroidal and nonsteroidal products, with a nonsteroidal analogue demonstrating estrogenic similarities to conjugated estrogens, but also clear variances. [55] I was also in the fortunate situation of being appointed Chairman of Obstetrics and Gynecology at the Mt. Sinai Medical Center of Cleveland at the end of 1979, an affiliate department of Case Western Reserve University School of Medicine. This allowed me to open my own clinical research center.

Over the subsequent quarter century I have been intensely involved in clinical safety and efficacy studies of multiple substances, dosage forms, routes of administration, and drug combinations and regimens. My role has varied from Principle Investigator at a single site to collaborating in multicenter studies, often as National Principle Investigator. In more recent years, my clinical research center was established as a free-standing independent site, greatly enlarged in capacity, and a significant site in the United States for menopause-related Phase II and Phase III new drug studies.

This section illustrates my progression and activities in the development of drugs for potential therapeutic use after menopause without giving the detailed differences between each of these drugs. While these findings are considered seminal to the development and investigation of products designed for enhanced safety and efficacy, it is the evolutionary process rather than the detail that I consider to be my personal contribution to this area of medical progress.

My initial efforts were to compare different estrogens available on the market in head-to-head studies.[12,26,27] These are not usual in the area of testing of products designed for menopausal therapies, most undertaken as placebo-controlled studies.[56] But they do offer the advantage of comparing new substances to what is currently available in order to determine whether the former will actually offer any potential advantage over existing therapies.

Determination of lowest effective dose through dose-response studies is critical to reducing potential risk as well as lowering cost. From the outset of testing hormonal therapies, I have been directly involved in planning and executing such studies. Indeed, I have been the Principle Investigator of the two largest pivotal studies into dose-response comparisons with both oral conjugated equine estrogens and medroxyprogesterone acetate (the HOPE study),[21] and the transdermal estradiol patch.[61] Perusal of my publications bears witness to my role in utilization of lower doses by, for example, my earliest studies recommending doses of conjugated equine estrogens of 1.25 to 2.5 mg per day, and my most recent studies promoting 0.3 to 0.625 mg per day, or equivalent low doses.

New product development is of extreme importance in the constant search for ways to enhance benefit and reduce risk. Examples of my contribution to new drug development include P1496 (an estrogen analogue)[55] and a new synthetic, 10-component, modified release conjugated estrogen tablet.[62,63] At this time, both the latter papers represent the only scientific clinical studies published on these products. Another new product investigated was a novel estrogen, estradiol acetate, which is an estradiol prodrug.[67] In head-to-head comparative studies, we demonstrated this product to be well tolerated and effective in treating vasomotor and urogenital symptoms in postmenopausal women.

In the early 1980's evidence began to develop that a nonoral route of administration of estrogen might offer advantages over the traditional oral route. The key objective was to determine whether avoidance of the first liver passage that follows absorption of drugs taken orally, would reduce the liver-induced side effects of the orally induced drug bolus.

Initially working with scientists at the Ciba-Geigy Pharmaceutical Company, and later with other companies, I was able to become involved *ab initio* in the development and testing of the transdermal patch technology. The background, overall safety profile, clinical efficacy, and utility, were documented in a series of communications.[57-61] These studies included testing of the first and subsequent generation of patches, as well as evaluation of dose response between patches and comparison of efficacy to oral estrogen. In reporting on pooled data from 448 subjects, I confirmed this therapeutic approach to be safe and effective. "*Severe adverse reactions were rare. The patch has been proven to be well tolerated, highly acceptable to patients and an important therapeutic alternative in the management of postmenopausal woman".*[58] The transdermal patch was thus demonstrated to be an effective mode of delivering estradiol while having no effect on certain liver proteins and no adverse biochemical changes. Moreover, vasomotor symptom relief was shown to be effective with low-dose transdermal patch therapy.[61]

Another transdermal development was the evaluation of the testosterone skin patch for its effect on sexual function.[64,66] Hypoactive sexual desire disorder (HSDD) is one of the most common sexual problems reported by women, yet largely ignored until

recently. As indicated in Section 2.3.5, the development and validation of instruments to measure human sexuality has been a very recent phenomenon. Utilizing validated instruments able to measure different domains of sexual function, we were able to demonstrate that in estrogen-replete surgically menopausal women with HSDD, the testosterone patch improved sexual function and decreased distress.[66]

There continues to be a need to recognize other problems that may be experienced through and beyond the menopause transition, and my current studies are involving nonhormonal drugs for symptoms such as insomnia or alternate bone active drugs to prevent or treat osteoporosis.[65,68]

SUMMARY - SEMINAL CONTRIBUTION #6

1. Different estrogens were shown to induce different clinical and metabolic effects. This seminal finding has influenced my search for safer and more effective hormonal products and routes of administration.
2. I initiated, completed, and published the world's first randomized, placebo-controlled blinded study, including head-to-head comparison of bioequivalent doses of different estrogens.
3. I have been the first, and sometimes only, investigator to evaluate and report on new products.
4. I have been one of the initial investigators to promote scientific comparisons of lower doses of hormone products.
5. I was one of the first investigators to evaluate nonoral routes of administration of hormones through technologies such as the transdermal patches and gels.

6.7 SEXUAL FUNCTION

Knowledge about sexual function and sexual response after menopause is less than satisfactory and was virtually unaddressed at the time of my first investigations in this area. The perpetuation of a number of myths about sex in aging populations has resulted in unsatisfactory stereotyping and negative attitudes. In my first studies, menopause appeared to have little effect on sexual function. Painful intercourse as a complication of vaginal atrophy is a cause of dyspareunia, not true loss of libido. I reported that the operation of hysterectomy *per se,* irrespective of whether the ovaries are removed or not, is associated with a significant loss of libido. Estrogen replacement was shown to be of no benefit in the treatment of decreased or absent libido unless specifically associated with dyspareunia.[46,69] Speculation as to the cause of the decreased libido was beyond the scope of these studies.

As described in Section 2.3.5, the use of validated instruments for measuring sexual response and dysfunction has allowed for acquisition of meaningful data about sexuality and limited efficacy of current therapies.[22,25,72,74] In turn, this has allowed us to develop recommendations and guidelines for the assessment and management of women's

sexual dysfunctions focusing on low desire, low interest, and lack of arousal, something I have contributed to as part of a collaborative group.[75]

An issue relating to sexuality in the perimenopause is the need to consider reproductive potential and the role of contraception. My personal contributions to this literature focused initially on oral contraceptive (OC) formulations and their influence on user compliance and reliability of the method. My interest came from my experience in working with developing populations, and the observation that the best formulation in one culture, society, or economic subgroup, is not necessarily the best for another. Hence, I reported recommendations to "keep it simple".[70] Another area I addressed related to age of onset and of use of oral contraceptives. While the danger of death from complications of childbirth in the woman over 40 probably outweighs that of death due to the use of OC's, there remains inadequate data on 'never-users' over age 40 who start OC's compared with matched "never-users" who go on not using it. Despite raising questions in the medical literature, I do not feel I have made any novel contribution in this area.[71]

My initial observations on post hysterectomy ovarian function, referred to previously, and my subsequent involvement with the development and clinical trials of the testosterone transdermal patch studies in post oophorectomized estrogen-replete women, allowed for my further observations relating to problems with desire and arousal in surgically menopausal women. By 2005, I was able to conclude that "*depletion of testosterone levels may be a contributor to loss of desire postoperatively. In turn testosterone patch therapy was shown to significantly increase sexual desire and activity scores in controlled clinical trials in surgically menopausal women with female sexual desire disorder (FSDD) receiving concomitant estrogen."* [74] Additional studies remain necessary to define the long-term safety profiles of individual testosterone formulations in this population. At this time, I am involved in conducting such studies, including determination of the effects of testosterone administration to the surgically menopausal woman without added estrogen therapy.

SUMMARY - SEMINAL CONTRIBUTION #7

1. My oophorectomy studies in women of reproductive age, and assessment of the role of exogenous estrogen replacement, were the first of this type in this population, and brought attention to an area in need of research.
2. I have worked as part of collaborative groups in developing and testing validated instruments for measuring female sexual response.
3. Estrogen therapy after surgical menopause was shown to be of no value in restoring or enhancing libido. But in later studies of testosterone in estrogen-replete surgically menopausal woman, the testosterone was shown to significantly improve sexual desire. Studies are ongoing.

6.8 BODY WEIGHT

Three questions have existed for many years regarding an association between body weight and female sex steroids:

1. Is the menopause *per se* associated with weight gain?
2. Does exogenous hormone therapy to the postmenopausal woman induce an increase in body weight?
3. Does body mass influence the dose requirement for hormone therapy?

My personal research was not designed to answer the first question, but did address the second question. In 1978, I was able to report that neither estradiol valerate nor conjugated equine estrogens were associated with any increase in body weight.[76] This finding did not gain widespread recognition. Twenty five years later, as Principle Investigator of the largest randomized, placebo-controlled, dose-ranging study ever undertaken, we were able to confirm that indeed, lower and standard-dose regimens of CEE or CEE/MPA are not associated with greater weight gain than placebo.[77,78] This is a seminal finding, and hopefully lays that particular myth to rest.

In the latter study, we also addressed the third question, namely, whether there is an influence of body mass index (BMI) on the effect of different doses of hormones on vasomotor symptoms, vaginal atrophy, bone mineral density (BMD), endometrial safety, and side effects such as endometrial bleeding and breast pain. Fortunately, the results of this 2-year study conducted in 2,673 women enrolled at 57 sites in the United States, was able to provide a definitive answer to this vexing question. Results from the study demonstrated that in a large population of healthy, early postmenopausal women, baseline BMI had no influence on vasomotor, vaginal, and endometrial responses to various doses of CEE and CEE/MPA. Nor did BMI affect the occurrence of side effects such as endometrial bleeding or breast pain. These results were able to demonstrate for the first time that the therapeutic effectiveness of lower dose ET/HT is not influenced by a woman's BMI. The conclusion was that, whereas the evaluation of BMI should be included in the overall health assessment of women entering menopause, BMI need not be considered when determining the clinical dose of ET/HT for menopause symptom relief.[76,77]

SUMMARY - SEMINAL CONTRIBUTION #8

1. I was the first to report that exogenous hormone therapy to the postmenopausal woman does not induce an increase in body weight.
2. We were able to report from a large multicenter study, that BMI is not an influencing factor on dose requirements for relief of symptoms in postmenopausal women.

6.9 QUALITY OF LIFE

Quality of life (QOL) is increasingly being recognized as a key outcome measure of quality of healthcare. Moreover, it is now widely accepted that a clear distinction needs to be made between health-related QOL (HRQOL) and global or overall QOL. HRQOL can be conceptualized as a patient's perception of their physical, cognitive, and mental health. Global QOL is a broader measure and may be defined as a reflection of a person's beliefs about functioning and achievements in various aspects of life, that is, an overall sense of life satisfaction and well-being.

As mentioned in Section 2.3, measuring global QOL was dependent on the development of validated instruments targeted at this specific population. My contributions to medical science in this area therefore fall under three headings:

1. Development of a validated instrument, the UQOL. This was described in Section 2.3.
2. Research contributions into multiple therapies for reducing or alleviating specific menopause-related symptoms, with consequent enhancement of HRQOL.
3. Application of the UQOL in clinical research to demonstrate the impact of specific treatments on global QOL.

Strictly speaking, much of my entire body of work as summarized in this doctoral submission has been directed at addressing item #2 above. Thus, identifying the true symptoms and potential pathologies associated with the menopause transition, and undertaking blinded and controlled studies of various potential therapies, has resulted in the multiple publications demonstrating improvement with most of these therapies, and which are referenced in this submission. Examples that have been referred to in the foregoing pages include demonstration of therapeutic efficacy of hormone therapies in alleviating vasomotor symptoms, night sweats, enhancing sleep, improving sexual function, and reduction of the likelihood of fracture following osteoporosis. Consequently, my having demonstrated therapeutic efficacy, and publicizing these results in research journals, medical reviews, and other resources for modifying clinical health practice, must inevitably have resulted in improved HRQOL for multiple thousands of women. The many ways in which I have been involved beyond the actual research studies in disseminating information to both health providers and the community at large will be described in Sections 2.12, 2.13, 2.14, and 2.15.

The development of the UQOL and related instruments is now allowing direct measurement of the effect of specific therapies on both HRQOL and global QOL. For example, treatment of postmenopausal women with a combination of conjugated estrogens and trimegestone was shown to result in significant improvement of 6 of 9 domains of HRQOL compared to placebo.[79]

Whereas the validation of the UQOL was horizontal or cross-sectional in nature, the UQOL has been demonstrated to be effective in vertical application, that is in randomized, blinded, prospective investigations. The first randomized, prospective study with the UQOL has now been completed, and multiple other studies are in

progress. Raloxifene, the first selective estrogen-receptor modulator (SERM) approved in the United States by the Food and Drug Administration (FDA), was demonstrated to improve the occupational and health domains in the overall score of the UQOL.[80]

Finally, I have also drawn attention to the fact that while the presence of a medical problem or symptom may negatively impact both HRQOL and global QOL, of equal importance is the fact that the level of QOL may impact the outcome of the medical problem. Utilizing osteoporosis as the example, it is clear that fracture and resultant pain and disability would negatively impact QOL. Less well defined has been the impact of global QOL on osteoporosis. But a decreased perception of well being will be associated with poor compliance/adherence with drug therapies, exercise programs or fracture outcomes. *An understanding of both sides of the coin would assist healthcare providers to appreciate more fully the importance of prevention and treatment*. [81]

SUMMARY - SEMINAL CONTRIBUTION #9

Perhaps my greatest contribution in this area has been to bring medical attention to the importance of defining, recognizing, accurately measuring, and enhancing quality of life in women through and beyond menopause. This has been accomplished through:

1. Development of a validated instrument, the UQOL.
2. Contributions of specific research in therapy for reducing or alleviating specific menopause-related symptoms and consequent enhancement of health related QOL.
3. Application of the UQOL in clinical research to demonstrate the impact of specific treatments on global QOL.
4. Multiple reviews and other educational activities.

6.10 POPULATION SURVEYS

Contemporary healthcare necessitates clear knowledge and understanding of the attitudes and experience of a target population, without which adherence to preventive or therapeutic programs are likely to be unsuccessful. In 1993, in the absence of any recent published survey of women's attitudes and experience with menopause and various forms of hormone replacement therapy, we organized a Gallup Survey through my organization, The North American Menopause Society (NAMS), (the details on NAMS are presented in Section 2.15). The objectives of the study were to determine women's knowledge about menopause, identify obstacles to efficient physician/patient communication, and to define issues of concern to women over age 45. The results helped in answering these questions, and are presented in the reference itself.[82] However, it is not the results but the actions taken because of the results that I believe lead to the significant contribution of this effort. These actions lead to the recognition that a scientific organization, namely NAMS, had an obligation beyond its health and scientific constituency, and that was to the health consumer. Accordingly, NAMS changed its mission/vision statement, developed a consumer education division, and

developed multiple educational programs for the public. In addition, the lessons learned from the survey also influenced development of teaching materials for doctors and other healthcare providers.

Public knowledge and attitudes are subject to constant change, and we continued to undertake population surveys. A repeat Gallup Survey in 1997 found *women to be still divided in their views on menopause, some seeing it as a medical condition requiring treatment, whereas others see it as a natural transition to be managed by "natural" means. The single main source of women's information on menopause was a health professional (49%). The majority of women who were already menopausal or experiencing menstrual changes expressed an attitude towards menopause that was either neutral (42%) or positive (36%).*[83] Again, the study confirmed that *providing women with accurate and up-to-date information and enhancing communication between healthcare providers and menopausal women remained the challenge.*

In 1998, yet another survey was undertaken to assess perceptions held by postmenopausal women in the United States aged 50 to 65 years regarding their menopause transition and early postmenopausal years. The findings suggested an improving population trend. *Although the postmenopausal women surveyed had differing views of menopause as well as their perceptions of postmenopause compared with premenopause, the majority viewed menopause and midlife as the beginning of many positive changes in their lives and health. Hysterectomy was a factor associated with improved sexual relationships, spouse/partner relationships, sense of fulfillment, and physical health.*[84]

In summary, population surveys are a necessary part of healthcare research. Properly designed with clear objectives and questions that are lucid and appropriate to the information being researched, these surveys provide invaluable information in understanding the attitudes, concerns, frustrations, and needs of the population for which healthcare regimens are being designed. For me, they provided important information on educational needs, and helped in our design, planning, and implementation of consumer-friendly educational programs that would clearly address the deficiencies in knowledge that had been exposed.

SUMMARY - SEMINAL CONTRIBUTION #10

The design and implementation of health surveys on population knowledge, attitudes, and experience regarding menopause and hormone therapies, was the tool which aided my key contribution under this section. That contribution was to recognize what the population was telling us about their health concerns and the health care system, and to translate that need into appropriately designed and distributed materials that were informative and understandable to that target population.

6.11 COST-EFFECTIVENESS ANALYSIS AND PHARMACOECONOMICS

Effective healthcare delivery is dependent on multiple factors. The health program or therapy must be effective, safe, and affordable. Three areas that have intrigued me for many years, and that have challenged me to explore in depth for mechanisms of analysis able to provide measurable outcomes, are:

1. Mechanisms for quantifying risk and benefit of therapies in relation to quality of life.
2. Considering the psychosocial and socioeconomic burden of true menopause-related symptoms or conditions.
3. Incorporating healthcare costs into risk and benefit analysis.

In summary, then, it is essential to quantify the impact of a medical problem on the individual and on society, to have a clear measure of the potential risks and benefits of the available therapeutic approaches, and, finally, to be able to rank the costs of these issues in financial and quality of life terms. Only then, having these answers, can effective cost-efficient public health policy be developed.

I first considered the issues of risk, cost and benefit ratios in menopause management in a brief 1977 review.[85] In 1978, observing the swinging pendulum of medical and public opinion of postmenopausal hormone therapy usage, I stated "…*a previously neglected area has become a subject of intensive research. Every new answer, perhaps inevitably, has posed yet more questions, so that debate and discussion have become even more acrimonious now than in the past. It is therefore time for us to put the subject in perspective; for a balanced evaluation of specific benefits and actual risks to be made. An attempt at evaluation of the risk benefit ratio of long-term effects of pure estrogens highlights the fact that, compared to the many carefully designed large scale epidemiologic studies on the health consequences of oral contraceptive use, no comparable body of data is available for pure estrogen. Despite this lack, it is possible to subject these risks and benefits, and their potential costs, to some form of mathematical evaluation and analysis, and to come out with some form of answer or direction."*[86]

Exploring the various analytic methods and equations available in 1978 revealed two different analytic approaches to the assessment of health practices:

1. *Cost-benefit analysis*. This values all outcomes in economic terms, requiring human lives and quality of life to be valued in dollars.
2. *Cost-effectiveness analysis*. Healthcare costs are measured in dollars, but health effectiveness can be measured as quality of life through "quality adjusted life years." This approach was reported in 1977 by Weinstein and Stason to evaluate the outcomes for renal dialysis, and I immediately recognized the applicability of this approach to menopausal therapies (Weinstein MC, Stason WB. Foundations of cost-effectiveness analysis for health and medical practices. *New Engl. J. Med.* 1977;296:716-721).

I modified and adapted the equation and mechanism of analysis, and reporting on the application of cost-effectiveness analysis to postmenopausal estrogen therapy in 1978, concluded that :"*Application of cost-effectiveness analysis to long-term estrogen therapy should be of value in that it will force physicians and health planners to be explicit about the beliefs and values that underlie their decisions. Where points of view differ, the relative trade-offs can be compared more directly….At the present time the decision to prescribe long-term estrogen therapy must rest upon a choice between relying on a proper analysis despite the present imperfections, or on no analysis at all". [86]*

In 1982, I attempted to put actual numbers into the equations, but remarked on the difficulty of finding adequate accurate data.[87] It was possible to conclude, despite the limitations, that a mechanism did exist for minimizing risks and maximizing benefits. Moreover "*the harsh facts of limited budgets and possible rationing of health services are fast becoming a fact of life in medical practice. It is extremely important that physicians consider the implications of any health preventive program they introduce and that they take into account not only the potential benefit, but also the potential risks and the relative costs of both". [88]*

The modified equations for measuring cost-effectiveness analysis had thus been introduced into this area of health care as a mechanism for ranking the issues of importance. Application of this line of thought was taken further when we reported on the risk-benefit appraisal of transdermal estradiol therapy.[90]

Later, I returned to my earlier interest on the psycho-socio-cultural aspects of menopause and menopause management. In an abstract to a paper in 1990, I stated:" *The climacteric is a pathophysiologic event involving morphologic and clinical changes that can lead to clinical symptoms. This event has to be considered in the broader perspective of the woman's psycho-socio-cultural milieu, which influences how she reacts to whatever symptoms she may experience. Studies have shown that women of lower socioeconomic status experience the most problems. Economic realities of the health care system call for cost-effectiveness analysis to determine the role of hormonal replacement therapy in relieving symptoms and preventing further disease, specifically osteoporosis and cardiovascular disease. To help make such an analysis and justify the cost, a series of formulas is presented, based on quality of life". [89]*

I returned to this subject in greater depth in 2005, stating in a detailed analysis that: "*Menopause-associated vasomotor symptoms are associated with significant direct and indirect costs. Overall costs of traditional pharmacotherapy or complementary and alternative medicine modalities, including over-the-counter treatments and dietary supplements, for managing menopause-related vasomotor symptoms (VMS) are substantial and include initial and follow-up physician visits and telephone calls. Additional costs include laboratory testing, management of adverse events, loss of productivity at work, and personal and miscellaneous costs. Pharmacoeconomic analyses, including those that consider risks identified by the Women's Health Initiative, generally support the cost-effectiveness of hormonal therapy for menopause-associated vasomotor symptoms, which have been the mainstay for the management of these*

symptoms for more than 50 years. However, because many women now want to avoid hormone therapy, there is a need for new targeted therapies, validated by results from controlled clinical trials that are safe, efficacious, cost-effective, and well tolerated by symptomatic menopausal women".[91]

The conclusion to that 2005 analysis was that the state of the art still remains less than satisfactory: "*Menopause-related VMS are very common and can be associated with a high patient and societal burden… The physiology underlying VMS is complex and not fully understood, but it is clear that alterations in noradrenergic and serotonergic mechanisms during hypothalamic thermoregulation are involved in their development. A significant unmet need remains for menopause-related VMS treatment options. Among women who are eligible for the treatment of menopause-related VMS, 80% do not seek treatment, receive inadequate counseling, or do not have access to local medical aid. The development of therapies that specifically target VMS may provide high efficacy and reduced risk of serious and potentially costly adverse events, thus increasing the overall cost-effectiveness of therapy".* [91]

SUMMARY – SEMINAL CONTRIBUTION #11

Pioneering the concept of balancing the risks and benefits of menopause-related hormone therapies, I was the first to introduce the application of cost-effectiveness analysis to this area of medicine. This emphasized the need for incorporating risk, benefit, the costs incurred or saved with each, as well as quality of life, into a measurable analysis. In turn, this will allow for impartial selection of such therapies in both individual and overall health planning. Most importantly, such analyses allow for the ranking and comparison of the cost-effectiveness of other therapeutic modalities for other health problems, and placing postmenopausal hormone therapies in perspective within the big picture.

6.12 HEALTHCARE DELIVERY AND MENOPAUSE CLINICS

Health care for women with menopause-related symptoms was an area of medical neglect. A mere 25 years ago the subject of menopause was considered to be of so little importance that there was no real mechanism for women to get appropriate therapy. My contribution to describing strategy and tactics for such health care came through an indirect path.

The concept and value of a menopause clinic for the centralization and coordination of menopause management was first described by me in 1977.[133] The Groote Schuur Hospital Menopause Clinic, started in 1967 and the first menopause research clinic in the world, was highly successful in stimulating interdisciplinary long-term collaborative research, and served as a role model for later descriptions of the values of such clinics.[53] This led to an informal discussion conducted on menopause clinics during the Second International Congress on the Menopause, held in Jerusalem in 1978, and a

formal session entitled “Menopause Clinics: purpose, function, and international comparisons,” during the next Congress in Ostende, Belgium, in 1981.[92]

Volunteers to clinical research studies were reluctant to leave the Groote Schuur Menopause Research Clinic at the end of their research protocol, and by default became patients of the clinic. Lessons were learned. For example, listening to women discuss their problems animatedly in the waiting room led to my descriptions later of “menopause support groups.”

The purpose and benefits of such clinics have been summarized in a number of papers.[92-95] These will not be elaborated on here. In summary, beyond an educational function and screening center for many menopause and age-related health problems, the menopause clinic represents the most cost-effective care because it is centralized. All medical specialties can be involved and their services coordinated through this central point. They are also ideal for conducting medical research. Perhaps most important, the patient is able to interact with health professionals who are truly empathetic with the special concerns of the menopausal woman.

Clearly, it is not always practical to “compartmentalize” health care. What is essential is that the health care be appropriate and cost effective. Menopause clinics have been good testing sites for evaluating protocols for optimal screening and evidence-based guidelines, and we have described the former as well.[96,97,98.] Recommendations were also presented for developing a menopause component in existing medical practices.[96]

In the 1980’s I conducted a series of teaching seminars in Cleveland for clinicians across North America entitled “The Menopause Clinic – A Practical Workshop,” the result being a proliferation of such centers of excellence.

SUMMARY SEMINAL CONTRIBUTION # 12

The original Groote Schuur Hospital menopause clinic was the first such facility in the world. Following publications on the role of such a facility, the clinic became a role model for similar clinics worldwide. Thus, I was the first person to start a menopause research clinic and then a comprehensive menopause clinic, and later to describe the role of such centers within the context of generalized healthcare distribution.

I educated clinicians from across North America and internationally in the details of establishing these centers, or developing a menopause management component within their existing medical practices. I advised on the establishment of such clinics in South Africa, the United Kingdom, the United States, Europe, and Asia.

An indirect result was that I was a pioneer in establishing the subspecialty of “Menopause Medicine.”

6.13 CLINICAL PRACTICE GUIDELINES

The concept of developing clinical guidelines or position statements is really quite recent, initiated in the 1970s by the U.S. National Institutes of Health with the development of consensus reports. The process changed radically through the 1990s with the "evidence-based medicine" movement that began to mandate a comprehensive and systematic review of the medical and scientific literature and for the requirement that recommendations needed to be directly linked to supporting evidence.

In principle, developing position statements should be easy. Presumably, using identical data bases and published evidence, the process should be straightforward for any group developing consensus statements and clinical guidelines. So why then do different organizations, after scrutinizing the same evidence, come out with different interpretations and recommendations?

The simple truth is that we will always lack a complete database. It is literally impossible to undertake and complete evidence-based clinical research in any area of medical science that incorporates all populations, subpopulations, conflicting and confounding factors, comorbidities and risk factors, and combinations and permutations of medications. The targets, such as risk factors, demographics, drug development and usage, and so on, keep moving and a complete contemporary database will therefore always be no more than wishful thinking. In short, therefore, the guideline-development concept would be flawed were it to rely entirely on the base of evidence existing at any one point in time. The process has to allow for clinical and scientific judgment to be taken into account by both the developer and those who ultimately put the recommendations into clinical practice.
My first experience in the difficulties involved goes back to 1988, and an attempt at setting guidelines on progestogen use for postmenopausal women.[102] It also raised my awareness of the need for basic rules and mechanisms for creating such documents.

As Executive Director of The North American Menopause Society (NAMS), I found myself in the advantageous position of being able to develop multispecialty expert panels, and having the organizational capacity to develop evidence-based guidelines. Through NAMS, we commenced development of consensus opinions in 1998, emphasizing that *they do not represent "practice standards" that would be codified and held up as standards by regulatory bodies and insurance agencies. Rather these are prevailing opinion pieces, attempting a best effort at incorporating current best evidence into practical clinical recommendations.* (Boggs PB, Utian WH. The North American Menopause Society develops consensus opinions. *Menopause*, 2004;5:67-68).

Since that time we have developed multiple consensus opinions and position statements. These have included the following:

1. Utian WH**,** NAMS Consensus Group, A decision tree for the use of estrogen replacement therapy or hormone replacement therapy in postmenopausal women: consensus opinion of the North American Menopause Society. *Menopause* 7: 76-86, 2000.[99]

2. Utian WH, (Rapporteur) NAMS Consensus Group. Effects of menopause and estrogen replacement therapy or hormone replacement therapy in women with diabetes mellitus: consensus opinion of the North American Menopause Society. *Menopause,* 7:87-95, 2000.[103]
3. Utian WH**,** (Panel Chair). Position Statement: Estrogen and progestogen use in peri- and postmenopausal women: September 2003 position statement of The North American Menopause Society. *Menopause*, 10:497-506, 2003.[104]
4. Utian WH**,** (Panel Chair). Position Statement: Recommendations for estrogen and progestogen use in peri- and postmenopausal women: October 2004 position statement of The North American Menopause Society. *Menopause*, 11:589-600, 2004.[105]
5. Utian WH, (Panel Chair). Estrogen and progestogen use in peri- and postmenopausal women: Position statement of The North American Menopause Society. *Menopause*, 14:--------,2007 (In Press)

These recommendations have been translated into multiple languages and published in medical journals worldwide. They have exerted considerable influence in the appropriate usage of these medications after the menopause. But translating these positions into clinical practice must still necessitate taking into account the complete health profile of the individual woman as well as her personal preferences and beliefs. That is, the position statement is intended to enhance the quality of patient care and to modulate the clinician's pattern of practice. Consumers of health care need to find them practical and acceptable. Fortunately, I have had the opportunity of explaining and further disseminating these positions through other vehicles, such as lectures, reviews, consumer education pieces, and other medical publications.[100,101,106.]

SUMMARY – SEMINAL CONTRIBUTION #13

I have initiated, coordinated, and disseminated evidence based position papers for best medical practice utilizing international panels of medical experts in multiple disciplines pertinent to the topic under consideration. These position statements have consequently had a major impact on medical management of the menopause.

6.14 CONTRIBUTION TO INTERNATIONAL PRACTICE THROUGH STATE OF THE ART REVIEWS, EDITORIALS, AND CLINICAL RECOMMENDATIONS

This section represents the evolution of my thinking about the subject of menopause over four decades. Based on my personal research, the current literature, and clinical experience, I produced a series of review articles and editorials that would express my recommendations for best clinical practice, or highlight areas of concern. This section is best divided into two subsections, the first with pertinent extracts from formal published reviews (2.14.1), and the second with selected abstracts on a chronological basis taken from editorials written for *Menopause Management* (2.14.2).

Since 1968, I have authored or coauthored nearly 40 major state-of-the-art reviews with clinical recommendations for best practice of menopause-related medicine. These are itemized as references 107 through 145 in Section 4. Additionally, I have written well in excess of 120 editorials in medical publications on virtually every facet of the subject. I have authored 3 books as an individual, and coauthored a further 4 books, most of which have also been translated into other languages. I have personally taught or lectured on every continent. All of these editorials and books are listed in my complete curriculum vitae in Section 8, as are my major lectures and medical congress presentations.

To attempt to summarize this massive body of work would virtually create another textbook, obscuring my key contributions or original ideas. Given the requirements for the Doctor of Science degree, I have therefore decided that instead of a narrative summary, I would select direct quotations from some of these publications that are representative of my forward thinking and seminal contributions to medical science at the time they were written. These unedited direct extracts or conclusions would also best represent the evolution of my personal thought processes over the last 40 years. Not every paper is abstracted, but all key publications are. Editorials from publications other than *Menopause Management* are not abstracted, but are listed in the curriculum vitae.

6.14.1 REVIEWS:

QUOTES FROM REVIEWS ARE PRESENTED BY YEAR
AND REFERENCE NUMBER (SEE SECTION 4 FOR COMPLETE TITLE)

1968/107

The menopause, once regarded as a physiological norm, has in recent years been described as being a hormone-withdrawal syndrome, and this as yet unproven assumption has resulted in a spate of literature enthusiastically describing the prevention of various ageing processes in the older female. It is therefore apparent that the current concepts leading to this dramatic swing of the pendulum need to be critically reassessed.

Investigators in the field of menopause therapy fall into 2 distinct schools: the 'enthusiasts' and the 'doubters'. As a result, most of what is published is based on emotional and philosophical premises; the 'change of life' is an emotional subject not only to women, but to men and doctors.

Evidence for the current concept that the climacteric is a result of hormone deficiency is critically appraised. There is as yet no proof that long-term oestrogen therapy to the postmenopausal female is of any major benefit in the prevention of coronary occlusive disease or osteoporosis. Further controlled investigation into the use of natural oestrogens, particularly their effect on ageing, is an urgent necessity.

1969/131

The possible major disadvantages of long-term therapy on the one hand are a fear of carcinogenesis and thrombogenesis. These risks, if valid, are extremely rare. On the other hand, the possible advantages of long-term therapy are also as yet unproven…
Exogenous oestrogens are of undoubted value in the relief of symptoms such as hot flushes, the associated bouts of perspiration, and atrophic vaginitis.

Their use in the prevention of coronary arterial disease and the problems of osteoporosis hold definite promise but the results of long-term prospective studies must be awaited before their routine use for the prevention of these disorders can be advocated

The prophylactic use of long-term exogenous oestrogen therapy in the prevention of ageing has not been established and Wilson's description of the probable fate of the non-treated elderly female as being one of hypertension, atherosclerosis, flabby breasts, dowager's hump and a vapid, cow-like feeling called a 'negative state', would appear to be an overstatement of the case.

It is therefore suggested that only specific problems be treated and that the routine use of oestrogens in all women after the menopause cannot be recommended at this time.

1970/120

Recent research has shown a relationship to exist between ovarian endocrine function and the density of bone. Osteoporosis is a metabolic disease of bone characterized by a disturbance between bone formation and resorption. The main disturbance is an increased resorption of bone which is related to production of hormones. The osteoporosis commences or accelerates in women soon after the natural or induced menopause and it does seem that osteoporosis is related to endogenous oestrogen deficiency. Recent work has tended to show that osteoporosis is more likely to develop when both calcium and sex hormones are deficient.

Osteoporosis is probably the commonest cause of chronic backache in the elderly patient. Although all parts of the skeleton are affected, the spine and pelvis are more extensively involved than other parts. Radiologically there is rarification and collapsed vertebrae are often seen.

The pain is characteristically worse when the patient is up and about or tired and is accompanied by rounding of the back and loss of stature.

At present it appears that removal of normal ovaries from a female of reproductive age will certainly result in osteoporosis.

Administration of exogenous natural oestrogens may prevent the development or extension of this process. Unfortunately, there is no evidence as yet that such female hormones can cure or improve osteoporosis once it has developed.

PREVENTION: A discussion such as this would be incomplete without some comment on prophylaxis. The following factors are important if backache is to be minimized in the female:

- *Retention of ovaries at gynaecologic surgery.*

Premature removal of the female ovary has been shown to result in a negative calcium balance and the subsequent development of osteoporosis. It is therefore incorrect for the gynaecologist to remove ovaries of normal appearance at the time of hysterectomy on women of reproductive age.

1974/121

The possible relationship between headache and the oral contraceptive is considered. In the present study, no association has been demonstrated between oestrogen withdrawal (as produced by oöphorectomy, or cessation of exogenous oestrogen replacement therapy in oöphorectomised females) or by exogenous oestrogen therapy, and the symptom of headache. This would support current theories and evidence which appear to implicate the progestogenic component of the pill as the most likely aetiological factor.

1976/132

THE SO-CALLED 'MENTAL TONIC' EFFECT: A profound psychological, euphoric and mental tonic effect of estrogen administration on ageing women has long been described. There were, however, until recently, no satisfactory single or double-blind trials and in the absence of such information it was difficult to assess the effect of sex hormones on the psychological state. Utian showed both estrogen and placebo therapy to have highly stimulating 'mental tonic' effects on the oophorectomized females.

True estrogen deficiency symptoms have been differentiated from indirect ones and the management thereof discussed. The pros and cons of long-term therapy have been considered. Taking all factors into account it would appear that such therapy is justified in females undergoing premature menopause, either natural or artificial, but that further research is necessary before this therapy can be recommended for all females after normal menopause.

The value of a Menopause Clinic to centralize such control and experience has been stressed and it is strongly recommended that such a facility be made available at all major gynaecological institutions.

1977/133

The true early symptoms of ovarian failure are shown to be remarkably few and must be differentiated from psycho-socio-cultural factors. Alternate pathology should always be sought for unexplained problems. Only complaints of hot flushes and those related to vaginal atrophy are estrogen related, and hence justify short-term estrogen therapy. Other early "climacteric" problems should be evaluated and treated according to acceptable medical criteria.

There is an urgent need for clarification of the benefit/risk relationship of long-term estrogen therapy and, for example, factors such as development of uterine or breast cancer and thromboembolic disease. Present indications are that such risks exist but that the order of risk is relatively low….. Further research is necessary before this therapy can be recommended for all females after normal menopause. Until specific answers are forthcoming it is best to keep an open mind on the subject.

1979/108

An endocrinopathy can be defined as a metabolic disease following an abnormal increase or decrease in function of an endocrine gland. Decreased function with resultant deficiency of a specific hormone or hormones and concomitant pathologic target organ changes have been described for all endocrine glands. Diabetes Mellitus for example, is an endocrinopathy even though insulin replacement therapy may fail to prevent all the associated pathologic changes…..The Current debate regarding oestrogen replacement therapy after menopause fails to recognize this analogy. That is, if ovarian failure and menopause are a physiologic event and part of the concurrent ageing process, then there is no justification for hormone replacement. If the climacteric-related events are the result of an endocrinopathy (a true hormone deficiency disorder following ovarian failure), then the syndrome should be defined and recognized as such, and determined efforts be made to evaluate methods of physiological replacement or substitution.

The purpose of this presentation will be to examine the arguments for and against the above concept, and for appropriate conclusions to be drawn regarding the current status of climacteric…..Sufficient evidence exists to justify the classification of ovarian failure and climacteric as an endocrinopathy with specific hormonal changes, notably decreased oestrogen production, change in ratio between different oestrogens, loss of oestrogen cyclicity, loss of ovarian cyclic progesterone production, and an increase in gonadotropin and androgen production. The direct effect of these alterations is on specific target tissues where there will develop significant genital and extra-genital responses. These in turn cause specific symptom formation. It follows that some form of hormone therapy appears justifiable and necessary.

I would therefore submit that I have proven my case; that the female climacteric constitutes an endocrinopathy and that there is indeed rationale for curative and preventive therapy after the menopause.

1979/134

The mounting evidence for a relationship between continuous long-term estrogen therapy and the development of uterine cancer should not, therefore, have come as any surprise. The hope for the future is that cyclic administration of estrogen in low dose, with added progestin, will not carry the same relative risk. There is a theoretical foundation for this hope, but no published proof as yet.

Until further results are forthcoming, the following attitudes to practice could be adopted.

1. *Short-term estrogen therapy for specific menopausal symptoms (hot flushes and atrophic vaginitis) is fully acceptable.*
2. *Long-term hormone therapy is justified in young women undergoing premature menopause, provided the due precautions, previously mentioned, are observed.*
3. *Long-term therapy cannot yet be recommended for all women after menopause.*
4. *It is not, however, justifiable to withhold such treatment from a normal informed patient who requests it on an individual basis, provided there are no contraindications and the patient agrees to regular check-ups.*
5. *Certain rules for estrogen usage and patient follow-up exist and have been discussed. In particular, the drug should be administered cyclically or intermittently, and in the lowest effective dose.*

1981/135

The climacteric can be considered a definitive endocrinopathy. Loss of ovarian function is associated with specific metabolic sequelae. Unfortunately at the present time exogenous estrogen replacement therapy offers neither a completely safe nor a fully effective physiological substitution.

The indications for exogenous estrogen therapy are well defined:
Specific Symptoms – Hot flushes and atrophic vaginitis only. The rule is minimal dosage, for a short-time period.
Long-term replacement – Whilst not indicated for all females from menopause onwards, it should be offered to patients with premature menopause or castration. The risk/benefit/cost ratio must be considered for each individual and the patient must be well informed, particularly of the potential risk of breast and uterine cancer, and of venous thrombosis.

The practicing clinician should keep an open mind to further developments in relation to long-term estrogen therapy. Much data is forthcoming and will change the risk/benefit ratio. It is to be hoped that the indiscriminate use of long-term estrogen therapy during the past decade becomes no more than another chapter in the history of medicine.

1982/126

An in-depth analysis of the scientific, medical and health-related epidemiologic literature was undertaken in order to determine whether women in the second half of their reproductive life were at increased medical risk specifically because of their reproductive age and sex. The outcome has been generally reassuring except for a steep increase in the incidence of breast cancer which occurs from age 35 onwards. Hypertension also increases dramatically at this time of life, but does not appear to be directly sex-related. The greater rate at which women between 35—45 years visit their doctor's office as compared to other women, or men of all ages, is probably accounted for by routine checkups and partially, perhaps, by psycho-socio-cultural factors, an area not considered in this report.

1986/143

Although historical references to non-endocrine treatment of the menopause may sound amusing, it is a sad reflection of the state-of-the-art, that even today we can offer little more in the way of non-hormonal medication to the women suffering severe hot flushes and having a reason not to take hormonal therapy.

The general lack of information on non-hormonal medication of the menopause can best be exemplified by the following analysis. As editor of Maturitas, the International Journal for the Study of the Climacteric, I reviewed the subject of all papers published between 1978 and this meeting. Out of 227 papers published, 96 related directly to hormonal therapy, yet only 7 were on non-hormonal medication.

Perhaps the problem really does not lie as much in the realm of therapeutics as it does in the actual definition of "menopausal symptoms".

CONCLUSION: The selection of pharmacologic agents, hormonal and non-hormonal, for use after menopause needs to be specific. Misuse or abuse of drugs can no longer be justified. This does not imply

that physicians and patients should shun their use, an opposite extreme that also cannot be supported. When a definitive indication exists, and the basic principles of drug therapy and follow-up are observed, then the use of such agents will often generate extremely gratifying results and should not be unduly withheld. There is an urgent need for further research in this area.

1987/53

Considerable research is still necessary to define all the specific sites where sex-steroid hormone receptors may be present and to clarify the response of these tissues to the altered endocrine state of climacteric. Nonetheless, more than enough evidence does exist to define the climacteric as an endocrinopathy in which changes in hormonal profile are associated with extensive pelvic and extrapelvic target tissue effects.

The longer these effects are allowed to continue without corrective therapy, the more likely there is to be expression of pathologic process and clinical symptoms. The nature of these changes does, however, justify some form of hormone replacement therapy in appropriately selected women. The dilemma facing the clinician is that not all of the changes described occur in all women. Methods to predict the onset, rate of progress, and ultimate severity of climacteric-related events thus present a major challenge to modern medicine.

1987/109

Postmenopausal women comprise an ever-increasing percentage of the population. The alteration in ovarian function with loss of cyclic hormonal activity after menopause appears to be an actual endocrinopathy that produces definite metabolic effects. Clinicians must therefore become able to differentiate postmenopausal endocrine changes from those associated with the aging process. Four criteria are necessary for endocrinopathy to be present; morphologic changes, functional changes, hormonal changes, and target-tissue changes. The metabolic and pathologic changes after menopause appear to satisfy these criteria. If an actual endocrinopathy is determined to be present, long-term hormonal replacement therapy may be appropriate.

1989/136

USA NATIONAL MULTICENTER STUDY: The largest study of transdermal oestrogen to date was undertaken in 12 centers in the United States (Ciba-Geigy Study 01).[57,58,59] *The primary objectives of this double-blind investigation were to assess the safety and efficacy of the transdermal patch, as well as to determine equivalent therapeutic doses of transdermal oestradiol and oral conjugated oestrogens in patients whose severe hot flushes had been controlled with the latter therapy. Some had been receiving medroxyprogesterone acetate in addition to conjugated oestrogens.*

THE CURRENT STATUS OF TTS OESTRADIOL: There appears to be little doubt that the TTS oestradiol system has a significant role in the treatment of appropriately selected postmenopausal women (i.e. in these individuals there should be an indication for therapy and no contraindications such as breast cancer or recent uterine cancer).

1989/137

THE PLACE FOR ORAL CONTRACEPTIVES (OC's): Common practice rules out OC's for women over 40, but this precaution is largely based on studies that involved high-estrogen pills and did not control for smoking. In short-term studies using the newer, low-dose OC's, risks appear to be reduced. Benefits of OC's for older women include relief of premenstrual syndrome and improvement of benign breast disease and menstrual cycle control.

1989/138

Women are increasingly spending more years of their lives beyond the menopause, which places them at risk for various health problems due to estrogen deficiency. Tissues and organs with estrogen receptors such as the ovaries, endometrium, vaginal epithelium, hypothalamus, urinary tract, and skin are directly affected by a lack of estrogen production. Other tissues in which estrogen receptors have not been consistently identified, such as bone, are also affected by waning levels of estrogen. The postmenopausal

woman frequently experiences neuroendocrine changes (hot flashes) that often dissipate over time and a steady rise in her risk of cardiovascular disease, which approaches that in men of comparable age.

1989/144

INTRODUCTION: Is quality of life impaired by ovarian failure and enhanced by hormone-replacement therapy? "Quality of life: (QOL) has no clear definition or simple description. It cannot be directly visualized, tangibly palpated or specifically quantified. Mood and feeling of well-being or satisfaction with self and surroundings are perceived remarkably differently by different individuals. There does exist, nonetheless, a large body of literature linking ovarian function and hormone-replacement therapy (HRT) with specific aspects of QOL. Trying to piece the puzzle together, to identify meaningful relationships between the variable parameters has offered a most intriguing challenge.
CONCLUSION: Finally, the question again, does ovarian failure impair QOL and HRT enhance it? Undoubtedly, yes. Nonetheless, we face a peculiar paradox. We currently have much of the necessary knowledge and tools required to prevent major morbidity and mortality, to enhance not only the quality but also the quantity of life after menopause, but only a small fraction of the eligible population currently receives proper care. We face a major health-care crisis in the future and are always calling for more and more research, but we do not even utilize our current knowledge properly. Essentially, we practice crisis care when preventive care is called for. The challenge is to disseminate knowledge and appropriate care to the population at risk. Let us meet this challenge with immediate and effective action.

1990/11

Marking as it does the loss of the ability to have children, menopause is a critical stage in the life cycle of the human female. Rather than dwelling on negative aspects, the modern woman should regard menopause as a time to look ahead and take actions that can help ensure a healthy and fulfilled future. High on a list of such actions should be a full medical evaluation. Women identified as being in need of hormone replacement therapy would be well-advised to consider going ahead with this highly effective form of treatment. Those not needing is should still see menopause as a signal to reevaluate all their health habits. Women who may need some form of hormone treatment but are unable to undergo HRT should not despair. Other methods of treatment, though not generally as effective as HRT, are available, and researchers are continuing to seek new treatments, as well as improvements in hormone therapy and its alternatives.

1991/112

Recent research on the menopause and experience with available treatments has generated interesting philosophic issues. The concept of hormone 'replacement' therapy covers a multitude of therapeutic circumstances, not all of which are best described as replacement. Replacement is perhaps the correct concept for oestrogen therapy given to the woman who has undergone premature oophorectomy, but the woman with an intact ovary may receive something closer to additive therapy. Another distinction requiring further scrutiny is that between physiologic restitution and pharmacologic treatment.

An ever-widening array of therapeutic alternatives is now available for administering oestrogens. More research is needed to define optimal combinations and duration of therapy, as well as the type, dose, potency and precise route of administration in each case. We must all be prepared to accept changing concepts and new treatment strategies. In the interim, the advantages and disadvantages of HRT should be carefully weighed in each individual patient.

1992/113

The modern therapeutic armamentarium is broad but in some respects superficial. Diet and nutrition, exercise, and hormonal medications receive the most attention and the latter the most debate. Hormone replacement therapy of varying types, formulations, doses, and routes of administration produce certain benefits and entails certain side effects and risks. The benefits include alleviation of hot flashes, urogenital atrophy, osteoporosis, and coronary hear disease, as well as improvement in sexual response, mood, sleep, and memory. In addition, it may promote longevity. Negative responses to hormone replacement therapy include nausea, mastalgia, menstrual bleeding, increased necessity for surgery, uterine and breast cancer, thromboembolic disease, hypertension, and gallstones.

1992/114

The significant differences in the steroid profile between the premenopausal and postmenopausal female are as follows:

1. *The blood production rates of estrogen decrease;*
2. *The cyclicity of estrogen production is lost;*
3. *Cyclic production of progesterone ceases;*
4. *There is an increase in the plasma levels of androgens relative to the reduction in estrogen values;*
5. *The major free estrogen becomes estrone, of which about 40µg per day is excreted; and*
6. *Androstenedione is of considerable importance as a precursor of estrone, although it is still uncertain what factors influence peripheral conversion. Peripheral aromatization of androstenedione to estrone increases over time but it is not clear whether this increase is related to the menopause of to age or both. Initially, the ovary and adrenal gland are the major sources of androstenedione, and estrone production remains fairly constant. Eventually, with ages, the ovarian stroma ceases production. The adrenal contribution, inadequate as a single source, is not able to maintain sufficient estrone production, and specific target-tissue deficiencies become apparent.*

One final important piece of information should be added. It may be that not all postmenopausal women are the same, in that differences between the ovaries may occur. Procope has clearly shown that two populations of postmenopausal females exist: one group demonstrates atrophic ovaries after menopause, and oophorectomy makes little difference to steroid production, whilst the second group shows ovarian cortical stromal hyperplasia, with removal of these ovaries making a considerable difference to the postoperative steroid profile.

1993/139

A COMPREHENSIVE APPROACH: It is often gratifying to note the extent to which a comprehensive approach to the perimenopausal woman can greatly enhance her quality of life beyond that which estrogen alone can accomplish. Health advice, including establishment of a sound diet and physical fitness program, is highly desirable. Counseling can also be extremely helpful, particularly in the area of marital problems or psychosexual adjustment. Finally, ongoing education is most helpful in having the woman thoroughly understand her treatment and will result in the best possible compliance with her program.

1994/123

Postmenopausal estrogen replacement therapy, however, emerges as the single most significant factor in the prevention of CAHD in women. While most of the available data are based on observational studies, which may have several types of flaws, it is unlikely that in the next decade well-designed, experimental studies will be completed, and patients and physicians alike will have to make some practical decisions based on the presently available data with regard to estrogen replacement. As in most such situations, the determination of risks and benefits of hormone replacement therapy will depend on the multiple factors described in this and the chapters to follow.

1994/124

Among the mechanisms by which estrogen might decrease coronary artery heart disease in postmenopausal women may be the reduction of platelet aggregation. This response might be a combination of a direct effect on platelet function or an indirect effect by increasing PGI_2. The increase in PGI_2 can be secondary to an increase in cyclooxygenase activity and/or enhancement of PSF, which was identified as apoprotein A-I.

There are a limited number of studies looking at the effect of estrogen on platelet activity in post menopausal women. There is a need for large, randomized clinical trials addressing the question of whether postmenopausal hormone treatment reduces the risk of cardiovascular disease in women. There is also a need for more studies to determine the effect of estrogen and different therapeutic combinations

of estrogen and progesterone/progestogen on platelet function so that the pathogenesis of CHD can be more clearly explained.

1995/127

Office management of gynecologic problems in elderly female patients requires sensitivity to the special needs of this group. The gynecologist can expect to see more and more geriatric women as the U.S. population continues to age. In 1990, 12.6% of the U.S. population was over the age of 65. By the year 2060, this figure will almost double to 22.9%, or over 100 million elderly.
This chapter will address some of the issues that are uniquely important in caring for older women, including screening and disease prevention, hypoestrogenism, pelvic floor support problems, urinary incontinence, gynecologic neoplasia, and sexuality. The pathophysiology of aging as it relates to the reproductive and lower urinary tract will be covered. Lastly, the impact of other medical problems on surgical treatments for gynecologic conditions will be discussed.

1999/128

The overall management strategy for the peri- or post-menopausal woman at high risk for breast cancer should be to (1) reduce modifiable risk factors (2) promote a healthy lifestyle, and (3) use alternate therapies for management of vasomotor symptoms and reduction of osteoporotic and cardiovascular risk. Breast cancer risk in such women may be reduced by the use of tamoxifen. Physicians should provide education and counseling to menopausal women regarding management of menopause and the various options available and should follow up to ensure adherence to the patient's chosen management plans.

2000/129

As the new millennium begins, menopause specialists will find themselves in a unique situation in the years to come. The aging baby boomer population will increase the number of older patients in clinicians' practices, as evidenced by the estimate that nearly one of every four persons in the United States will be over age 65 by the year 2050. Since more of these elders will be women than men, it is imperative that gynecologists and other practitioners providing care for menopausal women (the elderly of the future) be comfortable in both the primary and specialty care of these sometimes complex patients.

This article is intended to help clinicians become more familiar with the unique medical and social issues that affect the care of women over the age 65. To this end, we will provide an overview of the issues that clinicians should keep in mind when treating elderly postmenopausal women.

2000/140

CONCLUSION: Reports of administration of combinations and permutations of female sex steroids to women of older age are beginning to trickle in. With respect to osteoporosis it appears that some gain in bone mass in certainly possible, and that this is reflected in a decreased incidence of osteoporotic fractures or refractures. Unfortunately, studies of women in the perimenopausal age group are unlikely to be of much value in the near term in determining the impact of HRT on Alzheimer's disease incidence or severity in older patients, given the lower incidence in the perimenopausal population.

Given that one of the most frequent reasons women cite for not considering HRT is fear of breast cancer, and that the risk/benefit in older age is far more likely to be weighed in favor of preventing osteoporosis and cardiovascular disease than causing an increased incidence of breast cancer, it would appear mandatory to develop active research protocols in older women to clarify these issues.

All in all, based on the current evidence, it certainly is my opinion that women of older age would be an ideal populations to experience the immediate benefits of reduction in cardiovascular events, maintenance of bone mass, and potential brain effects. However, many new questions demand urgent answers. In older populations would lower estrogen doses provide the same benefits? These are just a few examples. Here also is a whole new world of research for young investigators.

2003-141

IF SHE IS ON HRT FOR QUALITY OF LIFE ISSUES: The Women's Health Initiative did not address a variety of conditions that estrogen-progestin therapy may or may not improve, such as vaginal atrophy and problems with the skin, teeth and gums, cognitive function, mood, sleep, sexuality, and quality of life (appropriately measured by a validated instrument such as the Utian Quality of life Scale).

Many women experience subjective negative feelings when they stop HRT and state they "feel better" on hormones. These responses are difficult to quantify, but women often weigh them heavily in favor of continuing HRT when they consider risk and benefit issues.

HRT TO PREVENT CARDIOVASCULAR DISEASE: Postmenopausal women should clearly stop taking estrogen-progestin therapy if they have no symptoms and are taking it only for cardiovascular protection. It is essential, however, to define their cardiovascular risk factors and treat these accordingly, for example with anti-hypertensive or lipid-lowering drugs.

2004/118

The past 2 years have witnessed a flurry of scientific publications on menopause and related therapies, particularly use of the sex steroid hormones. In turn, attitudes about menopause and hormone therapy have changed. Perhaps the greatest consequence of all the attention is the confusion about what to do, on the part of both provider and patient.

Many organizations responded with considered, evidence-based, practical guidelines. The most detailed and practice-oriented of these guidelines is the North American Menopause Society's (NAMS'S) September 2003 Position Statement on use of estrogen and progestogen in peri- and postmenopausal women (www.menopause.org). Even as this Update on Menopause is being written, the report of the terminated estrogen-only arm of the Women's Health Initiative (WHI) is in press and may further change clinical practice. NAMS will present an updated report on all these developments at the 2004 scientific meeting in Washington, DC, October 6 to 9, 2004. In the interim, the current recommendations hold.

2005/130

Are there issues specific to HIV-positive women and hormonal therapy for menopause? Do we have good data on these issues? Do the Women's Health Initiative (WHI) results impact on the treatment of HIV-positive women?

There is no current consensus on the role of sex steroid usage for women through and beyond the menopause. There is virtually no information on the impact of HIV/AIDS on the menopause or vice versa, and nothing regarding the benefits or risks of postmenopausal hormone therapy. The purpose of this brief review is to cover the current issues as they apply to all women.

Finally, the lack of data regarding the impact of HIV/AIDS on all the above issues is apparent and in need of urgent address. A call is therefore made immediately to set in place mechanisms for the following current cohorts in a scientific manner so that data can be rapidly accumulated and applied to this population.

2006/142

DISCUSSION: As an active ingredient that can provide potent estrogenic activity for the effective relief of vasomotor symptoms while having antagonistic activity or no effect on peripheral tissue sites, $\Delta^{8,9}$DHES holds great promise for the optimization of ET. Of particular interest are compounds that can achieve a reduction of troublesome vasomotor symptoms and help reduce bone loss while minimizing the affects on other peripheral tissues normally affected by nonselective estrogens.

2006/145

Domains of QOL are remarkably consistent through all cultures and socio-economic groups. The major objective of contemporary healthcare should be to assist our patients and populations to achieve these goals. Getting there requires the efforts of multiple public agencies and health care organizations, and the challenge is enormous.

6.14.2 EDITORIALS IN MENOPAUSE MANAGEMENT

EXCERPTS FROM MENOPAUSE MANAGEMENT EDITORIALS
ARE IDENTIFIED BY DATE AND TITLE OF THE EDITORIAL

The purpose of this section is to indicate one leadership role I have taken within organized medicine, namely, to speak out on behalf of the medical profession and in support of women's health issues.

The following are taken as direct quotes reflecting personal opinions in editorials that have I have written in Menopause Management. Since its inception in 1988, I have authored well over 100 editorials for that journal, a significant body of work in itself. The publication has a circulation in excess of 32,000 medical practitioners in the United States and Canada, and is also circulated internationally, thus providing a unique "bully pulpit". The complete list of editorials can be found in my curriculum vitae (Section 8).

Not all editorials have been abstracted. Also please note that these are short excerpts specifically selected to give an idea of the theme of the editorial.

<u>Fall/1988</u>

Menopause management: The changes…and the challenge

There are many reasons why we should know how to manage the menopause, but three reasons tell us why we should learn about them now…

First, the aging baby-boom generation, now entering its 40s, will enter the climacteric in just the next decade…

Second because the current life expectancy for women is 78 years, many more numbers of women will live well beyond the menopause…

A third and very important reason is that many of us are dropping the "Ob" from Ob/Gyn, probably because of today's litigious climate…

Why then another publication? Although the medical literature reports on scientific findings relating to the human climacteric, not enough practical advice for direct clinical care is available. We are providing this forum to meet that need.

<u>Winter/1989</u>

Renewing our commitment to the remaining 85%

Only about 15% of all postmenopausal women receive estrogen replacement therapy….Recognizing that estrogen deficiency occurs in 100% of all postmenopausal women, and not suggesting that all women after menopause require replacement, the question nonetheless is—what happens to the remaining 85%?...

<u>Summer/1989</u>

The North American Menopause Society: Why another society?

The News and Notices of our winter issue announced a conference on Multi-disciplinary Perspectives on Menopause*, which is to take place in New York on September 21-23. This will also be*

the inaugural meeting of The North American Menopause Society*. You may ask: why then, another society?...*

There are two very important reasons. First, since the founding of The International Menopause Society in 1978, nearly all European and Latin American countries have developed national societies of their own; the U.S., however, has not. In this regard, the U.S. medical community has fallen behind its international contemporaries.

Second, menopause management—as a discipline—cannot be limited to the practice of any single specialty. Rather, it comprises the expertise of a multitude of medical and basic sciences: cardiology, endocrinology, family medicine, geriatrics, gynecology, orthopedic surgery, psychiatry, psychology, anthropology, nutrition, sexology, and social sciences—to name a few. The purpose of The North American Menopause Society*, therefore, is to provide a common meeting ground for those medical and paramedical specialties that are touched by some aspect of menopause.*

December/1989

"*Multidisciplinary Perspectives on Menopause"—Agreeing to Disagree*

I am most pleased to report that September's conference, "Multidisciplinary Perspectives on Menopause," which also officially marked the inauguration of The North American Menopause Society (NAMS), was a well attended rousing success!

The 350 attendees, who gathered to discuss a multidisciplinary approach to this multifactorial condition, included basic and social scientists, Ob/Gyn clinicians and family practitioners, members of the press and media, and representatives of various special interest groups.

August/1990

Spreading the news

The good news is that attempts to distribute appropriate healthcare to peri- and postmenopausal women are escalating. There are numerous vehicles for such care, ranging from full-service menopause clinics to individual private practices. However, the primary challenge remains to inform women about the real meaning of menopause, and to encourage re-entry into healthcare services.

November/1990

Our Responsibilities in HRT and Beyond

Clearly, the responsibility of the physician in caring for the menopausal woman reaches beyond the realm of hormonal therapy. We must counsel our patients about lifestyle changes, and we must screen them for risk factors of diseases that occur for nonhormonal reasons around the time of the climacteric. One of the most important lifestyle changes we can advocate is for them to stop smoking.

International/Volume IV, Number 1/1991

Welcome

With this issue, we begin publication of an international edition of Menopause Management. We are pleased to have the opportunity to address an international audience with information on the care of menopausal and postmenopausal women, and in so doing, to play a role in helping to establish an international consensus on appropriate methods of care for these women.

International Volume V, Number 1/1992

Spreading the Facts about Menopause

It is a staggering fact: in most countries of the world, more women will pass through the menopause during the next decade than at any other time in history. For the majority of women, their understanding of the event will not be based upon medical fact; they are likely to receive a good deal of anecdotal misinformation from family, friends, and media. Who should assume the responsibility for educating the general public about the menopause? Clearly, the responsibility lies with the members of various healthcare professions.

November/December 1992

The challenges ahead

Only a new focus on preventive health care will prevent a total collapse of our healthcare system.

The menopause is an ideal time for women to reenter the healthcare system, to be evaluated, and to participate in appropriate preventive programs. Unfortunately, with the majority of third-party payors, the emphasis is not on preventive medicine. We urgently need for policy makers to recognize the scope of symptom formation and disease often associated with the climacteric, and the impact the aging female populations will have on the healthcare industry in the next several decades…

We must make it an urgent priority to identify the population at risk, introduce cost-effective preventive treatment modalities, educate the population about preventive vs. crisis treatment, and maintain compliance. The goals are to enhance the quality of life while increasing its duration.

January 1993

Menopause research—the dilemma

Addressing an NIH meeting in 1989 on the subject of menopause, I made the following comment: "We face a peculiar paradox. We currently have much of the necessary knowledge and tools required to prevent major morbidity and mortality, to enhance not only the quality but also the quantity of life after menopause, but only a small fraction of the eligible population currently receives proper care. We face a major health care crisis in the future and are always calling for more and more research, but we do not even utilize our current knowledge properly." Dr. Bernadine Healy, Director at NIH, agreed when she said, "It is disgraceful that in our sophisticated world of medicine, with our phenomenal track record, we still can't answer simple questions about menopause."

The dilemma is clear. We will always need additional research, but we fall short when it comes to applying our current knowledge. Our challenge is to address both issues with equal vigor.

February 1993

Menopause: What it is—and what it is not

There is a lack of consensus regarding the important terminology that defines stages and events in a woman's life…

While it is essential to define carefully what menopause is, it also is necessary to consider what menopause is not. Menopause is not the end of meaningful life. It is not a dramatic event leading to sudden behavior alteration, nor is it a disease.

The climacteric is not an endocrinopathy per se; clearly, however, it holds the potential for endocrinopathy…

One of the challenges facing us is to determine more clearly the specific effects related to the menopause and to differentiate them from those that are age-related or influenced by psycho-social-cultural factors, and in this day, by economic status as well. This task is not easy, but certainly can be accomplished.

March 1993

Listening to patients: What is said…and left unsaid

The importance of listening to what our patients say cannot be overstated. Equally significant — and more challenging—is the need to discover our patients' questions that remain unasked…the concerns that are unexpressed…

April 1993

Appropriate postmenopausal health care: A dilemma

The physician who is concerned about providing appropriate care to postmenopausal women faces a curious dilemma. One objective of this clinician must be to provide primary preventive care with

the goals of preventing illness, prolonging life, and enhancing the quality of life. While attempting to achieve this, the physician may be criticized for "medicalizing menopause."

I believe that this dilemma is due, in part, to the extreme positions that certain healthcare providers have taken. There are the "estrogen evangelists' who recommend estrogen replacement therapy (ERT) for every woman, while students of the "estrogen never" school find every possible reason not to prescribe ERT.

It would appear to me that members of the medical community have helped to create this dilemma. Too often, the medical and popular media—inappropriately—equate menopause with hormone replacement therapy (HRT)…

While the responsibility for adopting an appropriate approach to postmenopausal healthcare should be borne by both the provider and the consumer, the first educational steps must be taken by the healthcare provider.

So there you have it: Educate yourself and then educate your patients. The decisions regarding future care then can be reached by consensus.

May 1993

NIH and NAMS create joint research agenda

The National Institutes of Health and The North American Menopause Society recently completed a landmark workshop in Washington, D.C.; the purpose was to summarize the status of current knowledge on the menopause, and to establish an ongoing research agenda. The significance of this meeting for NAMS cannot be overstated: An organization barely four years old has joined with the highest agencies in the land to set priorities and goals for menopause-related research.

June/July 1993

Managing Menopause in a changing healthcare environment

As I travel around the United States teaching on the subject of menopause and its management, I sense a remarkable degree of gloom in the academic medical centers and private medical practices. I doubt that any factor promotes such feelings more than the pessimism and apprehension surrounding the anticipated changes in healthcare law.

I, for one, am especially optimistic about what the future may hold. During the last 25 years, I have grown to regard the menopause as a significant marker in the female life cycle—an event that takes place as concurrent age-related illnesses begin to occur more frequently. My early approach was to manage menopause as a potential endocrinopathy by treating problems as they occurred. This attitude changed drastically when I began to view the menopause as an opportunity to actively introduce primary preventive care. Those of you who accept this philosophy should welcome the upcoming changes in the healthcare industry…

Therefore, I encourage you to re-evaluate your medical practice and to make sure you are geared for the appropriate provision of primary preventive health care.

August 1993

International Congress engenders remarkable consensus

I have just returned from the 7th International Congress on the Menopause in Stockholm. Sweden, where I had the privilege of being elected President of the International Menopause Society for 1993-1996. The organization, founded in 1978, has been instrumental in the development of national menopause societies in many diverse countries throughout the world. Indeed, one of my prime objectives as President will be to convert the International Menopause Society into an international federation of menopause societies.

September 1993

The 4th Annual Meeting of NAMS–Take-home lessons

What was the single most memorable or striking aspect of the 4th Annual Meeting of The North American Menopause Society?...

I think that most observers must have found the nature of the meeting participants, themselves, to be most impressive. The meeting was multi-disciplinary, as always, and the attendees represented leading American academic and clinical institutions, women's groups, the nursing profession, and the National Institutes of Health, as well as experts from over 20 countries. All in all, this was the largest and most influential gathering in the interests of health care for women in their middle years yet to take place in the United States.

October 1993

Menopause education, instant experts, and the NAMS Gallup Poll

A cause of singular concern to me in recent years has been the amount of misleading information provided on the subject of the menopause. In particular, I am troubled by the escalating volume of magazine articles and books written by "lay instant experts" who lack experience and background in basic science, health care, or well-documented research findings -- and who, more often than not, express opinion rather than fact…

November/December 1993

Clinical research in a climacteric medicine practice

Have you ever considered incorporating clinical research into the menopause in your medical practice? While the study of basic biological mechanisms, outcomes of spontaneous or premature ovarian failure, or clinical and metabolic effects of ovariectomy might be out of your clinical purview, there is one area that is wide open to your interest…

January 1994

Examining the effect of ERT on breast cancer

Studies suggest that postmenopausal ERT has no negative effect on recurrence of disease or survival in postmenopausal women who develop carcinoma of the breast. However, when a woman with pre-existing breast cancer requests ERT, management decisions must be made on an individual basis. It would appear that, other than previous breast cancer, there are no definitive breast conditions that contraindicate ERT. However, as in all instances where ERT or HRT is being prescribed, it is mandatory that the woman be well-counseled so that she can make an informed decision and her care can be individualized. In general, a conservative approach appears justified because definitive answers are unavailable at this time. Fortunately, studies are commencing that soon may provide solutions to this vexing dilemma.

May/June 1994

A simple message: Stop smoking!

Prevention is a buzzword in discussions on proposed new healthcare legislation. Almost half of all deaths in the U.S. have an identifiable source of preventable morbidity, and cigarette smoking tops the list. Smoking cessation is known to result in significant financial savings for each successful outcome. Discuss the risks of smoking with every patient!

July/August 1994

Thyroid function and menopause

Hypothyroidism can cause lethargy, poor memory, cold intolerance, and weight gain. The non-specific nature of these symptoms can result in thyroid dysfunction being overlooked, the necessary treatment being delayed, or—equally unfortunate—the wrong treatment being prescribed. Therefore, it is prudent always to have a high index of suspicion for thyroid dysfunction when evaluating women for

"climacteric syndrome." Moreover, while routine thyroid function screening is not generally recommended for a healthy adult population, postmenopausal women comprise a group who could be considered an exception to the rule.

September/October 1994

The mystery of the worried well

I am increasingly impressed by a phenomenon observed in an escalating number of healthy perimenopausal women who visit my office. They present with furrowed brows and evident concern saying, "I feel perfectly well, but from what I have read or heard, something should be wrong; what hidden problems might I have?" These women are representative of an epidemic of the "worried well."…

Never in our history have so many women lived as long–or as well. Yet never has there been such a concern for diseases that they do not –and may never–have.

As healthcare providers who should meet this issue head on, we face a potential "catch 22." How do we inform the general population about preventive health care without creating a climate of fear and anxiety?...

There is also a challenge for the development of well-informed, up-do-date, and unbiased educational materials for presentation in various forms to this constituency, and NAMS should be at the forefront of such activity.

November/December 1994

Predicting endometrial pathology by timing of withdrawal bleeding to sequential HRT

A disturbing aspect of modern medicine is the speed at which limited information is incorporated into current practice dogma. Case in point: using the day of bleeding onset in response to sequential estrogen/progestin therapy as a predictor of endometrial hyperplasia…

The lesson to be learned from this is that we should scrutinize all studies very carefully before allowing the results to affect the dogma of clinical practice.

January/February 1995

Engaging women in comprehensive preventive health care

Therefore, I would submit that the best way of encouraging women to become involved in their own comprehensive care is to engage in education, counseling, and selective screening while addressing the primary reason for each office visit. For example, a woman presenting with a urinary tract infection should receive not only appropriate treatment, but also be counseled in behavioral risk factors such as the use of tobacco and alcohol, lack of exercise, and poor nutrition. Her record should also be reviewed to see when she last underwent a Pap smear, mammography, or other selective screening…

We must encourage women to assume a greater responsibility for their own health as we, the medical providers, define appropriate guidelines for cost-effective screening and preventive healthcare programs.

May/June 1995

Heart Disease in Women: Where Are We?

Each year in the U.S., ten women die from heart disease for every death due to breast cancer. Yet the healthcare system has historically underestimated the severity of heart disease—and women have a greater fear of breast cancer.

July/August 1995

Has "less then monthly progestin" come of age?

It would therefore seem that the time has arrived to offer patients on sequential HRT a reduction from 12 withdrawal bleeding episodes a year to only six and possibly fewer by administering progestin at two- to three-month intervals. While current evidence would suggest this regimen to be appropriate and safe therapy, I would suggest we continue to monitor patients so that any increase in hyperplasia (and potentially uterine carcinoma) can be avoided. In the continuing challenge of minimizing risks and maximizing benefits for women on long-term HRT, longer withdrawal intervals for progestin may likely prove to be the best protocol.

September/October 1995

Postmenopausal HRT and breast cancer revisited

I do believe we will have to address a point of real concern: the role of added progestin. Undoubtedly of value in obviating the estrogen-induced increase in uterine cancer, there is no protective effect—and possibly a compounding of risk—for breast cancer. Progestin's blunt the beneficial effect of estrogens on lipids, and there is direct animal-based evidence that progestin/progesterone negates estrogen-induced increase in coronary blood flow. When evaluating risks versus benefits, I would speculate that, in the future, progestin may have a minimal therapeutic role, if any.

November/December 1995

NAMS: A success story of remarkable growth and development

As the Sixth Annual Meeting of The North American Menopause Society in San Francisco proceeded, I was overcome by an escalating sense of amazement and satisfaction. Those few members who were present at the New York inaugural meeting in 1989 will well remember a meeting in which probably the only consensus was lack of consensus. There appeared to be conflict between physicians and nonphysicians, men and women, young and old, basic scientists and clinical scientists. Indeed, for a while I questioned my own mental stability in attempting to draw an interdisciplinary group into discussion of the menopause

Yet, in six brief years, a new Society nurtured by a few loyal members, and a dedicated Board of Trustees, has grown into a large international organization…

March/April 1996

Incorporating new options for osteoporosis management into clinical practice

Options for clinical management of osteoporosis have increased as rapidly as the recognition of the problem by the general public. Currently, it is more often the exception than the rule for a perimenopausal woman not to raise the topic during a medical evaluation…

To provide optimal clinical management, the practitioner needs to constantly bear in mind the objective of this action, that is, the avoidance of fractures…

Achievement of this goal necessitates incorporating into standard practice effective screening mechanisms. These include a comprehensive history and physical and selective use of screening tests. Densitometry of the spine and hip is the current gold standard for risk assessment…

An understanding of the technology, physiology, and interpretation of these tests is a necessary requirement for proper clinical management…

May/June 1996

Testosterone therapy after menopause

The word is out in the popular media—testosterone enhances sexuality, has a euphoric effect on mood, and healthcare providers are being uncooperative and are resistant to prescribing if for all women. Consequently, practitioners are receiving more and more requests for androgen prescriptions. But, how strong is the data, and what are the concerns?...

There is literally no data available for risk or benefit of long-term postmenopausal testosterone therapy. Does it increase or decrease the risk or coronary heart disease, or have no effect? We simply don't know. Given the adverse effects of progestins, it would be surprising if there were no negative consequences to long-term testosterone. However, the data simply does not exist…

What do we do? Basic principles mandate avoidance of harm. My personal approach is to advise against long-term testosterone therapy until adequate studies have been completed, to occasionally prescribe to women without ovaries on a short-term basis, and above all, to educate women about the current status and counsel on alternatives. Long-term studies are needed, probably justified, and should be encouraged.

July/August 1996

National menopause awareness

June 1996 may well be remembered as a turning point in consumer education on menopause. The NAMS Menopause Awareness Program was interfaced with the National Menopause Awareness Month Program resulting in over 1,000 health centers being provided with educational materials for their own subsequent consumer education programs.

September/October 1996

The Antioxidant Issue

Approximately 50 years ago, at the height of the poliomyelitis epidemic, a popular belief existed that wearing garlic around the neck reduced the risk of developing the feared disease. Perhaps the odor of the garlic kept people at a distance, reducing the opportunity for transmission. In this decade, due to epidemiologic studies reporting lower rates of cancer and/or cardiovascular disease by eating a healthy diet preponderant in fruits, grains, and vegetables, the "garlic" of the era has been hailed as beta carotene. Indeed, both the popular media and scientific literature has so popularized this issue that an entire industry has developed and millions of individuals consume beta carotene supplements.

Unfortunately, like garlic did not prevent polio, definitive reports now prove that current formulated beta carotene supplements do not reduce the risks of heart disease or cancer.

November/December 1996

Long-Term Estrogen Therapy and Alzheimer's Disease

One of the biggest concerns facing healthcare planners, policy makers, and individuals alike, is the fact that an increase in life expectancy has not been paralleled by a reduction in the time of disability before death. Indeed, the enlarging elderly population spend a greater proportion of their lives with some disability. In this context, particularly the female population with a greater life expectancy than men, Alzheimer's disease (AD) represents a major health problem…

As the first investigator to report the ERT brain effect on mood elevation in 1972, I would certainly be more than thrilled to see confirmation of an even greater neurological action. Regrettably, until we have better information, we cannot claim the prevention and treatment of AD as a significant benefit of estrogen usage.

May/June 1997

Menopause and HRT—Science, Politics and Pseudoscience

Many clinicians are currently being asked if they are "for or against" HRT, as if this were a political issue on which it was necessary to take sides. Regrettably, the written and visual media persist in focusing on this question in the same way, presenting a picture of us engaged in some form of modern medical warfare…

The truth, need I repeat at the risk of "crying Wulf," is that genuine medical science is a search for facts. In the absence of definitive data, the objective is to "do no harm," that is, to carefully balance

potential risks and potential benefits on a case-by-case basis. Under these circumstances, there is no side to take—only the best care for each woman…

I encourage you to respond proactively to inappropriate presentation of the "for and against" approach. But do it the scientific way, not the political way. Mixture of science and politics becomes pseudoscience, and that is unacceptable.

July/August 1997

Is "Natural" Natural?

Over the past few years, we have witnessed increasing confusion over defining products as pharmaceuticals or foods…

Clearly, there is an astounding degree of hypocrisy in all of this. Estrogens can't be declared to be the cause or accelerator of breast cancer if "synthetic," yet anti-cancerous if "natural." Nor can there be calls for more research on pharmaceutical ERT/HRT products amidst proclamations of the safety and effectiveness of "natural" estrogen or progesterone in the absence of long-term studies…

It is my hope that the FDA will soon identify this entire "natural"' remedy arena as one in need of its scrutiny. Until that time, the public at-large needs to be made aware of the fact that "natural" is not necessarily natural.

September/October 1997

Has Gender Bias Affected Menopause Management?

While listening to a presentation on gender bias in biomedical research, the question of whether gender bias might have affected menopause-related research and management crossed my mind. On the surface this might sound like a ridiculous concept—menopause is specific to women, making gender bias apparently irrelevant—but it struck me that much of what we say or do with regard to management of postmenopausal women might well have been influenced by gender bias.

November/December 1997

Hormone Replacement Therapy and the Older Woman

The shift in thinking to which I want to draw your attention is the question of whether we are treating the wrong populations, or at least ignoring one significant part of the population, namely, the older woman…

All in all, based on the current evidence, it certainly is my opinion that women of older age would be an ideal population to experience the immediate benefits of reduction in cardiovascular events, maintenance of bone mass, and potential brain effects. However, many new questions demand urgent answers. In older populations would lower estrogen doses provide the same benefits? Is added progestin still necessary? Would aspirin, exercise and healthy living give equal benefits? These are just a few examples. Here also is a whole new world of research for young investigators.

March/April 1998

The 1997 NAMS Gallup Survey—Evidence of Good Progress

Most of the women surveyed had a positive or neutral perception of menopause. Thus, we seem to be experiencing a "generational shift" in attitudes toward menopause as a phase in the female life cycle. Half of the women reported getting their information about menopause and other healthcare concerns from their healthcare professionals, specifically physicians and the obstetrician/gynecologist. This represents a considerable improvement over just three years.

May/June 1998

Determining Endometrial Pathology in Women on HRT

From a practical perspective, therefore, it would not seem appropriate to endorse ultrasound screening in women on unopposed estrogen therapy. The gold standard remains an annual endometrial biopsy.

July/August 1998

The Menopause Clinic

Today, the concept of a Menopause Center is well accepted, but the definition of such a facility has become quite variable. Indeed, there is no single accepted format…

November/December 1998

HRT and the HERS Findings—Has the Ground Shifted?

There is a clear lesson to be learned. Observational studies are of value in indicating trends. Randomized studies are necessary to test these observations. But these studies need to be based and planned on what the observational studies suggest, not what we hope a different treatment or drug combination would produce. Progress is only made one step at a time…

March/April 1999

The FDA, Soy Protein and Coronary Heart Disease

As your read this editorial, the FDA is proposing to authorize the use on food labels and in food labeling of health claims on the association between soy protein and reduced risk of coronary heart disease (CHD)…

Given that the FDA approval is likely to be for soy protein "included in a diet low in saturated fat and cholesterol," might it be irrelevant what is added for a protective effect to be exhibited? Thus, the FDA might just as well approve fish, or bananas, or low-fat yogurt, provided they complement a healthy diet.

Which brings us to the major question. How effective might soy protein be in the absence of a healthy diet? Here, it appears, the studies are essentially as observational as are many of those on estrogen use.

May/June 1999

The Trojan Horse of Menopause Marketing

Remember the story of the Trojan horse? In Greek mythology a huge, hollow wooden horse, in which attacking Greek troops hid, was left at the entrance to Troy as the attacking Greeks surreptitiously feigned departure and hid. The Trojans, sensing victory and believing the horse to be a departing gift, moved it through the gateway into the walled city, and unsuspectingly allowed the Greeks to capture the city of Troy; thus, ending the Trojan war.

Well, I am deeply disturbed by a similar phenomenon by which our once proud medical profession is being "sprung by the same trap," and is inadvertently doing the same to its patients. In this instance the Trojan horse comes in different guises, frequently appearing as slickly marketed packages of ostensibly independent CME. But the "troops in the horse" are aggressive marketers of questionable "menopausal products," and the "inhabitants of Troy" are the menopausal women and their pocketbooks.

It truly troubles me to note once proud names in medicine who, often for no more than the price of a fancy weekend in a plush resort, will allow the use of their names, faces or institutions on glossy packets of "educational" material, the hidden agenda of which is only to market products.

September/October 1999

Is There an "Alternate" Menopause Management?

Ever since 1994, when the "natural products" industry was granted what amounts to a license to steal by the US Congress, I have watched with wonder and bemusement as products that are quite

obviously pharmaceuticals are labeled "dietary supplements" and, with the FDA sidelined, have been ever more aggressively marketed, and accepted by a seemingly gullible public. I have also been fascinated—and frankly, often disgusted—by the obscene haste with which some healthcare professionals have jumped onto this bandwagon…

Logically, therefore, traditional and alternative therapies will, when subjected to scrutiny, either pass or fail the test for effectiveness. But the playing field needs to be leveled; the intensity of scrutiny needs to be the same. Under these circumstances the public will be protected from ineffective alternatives, and the therapies that are actually effective will be recognized as such. There is no "alternative" medicine, only good medicine.

November/December 1999

Preventive Care—Who Pays the Bill?

My interpretation of events at this time is that unless a portion of the current efforts at legislation for healthcare reform include mandated minimum requirements of third-party reimbursers to pay for screening and preventive programs with proven benefits, the healthcare profession will be fighting a very slow and tedious battle.

March/April 2000

Hormone Replacement Therapy and Risk of Venous Thrombosis

Current thinking on the risk of venous thrombosis in association with postmenopausal hormone replacement therapy has undergone a radical shift…

May 2000

Thoughts on Change

I recently had some personal reasons to ponder the concept of change. After 20 years as a director of obstetrics and gynecology departments I have, by choice, resigned my positions as Chairman of the academic Department of Reproductive Biology at Case Western Reserve University, Director of Obstetrics and Gynecology at University Hospitals of Cleveland, and director of the faculty OB/GN clinical practice…

My reasons for drawing this subject of change to your attention is to challenge all of us who are developing mechanisms that would allow all women to have a similarly positive "free at last" attitude—free to step into another chapter of their lives, to undertake a new opportunity, activity, occupation, hobby or whatever.

July/August 2000

Dishonesty in Reporting and Its Negative Impact on Clinical Practice

A recent major scandal in medical research has once again shaken the foundations of scientific integrity. To many of us in academic medicine and medical society administration, as well as in clinical practice, this misdirection in science should act as a catalyst to the meticulous and inquiring scrutiny of published and spoken pronunciations, whether at professional meetings, in journals or via the lay media…

September/October 2000

Thoughts on the NIH Consensus Development Conference on Osteoporosis Prevention, Diagnosis and Therapy

I feel that this consensus statement warrants criticism; in its attempt to be "all things to all people," it presents general statements that fail to reach concrete solutions……Finally, was the question, "What are the optimal evaluation and treatment of osteoporosis and fractures?" answered by this panel? Quite frankly, no.

November/December 2000

Hormone Replacement Therapy and Coronary Heart Disease–Where Now?

The overall conclusion at this time, pending the outcome of more definitive studies in progress (e.g., WHI, RUTH), is that prevention is easier than cure. Thus, clinicians should encourage women with no history of heart disease to make healthy lifestyle choices by quitting smoking, improving diet, exercising and considering the use of HRT. Once active atherosclerosis is present it is unclear whether HRT will have an impact on long-term outcome.

January/February 2001

NAMS Menopause Clinician and Educator Competency Examinations Explained

September 6, 2000, represented another milestone in the evolution of The North American Menopause Society (NAMS), as the first groups sat for the NAMS/NCC competency examinations for Menopause Clinicians and for Menopause Educators…

In essence, the purpose of these competency examinations is to raise the bar of expectation of knowledge and quality of care around menopause.

March/April 2001

OTC Steroids: Time for Government to Act Responsibly

The federal government must now get off its duff and recognize the potential hazards to which it is exposing the citizens it claims to represent. We, as healthcare providers, have a similar responsibility to create awareness of the problem among legislators and the public. The time for government to amend the 1994 law is NOW!

May/June 2001

Your Letter to Congress

I have a fantasy that all healthcare providers with concerns about women throughout menopause and beyond will be simultaneously energized to, just once, write to their congressmen and senators. The following is the sort of letter I hope they will write:…

So, the purpose of this letter is to implore you to take a two-pronged approach to the prevention of a very frightening scenario. First, there is an urgent need for legislation forcing all health insurers to provide cost-effective, evidence-based preventive health programs to the "pre-Medicare" population. Second, there is a need for the federal government to review preventive health care provided under Medicare and to set an example for the world. Protocols that could be considered are already available.

July/August 2001

Recognizing the Clinical Significance of Premature Ovarian Failure

Current clinical management of young women with premature ovarian failure tends to focus on the issue of loss of fertility. This happens at the expense of sufficient recognition of the potential long-term adverse health outcomes secondary to the changed hormonal profiles…

September/October 2001

Precisely Defining the Effects of Long-Term- HRT—The Ultimate Catch-22

Remember Joseph Heller's 1961 novel Catch-22? "There was only one catch and that was Catch-22, which specified that a concern for one's safety in the face of dangers that were real and immediate was the process of a rational mind. Orr was crazy and could be grounded. All that he had to do was ask; and as soon as he did, he would no longer be crazy and would have to fly more missions. Orr would be crazy to fly more missions and sane if he didn't, but if he was sane he had to fly them. If he flew them he was crazy and didn't have to; but if he didn't want to he was sane and had to."

Attempts to precisely define the true benefits and risks of long-term hormone replacement therapy (LTHRT) after menopause pose an exquisite dilemma, perhaps the ultimate Catch-22…

Obtaining this information necessitates enrolling large numbers of women in studies that, of necessity, take many years to plan, complete and report. But by the time such randomized, controlled, blinded long-term studies are completed, the drugs, doses, regimens and combinations will almost certainly have changed…

The Women's Health Initiative (WHI) is a perfect example of this problem. WHI was planned in the 1990s, is being executed over the course of a decade as one of the most expensive clinical research projects ever supported by the NIH, and findings will be reported in detail later this decade. By that time, at the very least, the preferred doses and, almost certainly, the preferred progestogen, will have changed.

November/December 2001

HRT and Cancer

Are estrogenic steroids carcinogenic? Attempts to answer this perplexing question are beginning to resemble those around the question, "When does life begin?"…

January/February 2002

Thoughts on Fear and Anxiety

The horrific news of September 11, and after, have already affected all of our lives in more ways and to a far greater extent than anything we might have initially expected…

What has all of this to do with Menopause Management? Everything and nothing. The majority of women, as demonstrated in NAMS Gallup Surveys, do not have these thoughts and fears as they go through the menopause transition, but many women do. Our role as healthcare providers has never been more important. We need to step up to the plate as role models and leaders. The remedies for the fear created by terrorism are much the same as those for almost any transitional situation in life…

I take every opportunity to counsel women that the best response to fear, whether of terrorism or of potential future health problems, is to continue doing what they do best—only more so. Work just that much harder. Love your loved ones and offer friendship and charity that much more. Do not give fear and terrorism the negative response they seek. I suppose that my message to you is the same, for one healthcare provider to many; do the same for your patients —and yourself!

March/April 2002

Bone Mineral Density Testing: Storm Clouds Rising

The use and potential for abuse of bone mineral density (BMD) testing are escalating rapidly. BMD testing is increasingly being promoted as a universal requirement, with BMD being measured centrally or peripherally and the tests being advertised, publicized and charged for. In short, BMD testing has become big business. But much of this enthusiasm might well rest on a shaky foundation. My concern relates not to the use of BMD in research, but to its application to the individual patient…

May/June 2002

Scientific "Disinformation" and Media Misinterpretation—Take the Case of the HERS Study Group

Little wonder that women are confused, angry and suspicious about modern medicine. Neither is it surprising that many medical practitioners are irritated by the weekly "over-the-top" media circus in which the selected article of the moment is highlighted on the evening news and in newspapers and magazines. Health science is news, and certain topics are big—postmenopausal HRT currently being an Andy Warhol "top ten."

Case in point: the milking dry of data by the HERS study group…..

July/August 2002

Managing Menopause After HERS II and WHI: Coping With the Aftermath

Barely was the long-awaited follow-up of the HERS study published, than the National Institutes of Health (NIH) dropped its bombshell of discontinuing the trial of estrogen plus progestin (E+P Trial) in women with an intact uterus in the Women's Health Initiative (WHI). Since then, there has been much water under the bridge, but let's try to consider "Where to now?"…

While the merits and demerits of the data and the wisdom of the decision to terminate this arm of the WHI study will be debated for years, the manner in which the study was terminated was poorly planned, abrupt and inhumane.

September/October 2002

The Neglected Symptom: Vaginal Dryness

Other than the cessation of menstruation itself, the two most specific early symptoms associated with menopause are hot flashes and vaginal dryness. The former are the usual reason for women to seek help during the perimenopause; vaginal dryness, on the other hand, is frequently not addressed…

The bottom line is to query all patients about vaginal symptoms, including those on ET/HT. Vaginal dryness and dyspareunia should be regular components of a comprehensive gynecological history.

November/December 2002

Weight, Menopause and Hormones

One of the frequent questions raised in clinical discussions is whether menopause of itself influences body weight or body mass index (BMI), or if sex hormone therapy can cause an increase in body weight...

What then is the message regarding sex hormones, menopause and BMI? While they are probably not related, in that neither menopause nor ET/HT appears to be associated with weight gain and BMI does not determine symptomatic response to therapy, BMI is nonetheless an important component of menopause management. Of itself, elevated body weight is a negative factor for morbidity and mortality. It should therefore be raised as an item for health-related discussion every time an overweight patient is seen.

January/February 2003

Clinical Practice Six Months After the WHI EPT Arm Termination

There is probably one fact all parties impacted by WHI can agree on: Life has been very hectic and confusing since the termination of the EPT arm of the WHI study…

It cannot be overemphasized that WHI is a prevention project, and that hormones can be prescribed for preventive or clinical indications, or both. But both the consumer and the provider must clearly understand why hormones are being considered and prescribed.

What does this mean in practical terms? The NAMS Advisory Panel provides some guidance in this respect.

March/April 2003

Integrity of Scientific Clinical Publications and Media Reporting—Credible Information or Imaginative Marketing?

In this new century it is virtually impossible to avoid being a cynic or a total doubter. The media feed us daily avalanches of mixed messages: bad news, cautions, warnings, exposures of "evil doers," and unbelievable promises of technological advances or medical breakthroughs. We hear stories of

greedy and conniving CEOs, disgraced politicians, fallen priests, a pharmaceutical industry force-feeding products via direct-to-consumer advertisements and a rampant health profession placing profits ahead of patient care…

How can we in the health profession deal with the challenge of differentiating scientific credibility from imaginative marketing? There is no clear answer. Transparency is obviously essential. Therefore, Menopause Management will immediately introduce a policy of full disclosure from authors of future articles appearing in this publication that discuss any product or services.

May/June 2003

Menopause and Systemic Hormones in the HIV-Infected Woman

The medical practitioner needs to be prepared to provide appropriate menopause-related care to the HIV-infected and at-risk population. The scientific community needs to accelerate its research endeavors to help provide practitioners the answers so necessary to handle an increasing number of women and an escalating numbers of questions. Here exists a unique opportunity for new young investigators to get in on the ground floor of a crucial area of research for which funding really is available. NIH is to be commended for getting the ball rolling, but we all need to face the challenge as a matter of urgency.

July/August 2003

Apples are not Oranges—Prevention and Treatment are Different!

The aftermath of the abrupt termination of the estrogen-progestogen (EPT) arm of the Women's Health Initiative (WHI) in July 2002, as well as the recent publication of its substudies, has produced at least one major benefit—women are having more interactive discussions with their health providers about their overall care…

However, the issue I intend to focus on is that prevention of potential future disease is not equivalent to treatment of an existing problem! Let me repeat that. Prevention and treatment are very different issues.

November/December 2003

Does "Statistically Significant" Always Equate to "Clinically Relevant?"

There is a widening chasm between the points of view of epidemiologist/research investigators and practicing clinicians regarding the appropriate interpretation of major randomized trials and observational studies…

Clinical practitioners should not despair. Nor should they grant excess credence to any one research report, meta-analysis, or focused review. Instead, they should consider all facts relevant to each individual patient. The unique profile inevitably requires a unique clinical opinion. Provided that a patient is given an understandable summary of the balance of risk and benefit, that discussion is documented, and that appropriate follow-up is planned, you are practicing good medicine. Ultimately, whether "statistically significant" is "clinically relevant" still has to be decided between the woman and her health provider, and that remains the challenge of the "practice of medicine!"

January/February 2004

Menopause, Hormones and the Eye

There can be no doubt that a strong relationship exists between endogenous and exogenous hormones, menopause and the eye. This relationship adds to the complexity of decision-making concerning the benefit-to-risk ratio of hormone usage after menopause. Few women will discuss their eyes with you, but eye diseases increase with increasing age. At the very least, menopause-related healthcare providers need to draw attention to these potential problems, and apprise women of the need for regular eye examinations.

March/April 2004

Thoughts on Suffering and Dying–Or, is "Disease A" Really Equivalent to "Disease B"?

Most healthcare researchers, epidemiologists and clinicians tend to consider morbidity and mortality in cold, professional terms until they, themselves, become victims of illnesses involving disability and dying…

Clearly, the primary objective of medical research and subsequent healthcare delivery is to enhance quality and duration of life…

This entire concept has been largely ignored in the current debate over the use of postmenopausal pharmacotherapy…

I cannot emphasize strongly enough that this criticism of current affairs must not be taken as a recommendation for or against the use of HT. The QoL and cost-effectiveness analyses are simply lacking. Rather, this is an urgent appeal for a more precise and humanitarian approach to data evaluation, so that advice given to women facing severe medical problems or making difficult medical decisions can be truly "quality"- and "caring"-based. For the clinician helping women to enhance QoL, the challenge remains to recognize that each woman has a unique profile that needs to be recognized and utilized in medical management.

May/June 2004

Women and Prostate Cancer

This editorial is one I wish I had not been inspired to write since much of it relates to a recent personal experience…

But this is not an editorial on prostate cancer; it is a call to healthcare providers to recognize that this diagnosis has an impact on the life of the spouse/partner that is almost as severe as the impact on the individual who has been diagnosed.

July/August 2004

Women's Health Initiative Round 2—Is this the Opportunity to Clear the Air on Postmenopausal Hormone Use?

The dogmatic pronouncements of the demise of postmenopausal hormone therapies (the "last nail in the coffin") since the termination of the estrogen and progestogen therapy (EPT) arm of the Women's Health Initiative (WHI) in July 2002 appear to have been premature. The latest data reported with the termination of the estrogen-only arm of the WHI have given postmenopausal estrogen therapy (EPT) serious revitalization…

It is clear that, at this time, there have been few winners. My hope is that we can utilize the latest WHI estrogen-only data in a more responsible fashion to truly reopen the debate, reduce the confusion and fear in our real constituency (women with legitimate health concerns and needs) and banish the acrimonious and biased opinions, that, until now, have pervaded the subject to the garbage heap of medical history.

September/October 2004

If Drugs Can Prevent Disease, Why is Continuance so Poor?

There are some real enigmas in the world of preventive and therapeutic health care. Most experts would assert that the cost of treating the complications of an uncontrolled medical disorder far exceeds the costs of medication…

Yet, despite patient awareness of the role and importance of their drug therapy, the majority of patients simply do not stay on board. Why?

November/December 2004

Development and Clinical Application of Guidelines, Consensus Opinions, and Position Statements—
The Need for Clinical Judgment Beyond the Evidence

Reliable, practical, and scientifically substantiated recommendations for current clinical practice have become an important guide for our day-to-day clinical decision-making…

…Presumably, using identical databases and published evidence, the process should be straightforward for any group developing consensus statements and guidelines. So why then do different organizations, after scrutinizing the same evidence, come out with different interpretations and recommendations?...

January/February 2005

Osteoporosis-Related Events Negatively Impact Quality of Life, But Does Quality of Life Impact the Outcome of Osteoporosis?

There is an escalating awareness in clinical medicine that self-perceived quality of life (QOL) can be a key outcome measure of quality of health care. There is considerable evidence that the complications of osteoporosis will have a negative impact on QOL. But less well recognized and of enormous potential clinical relevance is the question of whether perceived overall QOL will actually have an impact on osteoporosis and its complications…

March/April 2005

Pregnancy After Menopause and The North American Menopause Society (NAMS)

It was really inevitable. Given the remarkable sequential breakthroughs in reproductive technologies over the past three decades, it was only a matter of time before women could begin to consider the option of salvaging fertility, and be able to achieve pregnancy with their own eggs after menopause. Who would have thought that pregnancy and menopause would need to be considered a single area of health care?...

NAMS, by the very nature of its broad and all-inclusive scientific and multidisciplinary membership, has focused on all aspects of perimenopausal transition and beyond. Now that same diverse base is admirably situated to add a new dimension to its agenda—all the issues regarding pregnancy after menopause…

May/June 2005

The What and the Who of Contemporary Menopause Management

We ask a lot of 'what's?' in clinical practice. Consider the most recent new patient you have just seen in your office. The front office staff had already asked innumerable questions, like "What is your name?", "What is your age and date of birth?", "What medical insurance do you have?" So, by the time she entered your consulting room you had a pretty good idea of the patient's demographics.

Chances are that you started the conversation, after the preliminary courtesies, by asking, "What is your main complaint?", and then proceeded to ask a series of other "what's", such as those about previous medical history, family history, personal habits, exercise and diet patterns, and so forth.

But did you ever get around to asking the woman, "WHO are you?"

July/August 2005

The True Symptoms Associated with Menopause Confirmed after 33 Years: Better Late than Never, But Let's Move on NOW!

It is quite extraordinary how frequently in medicine a finding published three, four, or more decades ago languishes in obscurity until, voila!—the observation is rediscovered and that idea then becomes the newly accepted dogma

September/October 2005

Selling Menopause

The days when the definition of "menopause" was a one-liner in medical textbooks ("Menopause is physiological amenorrhea") are long gone. Gone too are the days when the word "menopause" was not mentioned in public by any self-respecting woman. Nowadays, the "M word" is a healthcare subject that is inspiring musicals, and a 'title' launching a thousand opinion-based books and magazine articles. Above all, the word "menopause" has, unfortunately, become a selling tool. In simple terms, menopause has regrettably graduated into an industry!

This observation may seem to be particularly hypercritical, coming from someone such as myself, who has made a major part of my medical career out of the educational, research and clinical issues regarding menopause, and perhaps in my capacity as Executive Director of The North American Menopause Society (NAMS), an organization whose very existence is based on menopause. But there is indeed a significant difference that needs to be highlighted. It is one thing to attempt to bring scientific clarification to all issues about menopause, or to attempt to deliver state-of-the science, high quality, preventive and therapeutic health care to all women going through (and beyond) the menopause transition. It is quite another thing to use menopausal women as a "market" and to knowingly and consciously attempt to industrialize, commercialize, and sell inappropriate "remedies" purely for the sake of gathering the almighty dollar…

November/December 2005

Domestic Violence and Menopause

A patient of mine committed suicide in the early 1970s…

My primary objective in writing this editorial is to trigger awareness of intimate partner violence (IPV) and domestic violence (DV), and to remind you that these issues might lie behind an unusual or persistent presentation in some of your patients. We are the front line and often the only defense for victims of abuse. I strongly recommend that you access the resources referred to in this editorial. I certainly wish that all those years ago I had an awareness of DV and IPV and that these resources were available to me. Perhaps the outcome for my own patient might have been better.

January/February 2006

Women's Voices for Change—A New Voice for Women and a New Partner for NAMS

Here is a great new development and a challenge to NAMS members across North America.

November 21, 2006 marked a new milestone in the accelerating growth and influence of The North American Menopause Society. At a glittering event in New York City, attended by over 400 women and about six men, welcomed by Liz Smith and Ann Richards and entertained by Bette Midler, a new not-for-profit partnership organization was launched. Women's Voices for Change (WVFC) has been established to change the meaning of menopause in the 21st century…

Already, an example of the potential for this organization is a project WVFC is rolling out in partnership with New York Presbyterian Hospital. They have started a project to provide free bone density screening and follow-up for 1,000 under-served Hispanic women in New York City…

March/April 2006

The Psychosocial and Socioeconomic Burden of Menopausal Vasomotor Symptoms

We are constantly informed of the high socioeconomic impact of a number of diseases, from osteoporotic fractures, to heart attacks, to various cancers. But disruptive symptoms like headache, backache–and yes, hot flushes—are also a source of considerable medical cost and socioeconomic impact. I recently reviewed the psychosocial and socioeconomic burden of menopausal vasomotor

symptoms (VMS) elsewhere, but in this column would like to draw your attention to some of the most significant conclusions of that review…

May/June 2006

Low Back Pain: Management Dilemmas

…So, there you have it. Low back pain is a major clinical problem that presents a dilemma for management. Current practice would, therefore, suggest a process of comprehensive evaluation, counseling, bed rest for a short period of time with short-term analgesic use, and special tests for nonresponders and atypical presentations. Above all, patients with low back pain must be given adequate information about their symptoms. Allaying a patient's fears may reduce the utilization of medical resources and encourage adherence with treatment.

July/August 2006

Reconsidering Postmenopausal Estrogen Therapy and Breast Cancer

…My personal opinion is that from a breast perspective, women – certainly those with previous hysterectomy – and practitioners can breathe more easily. While the outcome for women with an intact uterus requiring endometrial protection or observation is less certain, the symptomatic perimenopausal woman should feel more secure in her short- to medium-term prescription of estrogen-alone therapy. Certainly, CEE treatment alone does increase the need for more frequent mammography screening. Whatever the decision, I am convinced that there is a need to reduce exposure to progestin. As always, constant vigilance remains mandatory.

September/October 2006

Is Evidence-Based Medicine a Pipe Dream?

Sir William Osler (1849-1919) was credited with presenting the following observation during a commencement speech at Johns Hopkins Medical School: "As you complete your rigorous studies and graduate today, unfortunately I must inform you that half of what we have taught you is wrong. Even more unfortunately, we cannot tell you which half!"

In the concerted effort to enhance the quality and outcomes of contemporary health care, clinicians, other health providers, medical societies, reimbursers, and the rest, have all scrambled to develop guidelines, clinical care paths, protocols, "best practice of medicine" rules, and position statements. One of the most emphasized and current of these methodologies is the so-called practice of "evidence-based medicine" (EBM). The question I pose is whether EBM is really wishful thinking, a fanciful attempt at determining clinical practice on an Osler-defined shaky foundation.

November/December 2006

Naturally, developing this material is costly in time, effort, and money. The NAMS Foundation was therefore launched in September 2006 as a support organization of NAMS, charged with the challenge of raising significant financing for greatly enhanced objectives. With financial support from the Foundation, the Society will be able to continue its excellent development of materials and programs, and be well positioned for even more growth in the years to come.

January/February 2007

George Santayana's admonition that "those who cannot learn from history are doomed to repeat it" is a warning and not a cliché. Feminine Forever: Revolutionary - the amazing new breakthrough in the sex life of women*, by Robert Wilson, MD was published in 1966. He claimed that "for the first time, a leading doctor in the field of menopause prevention explains why no woman – no matter what her age – need ever feel a day over forty."…*

The 2002 WHI termination of its EPT (estrogen-progestogen) arm was a major speed bump on this road of menopause history. But the subsequent massive backlash against use of FDA-approved hormonal therapies has had an unanticipated and unfortunate outcome – a shot in the arm for a new school of "natural" therapies. We are now in the era of Ageless: the naked truth about bioidentical hormones*. Written and mega-marketed by a high school graduate, Suzanne Somers, the book claims a*

foundation of "16 interviews from cutting-edge doctors on how to slow the aging process, for women and men."…

There should be an explanatory patient package insert in all hormone prescriptions, whether commercial or compounded, that clearly explains to women the benefits and risks associated with the product. Nonetheless, you are the advocate for your patients and for safe and effective women's health care. The responsibility to counsel women about risks and benefits of <u>all</u> pharmacotherapies is yours. You sign the prescription, you carry the liability. It is time to tell women that "buyers beware!"

SUMMARY SEMINAL CONTRIBUTION #14

As author or coauthor of nearly 40 major state-of-the-art reviews with clinical recommendations for best practice of menopause-related medicine, having written well in excess of 120 editorials in medical publications on virtually every facet of the subject, authored three books as an individual, and coauthored a further four books, most of which have also been translated into other languages, as well as having personally taught or lectured on every continent, I believe this effort and the extracts presented in this section attest to the considerable influence I have exerted on this area of clinical practice .

Instead of a narrative summary, selected direct quotations from some of these publications are presented as examples of my forward thinking and seminal contributions to medical science at the time they were written. These quotations would also best represent the evolution of my personal thought processes over the last 40 years.

6.15 SEMINAL IMPACT ON WORLD MEDICINE THROUGH ESTABLISHMENT OF NATIONAL AND INTERNATIONAL MENOPAUSE ORGANIZATIONS, MEDICAL JOURNALS AND A COMPETENCY EXAMINATION

It is one thing in contemporary medicine to undertake and publish basic and clinical research findings, to write reviews, editorials, and personal opinions on the current literature, to be involved in the development of evidence-based recommendations for clinical practice, or to be a teacher. It is quite another thing to create vehicles through which all this information can be discussed, distilled, and disseminated to the world at large, or by which standards of health care and its delivery can be improved. In judging my own personal and seminal major impact on medicine and women's health, I believe it is in the second category that I have made my most significant contribution.

In the role of pioneer in establishing scientific organizations, assisting in their development, and launching scientific medical journals, my efforts have been pivotal in achieving the following outcomes:

1. Creating forums for scientific discussion;
2. Developing vehicles for supporting young and new research investigators;
3. Establishing professional and consumer education committees which in turn have developed professional and consumer education products;

4. Enhancing education at medical schools in the area of menopause and women's health;
5. Improving women's knowledge about menopause through print, internet, and other vehicles;
6. Initiating an international Menopause Practitioner Competency Certification examination.

The outcomes of these accomplishments have raised the "bar of expectations" for standards of medical practitioner's healthcare delivery, and in turn of many women's knowledge about menopause and their expectations from the health system. The mechanisms through which I have achieved these objectives, with examples of some of the products developed, are summarized below.

6.15.1 ESTABLISHMENT OF NATIONAL AND INTERNATIONAL MENOPAUSE ORGANIZATIONS

6.15.1.1 THE INTERNATIONAL MENOPAUSE SOCIETY (IMS)

The historical background to the development of the IMS is described in Section 2.1 above. In summary, two people conceived the idea in 1973, Pieter van Keep and me. The idea was honed over the next 3 years, during which time we planned the First International Congress on Menopause, which was held at la Grande Motte, France, in 1976. At that meeting, we refined the ideas about the organization, selected members for the first Board of Trustees, and launched the IMS in Jerusalem in 1978.

Since that time, I have served at various periods on the Board of Trustees, and am an Honorary Past President.

The nature, scope and activities of the IMS are described on its web site at www.imsociety.org.

6.15.1.2 OTHER NATIONAL MENOPAUSE SOCIETIES

Following the launch of the IMS and the successful first world meetings in 1976 and 1978, I was invited by colleagues with interests in their own countries to help in the development of their own national organizations. This invariably involved a lengthy correspondence with assistance in writing initial statutes based on their national objectives (mission/vision). Following that my routine recommendations included that a national menopause meeting be held, at which time the organization would be formally approved. Again, invariably, I would attend those meetings, assist in committee deliberations, and give a keynote lecture at the meeting. The following is a list of countries with which I was involved and, for many, the lectures I presented are listed in my full curriculum vitae (Section 8). The years represent year of launch or of initiation of serious planning.

Greece (1977)
Australia (1979)
Holland (1981)
Venezuela (1982)

Belgium (1983)
South Africa (1984)
China (1984)
Italy (1985)
Israel (1986)
Brazil (1987)
Switzerland (1988)
Spain (1988)
Portugal (1989)
Denmark (1989)
Argentina (1989)
Korea (1992)
Japan (1992)
Chile (1993)
United Kingdom (1993)
Taiwan (1995)
Latin America (1995) (Federation Latin American Climacteric – FLASCYM)
Poland (1996)
Germany (1996)
Hungary (1996)
Czech Republic (1998)
Jamaica (1998)
Turkey (2000)
Caribbean Menopause Society (2000)
Asia Pacific Menopause Federation (2001)

6.15.1.3 THE NORTH AMERICAN MENOPAUSE SOCIETY (NAMS)

The background and history to my starting The North American Menopause Society (NAMS) is detailed in Section 2.1. The growth and success of this organization has been phenomenal and a detailed description of every aspect of the organization and its programs can be accessed at www.menopause.org. Some examples of its milestones, accomplishments, and activities follow.

- Founded in 1989, NAMS is North America's leading nonprofit organization dedicated to promoting women's health and quality of life through an understanding of menopause. NAMS organizes meetings and congresses, and advances the interchange of research plans and experience between individual members of the Society. Its multidisciplinary membership of leaders in the field—including clinical and basic science experts from medicine, nursing, sociology, psychology, anthropology, pharmacy, epidemiology, nutrition, and education—allows NAMS to be the preeminent resource on all aspects of menopause to both healthcare providers and the public.

- The annual scientific meetings confirm our diversity, with members drawn from the basic and clinical sciences, physicians, nurses, and all the others listed above. By avoiding concurrent sessions, the annual meetings have been

extraordinarily successful in fostering increased collaboration and elevating knowledge. The scientific programs are attended by thought leaders from over 50 countries.

- NAMS provides guidance for healthcare providers through its development of position statements on key clinical issues, printed and Web-based educational programs, and its popular textbook, *Menopause Practice: A Clinician's Guide*. Members also receive expert advice through our Webinars and quarterly *Menopause e-Consult* e-newsletter. Many of these programs allow participants to earn continuing education credits from NAMS, an ACCME-accredited organization.

- The abrupt pronouncements on the termination of the estrogen/progestin arm of the WHI study in July 2002 caused real confusion for women and health providers. But it contributed to the my launching of our highly acclaimed *First to Know*® monthly e-newsletter in which experts cull the current and about-to-be-released literature for important news. The best are summarized and e-mailed to members with expert commentary. The file is then posted to the NAMS web site for open access.

- NAMS established multiple awards for significant accomplishments in scientific research, clinical care, teaching, and consumer information and education.

- NAMS provides startup research grants to new investigators for pilot research projects.

- A decade ago, recognizing our strengths and the demand for reliable information for the public, NAMS added consumer education to its broader mission. Major accomplishments in this arena include:
  - The award-winning NAMS Web site (www.menopause.org), currently drawing in excess of 5 million hits per month.
  - Two primary print resources, the *Menopause Guidebook* and the *Early Menopause Guidebook*, provide factual information to hundreds of thousands of women.
  - Now in its third year is *Menopause Flashes*, a complimentary monthly e-newsletter for women that translates the most current scientific information into consumer-friendly language.
  - And just launched in 2006 with an initial print run of one million is *Changes*, the NAMS-endorsed magazine distributed to patients through U.S. physicians' offices.

6.15.1.4 THE COUNCIL OF AFFILIATED MENOPAUSE SOCIETIES (CAMS)

CAMS is one of the Organs of the International Menopause Society. I launched CAMS during my tenure as President of the IMS in 1996 with several specific objectives in mind. The first was to provide a democratic forum for all national societies affiliated with

the IMS. The controlling committee of the IMS (the Board) by virtue of its limited size could not have a member from every country on its rostrum. CAMS on the other hand, irrespective of the size or number of members of a national or regional society, allows one member from each onto its Board. The second main objective of CAMS was to develop ideas for projects that would have international pertinence to the scientific basis and healthcare delivery aspects of menopause.[4]

The first four projects that were approved serve as examples of these objectives:

1.DEFINITIONS PROJECT
This project was assigned the task of modernizing the terminology associated with menopause, taking into account the definitions developed at the First International Menopause Congress at La Grande Motte in 1976, as well as WHO and other previous definition projects. I was assigned the task, and working with a committee that I enrolled to be representative of our family of nations, completed the task, and the final report was widely disseminated, and also published in our official journal, *Climacteric* (2,284-286, 1999).
2. MINIMAL STANDARDS FOR BEST HEALTH CARE PROJECT

Discussions between many IMS members over the years had highlighted the need for the IMS to come out with a clear set of guidelines as to what would comprise the minimum level of health care that should be delivered to women worldwide. Such a document would be useful to both healthcare providers in day-to-day practice as well as to controlling authorities such as local or central governments and reimbursing agencies in setting their priorities and budgets.

3. ESSENTIALS FOR MEDICAL EDUCATION PROJECT
A project was approved by the CAMS for the development of a curriculum of essential criteria for menopause education that should be included in the women's health teaching programs at medical schools.

4. WORLD MENOPAUSE DAY
A project to declare October 18th every year as World Menopause Day was approved by the CAMS Board and subsequently by the World Health Organization (WHO). For the first 6 years, I personally developed appropriate materials and circulated them to all CAMS members for use in their home countries.

6.15.1.5 WOMEN'S VOICES FOR CHANGE (WVFC)

The NAMS Board recognized the need to develop a grassroots women's organization to partner in its efforts to disseminate good information. I was given the go-ahead to work with a group of eminent women in New York City to establish such an organization.

On November 21, 2005, a new not-for-profit partnership organization was launched. Women's Voices For Change (WVFC).The organization's mission is to provide education, advocacy, and support to the estimated 50 million North American women of

menopausal age through a collaborative partnership with NAMS. WVFC will rely on NAMS for the scientific content of its initiatives, and will donate half of its annual proceeds to NAMS, specifically for the mutual development of projects. The new essential component now activated is a voice for women through the power of a strong grassroots organization in partnership with a strong scientific organization. An example of the potential for this organization is a project WVFC has undertaken in partnership with New York Presbyterian Hospital. This is a project to provide free bone density screening and follow up to 1,000 underserved Hispanic women in New York City. Each participant will receive free bone density testing, a free Spanish-language version of the NAMS guidebook *Menopause: A New Beginning,* one year's supply of calcium and vitamin D, and free transportation to the hospital for the testing.

6.15.1.6 THE NAMS FOUNDATION

Developing NAMS material is costly in time, effort, and money. The NAMS Foundation was therefore launched in September 2006 as a support organization of NAMS, charged with the challenge of raising significant financing for greatly enhanced objectives. With financial support from the Foundation, the Society will be able to continue its ambitious agenda for development of materials and programs, and will be well positioned for even more growth in the years to come. I have been appointed President of The NAMS Foundation for the years 2006 through 2009.

6.15.2 FOUNDING OF MEDICAL JOURNALS

I have also been privileged to have been involved in the conception, planning, launching, and editing, of three major medical publications:

6.15.2.1 *MATURITAS*

Maturitas was the first official medical journal of the IMS. For years, I coedited this journal with Peter van Keep MD, PhD, who at that time was Director General of the International Health Foundation. Before I launched NAMS in 1989, I stepped down from that responsibility, as there would have been a conflict of interest when NAMS planned to initiate its own scientific publications.

6.15.2.2 *MENOPAUSE MANAGEMENT*

Menopause Management is a practical, peer-reviewed clinical publication, mailed bimonthly throughout North America and internationally, with a circulation of just under 35,000. The evidence-based, clinically relevant, and practical articles have resulted in the wide acceptance and popularity of this publication. I have been the Medical Editor since the onset of publication in the fall of 1988. I write the editorial for every issue.

6.15.2.3 *MENOPAUSE: THE JOURNAL OF THE NORTH AMERICAN MENOPAUSE SOCIETY*

Menopause was launched in 1994 under the stewardship of Isaac Schiff, MD, and me as a journal to serve as a vehicle for transmitting peer-reviewed scientific information that would be helpful to the NAMS membership, the healthcare profession, and society

in general. *Menopause* is now ranked in the top three of OB/GYN journals listed by the Library of Congress, as measured by Science Citation Index, and universally accepted as *the* scientific journal on the subject.

6.15.3 THE FIRST AND ONLY MENOPAUSE COMPETENCY EXAMINATION

With the Mission of NAMS to promote the health and quality of life of women through an understanding of menopause, we recognized the need to set essential standards for health providers, thereby assuring high-quality care for women. To meet this need, the Society in 2000 developed an opportunity for licensed healthcare providers from multiple disciplines to demonstrate their expertise though passing a 100-question multiple-choice competency examination and becoming credentialed as a NAMS Menopause Practitioner. Currently, healthcare providers throughout the world hold this prestigious 3 year credential.

Those who pass the examination receive a certificate suitable for framing, plus suggestions on how to promote the accomplishment within the community. NAMS assists in announcing this accomplishment by posting all Menopause Practitioners names on the Society's Web site. In turn, this allows women searching the NAMS Web site for a competent practitioner near home, with the names of those who have received the credential.

SUMMARY SEMINAL CONTRIBUTION #15

This section provides a detailed summary of my pioneering efforts in organizing the medical profession into societies and foundations, all established with the prime objective of enhancing the quality of health care provided to women worldwide. One of the original three founders of the International Menopause Society, I assisted about 20 countries establish national societies, before founding The North American Menopause Society in 1989.

In this endeavor of establishing scientific organizations, assisting in their development, launching scientific medical journals, and initiating a competency examination to set the minimal standards of knowledge required for this area of health care, my efforts have been pivotal in achieving the following outcomes:

1. Creating forums for scientific discussion;
2. Developing vehicles for supporting young and new research investigators;
3. Establishing professional and consumer education committees which in turn have developed professional and consumer education products;
4. Enhancing education at medical schools in the area of menopause and women's health;
5. Improving women's knowledge about menopause through print, Internet, and other vehicles;
6. Initiating an international Menopause Practitioner Competency Certification examination.

SECTION 7

SUMMARY STATEMENT ON THE NATURE AND VALUE OF THE CONTRIBUTIONS TO MEDICAL SCIENCE

CONTRIBUTION #1 – HISTORICAL PERSPECTIVE

3. My first significant contribution to medical science was the recognition of the female menopause as being a health-related issue beyond simple loss of menstruation. In drawing attention to this issue, I was also one of the pioneers in identifying the key questions for future research.
4. Another major pioneering contribution to medical science and women's healthcare was to recognize the need to establish national and international scientific organizations, peer reviewed medical journals, and mechanisms both for researchers to share and interact in programs for scientific progress, and clinicians to be apprised of current standards and recommendations for practice.

CONTRIBUTION #2 – TERMINOLOGY AND DEFINITIONS

Over a period of 30 years I was the first to introduce a standard set of definitions on menopause-related terminology, and then to work with international working groups and medical organizations to further develop this process. By helping standardize the semantics and the staging of reproductive aging this represents a significant achievement in comparing research and evaluating clinical standards of care.

CONTRIBUTION #3 – RESEARCH METHODOLOGY, TECHNIQUES, AND INSTRUMENTS

Faced with a lack of methods to quantify the potential physical and clinical impact of the menopause transition, I was forced to develop techniques for accurate quantification of change. The areas I have made a contribution to, in this respect, include:

7. Documenting the role of the parabasal cells of the vaginal smear as being adequately reflective of the level of estrogenicity of the postmenopausal woman. Thus a simple vaginal smear was recognized as a good clinical instrument in determining therapeutic indications for estrogen therapy.
8. Identifying the relationship between plasma calcium levels and estrogenicity presented an early potential marker of change in bone metabolism.

9. Involvement in the evaluation and determination of the role of successive technologies for measurement of bone density.
10. The development and validation of a precise instrument for measuring and following global quality of life. The UQOL is established in contemporary research as a good instrument for following 4 inter-related domains of quality of life.
11. Development of a laboratory cell line of ectocervical epithelial cells that can serve as a system for studying the effects of a variety of agents, including the sex steroids, on the female ectocervix.
12. Helping develop and test instruments to measure vasomotor symptoms and domains of sexual function.

CONTRIBUTION #4 – PHYSIOLOGY AND MECHANISMS

Working alone or with co-investigators I have been able to contribute some significant basic research findings towards explaining the fundamental physiology and mechanisms of disease, and the pharmacologic function of female hormones. These contributions include:

5. I was the first investigator to suggest that different estrogens demonstrate different properties and effects. Studies with the non-steroidal estrogenic product P1496 might also represent the first study with a SERM.
6. The prevailing dogma that hormone replacement therapy dosage should be titrated to gonadotropin levels was shown to be incorrect. Moreover, low dosages of estrogen were shown to be potentially effective, presaging the advent of low dose hormone therapy.
7. We were amongst the first investigators to explain changes in human vaginal and cervical epithelium at a molecular biological level.
8. Through a series of studies and experiments a window has been opened into explaining the role of estrogens and progestogens in potential protection from and pathogenesis of cardiovascular disease.
    1) The impact of bilateral oophorectomy and replacement estrogen was studied and *"these findings considered sufficient evidence for questioning the empirical use of estrogenic hormones for the prevention of ischemic heart disease in postmenopausal women".*[27]
    2) Our studies of unesterified deposits in human arteries demonstrated correlation with the severity of the atherosclerotic lesion. This allowed a working two-stage hypothesis involving a reversible first stage in which there is small particle aggregation, and a second irreversible stage with more massive agglomeration of irregularly shaped particles containing unesterified cholesterol and calcium phosphate. These findings are particularly important because of the current suggestion from clinical studies that exogenous estrogen therapy commenced early in the process of atherogenesis in postmenopausal women may be cardioprotective, whereas therapy started several years after menopause may in fact be deleterious and result in increased risk of heart attack.

3) Our early experiments demonstrated modulation effects by sex hormones on flow velocity in the parametrial artery of pregnant rats.[37] Following on this we showed coronary blood flow to increase by an order of about 50% and to be virtually abolished by N^G-nitro-L-arginine, an inhibitor of nitric oxide synthase. We were able to conclude that estrogen regulates coronary blood flow, in part by upregulating nitric oxide synthase in the coronary vasculature.
4) Puzzled by our observations in pregnant rats that estrogen and progesterone may have opposing effects on blood flow we were the first to prove that when administered with estradiol, all progestogens and progesterone abrogated the estradiol-related increase in coronary flow.[40] These studies may be evidence of a potential mechanism to explain later clinical studies suggesting that administration of combined estrogen and progestogen might be associated with an increased risk of heart attack in the first year of therapy.
5) To investigate whether estrogens might act directly on the cardiac myocytes and in this way affect the mechanical performance of the heart we demonstrated that the overall influence of estrogen on the coronary circulation and its influence on the contractile function of the heart combine synergistically to exert a cardioprotective effect. The results confirmed that estrogens are cardioprotective agents in females.
6) Because that cardioprotective effect could result from modulation of endothelial permeability, we investigated and effectively demonstrated that the *net* effect on transendothelial permeability depends on the relative contributions of each of two systems. This has current relevance because understanding the mechanisms by which estrogens modulate endothelial permeability may be important for development of drugs that can target the specific mechanisms involved in the actions of estrogen and may provide the pharmacological means to selectively regulate the permeability

In summary then, my seminal contribution in investigating the potential relationship between female hormones, ovarian function and heart disease has been to identify the areas in need of study, and to work closely with colleagues in attempting to clarify those relationships. The outcome has been to open a window into some of the mechanisms and to provide impetus to further elucidating this important component of women's health.

CONTRIBUTION #5 – CHARACTERIZING MENOPAUSE, SPECIFIC SYMPTOMS, AND CHRONIC CONDITIONS

7. The menopause transition was shown to represent a potential endocrinopathy.
8. The definitive symptoms and physical signs directly related to the change in endocrine profiles were defined and classified.

9. Those symptoms responsive to estrogen replacement therapy were differentiated from those responding to general supportive and placebo therapy. This finding has formed the foundation for national and international evidence-based guidelines for symptomatic indications for estrogens after menopause.
10. The mental tonic effect of estrogens, or ability to produce a feeling of wellbeing, was scientifically documented and established for the first time.
11. The significant response of vasomotor symptoms to placebo in randomized placebo-controlled clinical research studies of estrogen therapy was recognized and reported for the first time.
12. The continued function of ovaries conserved at the time of hysterectomy in premenopausal women was confirmed, and a plea made for their conservation.

CONTRIBUTION #6 – NEW DRUGS AND DELIVERY SYSTEMS

6. Different estrogens were shown to induce different clinical and metabolic effects. This seminal finding has influenced my search for safer and more effective hormonal products and routes of administration.
7. I initiated, completed, and published the world's first randomized placebo-controlled blinded study, including head to head comparison of bioequivalent doses of different estrogens.
8. I have been the first, and sometimes only, investigator to evaluate and report on new products.
9. I have been one of the initial investigators to promote scientific comparisons of lower doses of hormone products.
10. I was one of the first investigators to evaluate non-oral routes of administration of hormones through technologies such as the transdermal patches and gels.

CONTRIBUTION #7 – SEXUAL FUNCTION

4. My oophorectomy studies in women of reproductive age, and assessment of the role of exogenous estrogen replacement, were the first of this type in this population, and brought attention to an area in need of research.
5. I have worked as part of collaborative groups in developing and testing validated instruments for measuring female sexual response.
6. Estrogen therapy after surgical menopause was shown to be of no value in restoring or enhancing libido. But in later studies of testosterone in estrogen-replete surgically menopausal woman, the testosterone was shown to significantly improve sexual desire. Studies are on-going.

CONTRIBUTION #8 – BODY WEIGHT

3. I was the first to report that exogenous hormone therapy to the postmenopausal woman does not induce an increase in body weight
4. We were able to report from a large multicenter study, that BMI is not an influencing factor on dose requirements for relief of symptoms in postmenopausal women.

CONTRIBUTION #9 – QUALITY OF LIFE

Perhaps my greatest contribution in this area has been to bring medical attention to the importance of defining, recognizing, accurately measuring, and enhancing quality of life in women through and beyond menopause. This has been accomplished through:

5. Development of a validated instrument, the UQOL.
6. Contributions of specific research in therapy for reducing or alleviating specific menopause-related symptoms and consequent enhancement of health related QOL.
7. Application of the UQOL in clinical research to demonstrate the impact of specific treatments on global QOL.
8. Multiple reviews and other educational activities.

CONTRIBUTION #10 – POPULATION SURVEYS

My key contribution under this section was the design and implementation of health surveys on population knowledge, attitudes, and experience regarding menopause and hormone therapies. That provided recognition of what the population was telling us about their health concerns and the health care system, and enabled translation of that need into appropriately designed and distributed materials that were informative and understandable to that target population.

CONTRIBUTION #11 - COST-EFFECTIVENESS ANALYSIS AND PHARMACOECONOMICS

Pioneering the concept of balancing the risks and benefits of menopause-related hormone therapies, I was the first to introduce the application of cost-effectiveness analysis to this area of medicine. This emphasized the need for incorporating risk, benefit, the costs incurred or saved with each, as well as quality of life, into a measurable analysis. In turn this will allow for impartial selection of such therapies in both individual and overall health planning. Most importantly, such analyses allow for the ranking and comparison of the cost-effectiveness of other therapeutic modalities for other health problems, and placing postmenopausal hormone therapies in perspective within the big picture.

CONTRIBUTION # 12 – HEALTHCARE DELIVERY AND MENOPAUSE CLINICS

The original Groote Schuur Hospital Menopause Clinic was the first such facility in the world. Following publications on the role of such a facility, the clinic became a role model for similar clinics world wide. Thus I was the first person to start a menopause research clinic and then a comprehensive menopause clinic, and later to describe the role of such centers within the context of generalized health care distribution.

I educated clinicians from across North America and internationally in the details of establishing these centers, or developing a menopause management component within their existing medical practices. I advised on the establishment of such clinics in South Africa, the United Kingdom, the United States, Europe, and Asia.

An indirect result was that I was a pioneer in establishing the sub-specialty of “Menopause Medicine”.

CONTRIBUTION #13 – CLINICAL PRACTICE GUIDELINES

I have initiated, coordinated, and disseminated evidence based guidelines for best medical practice utilizing international panels of medical experts in multiple disciplines pertinent to the topic under consideration. These position statements have consequently had a major impact on medical management of the menopause.

CONTRIBUTION #14 - CONTRIBUTION TO INTERNATIONAL PRACTICE THROUGH STATE OF THE ART REVIEWS, EDITORIALS, AND CLINICAL RECOMMENDATIONS

As author or coauthor of nearly 40 major state-of-the-art reviews with clinical recommendations for best practice of menopause-related medicine, having written well in excess of 120 editorials in medical publications on virtually every facet of the subject, authored three books as an individual, and coauthored a further four books, most of which have also been translated into other languages, as well as having personally taught or lectured on every continent, I believe this effort and the extracts presented in this section attest to the considerable influence I have exerted on this area of clinical practice .

Instead of a narrative summary, selected direct quotations from some of these publications are presented as examples of my forward thinking and seminal contributions to medical science at the time they were written. These quotations would also best represent the evolution of my personal thought processes over the last 40 years.

CONTRIBUTION #15-SEMINAL IMPACT ON WORLD MEDICINE THROUGH ESTABLISHMENT OF NATIONAL AND INTERNATIONAL MENOPAUSE ORGANIZATIONS, MEDICAL JOURNALS AND A COMPETENCY EXAMINATION

This section provides a detailed summary of my pioneering efforts in organizing the medical profession into societies and foundations, all established with the prime objective of delivering quality health care to women world wide. One of the original three founders of the International Menopause Society, I assisted about 20 countries establish national societies, before founding The North American Menopause Society in 1989.

In this endeavor of establishing scientific organizations, assisting in their development, launching scientific medical journals, and initiating a competency examination to set the minimal standards of knowledge required for this area of health care, my efforts have been pivotal in achieving the following outcomes:

7. Creating forums for scientific discussion,
8. Developing vehicles for supporting young and new research investigators,
9. Establishing professional and consumer education committees which in turn have developed professional and consumer education products,
10. Enhancing education at medical schools in the area of menopause and women's health,
11. Improving women's knowledge about menopause through print, internet, and other vehicles,
12. Initiating an international Menopause Practitioner Competency Certification examination

EPILOGUE

CLOSING STATEMENT ON SEMINAL CONTRIBUTION TO MEDICAL SCIENCE

"Anyone who believes you can't change history has never tried to write his memoirs."
David Ben Gurion

During a professional career spanning over four decades, I believe I have made seminal contributions to both the science and understanding of menopause, and to the organization of the medical profession in setting standards for research, education, and healthcare delivery. In the process, I started with the unusual opportunity of identifying the significance of an unrecognized area in medicine that ultimately affects all women. My contribution beyond the recognition phase was to identify or be at the beginning of virtually every aspect related to the research into, and management planning of, the female menopause. This has included, *inter alia*, defining the menopause transition, establishing instruments for evaluation and identification of the menopause as a potential endocrinopathy, stimulating and undertaking basic and clinical science research, characterizing the condition, determining women's own perceptions of the transition, describing and developing appropriate healthcare delivery systems, quantifying cost-effectiveness of therapies, producing evidence based clinical guidelines, and founding national and international menopause societies to further all these activities. Beyond this, I have edited the major medical journals in the subject, used my editorials as a bully pulpit to drive enhanced health care and question outdated dogma, and taught and lectured on the subject worldwide.

In humbly submitting this body of work for consideration for the prestigious degree of Doctor of Science at the University of Cape Town, I truly believe that my life's work has had a positive impact on the health and quality of life of millions of women worldwide. I am conscious of my good fortune in having been able to do what I have done, and the debt I owe to the many research and clinical collaborators I have worked with around the world. Above all, I am deeply grateful to the many thousands of women I have seen in consultation, and for what they have confided in me and taught me.

"I have but one lamp by which my feet are guided, and that is the lamp of experience. I know of no way of judging of the future but by the past."
Edward Gibbon

SECTION 8

FULL CURRICULUM VITAE

WULF H. UTIAN
MB, BCH, PhD, FRCOG, FACOG, FICS

UPDATED: January 30, 2007

NAME AND CURRENT TITLES

Wulf H. Utian, MB, BCh, PhD, FRCOG, FACOG, FICS

Executive Director and Honorary Founding President
The North American Menopause Society

The Arthur H. Bill Professor Emeritus
Department of Reproductive Biology
Case Western Reserve University

Chairman, Board of Advisors, Rapid Medical Research Inc.

Consultant, Obstetrics and Gynecology and Women's Health
The Cleveland Clinic Foundation

Visiting Professor, Faculty of Health Sciences,
University of Cape Town (2007-2010)

ADDRESS

Home:	27500 Cedar Road, Point East P-7 Beachwood, OH 44122
Office:	The North American Menopause Society 5900 Landerbrook Drive Mayfield Hts., OH 44124

TELEPHONE/ *EMAIL*

Home:	216/378-1840
Office:	440/442-7680 NAMS
Fax:	440/442-2660
Cell:	216/272-7751
Home:	utian@attglobal.net
Office:	utian@menopause.org

PERSONAL DATA

Date of Birth:	September 28, 1939
Place of Birth:	South Africa
Wife:	Moira
Children:	Brett
	Lara

EDUCATIONAL BACKGROUND

1956	Highlands North High School Johannesburg, South Africa
1962	University of Witwatersrand Johannesburg, South Africa MB.BCh
1970	University of Cape Town Cape Town, South Africa PhD
Thesis:	Clinical and Metabolic Effects of the Menopause and the Role of Replacement Oestrogen Therapy

CERTIFICATION

- MRCOG (London), 1967
- FACOG, December 1976 (Elected Life Fellow, November 2005)
- ECFMG Written and passed May 1963 (033-629-7)
- FLEX passed December 1976 (FLEX avg. 81.8; OB-95)
- American Board of Obstetrics and Gynecology, March 1979
- American Board of Obstetrics and Gynecology, Division of Reproductive Endocrinology, February 1980
- Fellow, Royal College of Obstetrics and Gynaecology, Elected 1980
- Fellow, International College of Surgeons, Elected 1980
- Certified Clinical Densitometrist (CCD), International Society for Clinical Densitometry, October 15, 2001 (valid through October 15, 2009)
- NAMS Menopause Practitioner Certification, February 18, 2005

MEDICAL LICENSURE

1963	South African Medical Council, Medical Practitioner (MP9514)
1963	General Medical Council, London, England (1105614)
1970	South African Medical Council, Specialist Obstetrician and Gynaecologist
1977	Ohio State License by FLEX (40409)
1979	Medical Board of South Australia
1979	Medical Board of New South Wales

PREVIOUS HOSPITAL ADMITTING PRIVILEGES

- Part-time lecturer to the University of Cape Town and Consultant in Obstetrics and Gynaecology, Groote Schuur Hospital.
- Part-time Consultant Obstetrician, Mowbray Hospital, Cape Town
- Honorary Gynaecologist, Highland House Home for the Aged, Cape Town
- Medipark Clinic, Cape Town
- Vincent Palotti Hospital, Cape Town
- New Somerset Hospital, Cape Town
- Rondesbosch Cottage Hospital, Cape Town
- Victoria Hospital, Cape Town
- The Mt. Sinai Medical Center, Cleveland
- University Hospitals of Cleveland, Cleveland
- The Cleveland Clinic, Cleveland

BIOGRAPHICAL LISTINGS

- American Board of Medical Specialties
- Personalities of the West and Midwest
- Personalities of America (4th Edition)
- Who's Who in the Midwest (20th Edition)
- Directory of Medical Specialists, 1976 to Present
- ABMS Director of Certified Obstetrics and Gynecologists
- Who's Who in the Midwest (21st Edition)
- Men of Achievement, (13th Edition) 1988
- The International Directory of Distinguished Leadership, 1988
- Personalities of the Americas, First Commemorative Edition, 1988
- Personalities of America (5th Edition) 1988
- Who's Who in America, 1988
- Five Thousand Personalities of the World, 1988
- Men of Achievement (14th Edition) 1990
- Who's Who in the Midwest (22nd Edition) 1989
- International Leaders in Achievement (2nd Edition) 1990
- Directory of Distinguished Americans (5th Edition) 1989
- Five Thousand Personalities of the World (2nd Edition) 1989
- The International Directory of Distinguished Leadership (3rd Edition) 1991
- Men and Women of Achievement (4th World Edition) 1991
- Personalities of America (6th Edition) 1992
- Five Thousand Personalities of the World (3rd Edition) 1990
- Men of Achievement (15th Edition) 1991
- Who's Who in the Midwest (23rd Edition) 1991
- Dictionary of International Biography (22nd Edition) 1992
- The International Directory of Distinguished Leadership (4th Edition) 1991
- Five Thousand Personalities of the World (4th Edition) 1992
- Oxford's Who's Who, 1993

- Who's Who in the Midwest (24th Edition) 1993
- Men of Achievement (16th Edition) 1994
- International Who's Who, 1994
- International Directory of Distinguished Leadership (5th Edition), 1994
- Who's Who in the World (12th Edition) 1995-1996
- International Who's Who in Medicine (2nd Edition) 1995
- Who's Who in America (49th Edition) 1995
- Who's Who in Science and Engineering (3rd Edition) 1996-1997
- International Who's Who of Professionals, 1995
- Men of Achievement (17th Edition) 1996
- Who's Who in the Midwest (25th Edition) 1996-1997
- International Who's Who of Professionals, 1996
- Who's Who in the World (14th Edition) 1996
- Who's Who in Science and Engineering (4th Edition) 1997
- Who's Who in the World (15th Edition) 1998
- Who's Who in America (52nd Edition) 1997
- Who's Who in Medicine and Healthcare (2nd Edition) 1999-2000
- Who's Who in the Midwest (26th Edition) 1998-1999
- Who's Who in the World (16th Edition) 1999
- Who's Who in America (53rd Edition) 1999
- Who's Who in America (54th Edition) 2000
- Who's Who In The World (17th Edition) 2000
- Who's Who in Medicine and Healthcare (3rd Edition) 2000-2001
- Who's Who in America (55th Edition) 2001
- Who's Who in America (56th Edition) 2002
- Who's Who in Medicine and Healthcare (4th Edition) 2002-2003
- Who's Who in America (57th Edition) 2003
- Who's Who in America (58th Edition) 2004
- Who's Who In Medicine and Healthcare (5th Edition) 2004-2005
- America's Top Obstetricians and Gynecologists (Consumers Research Council) 2004-2005
- Who's Who in America (59th Edition) 2005
- Who's Who in America (60th Edition) 2006
- Who's Who in Medicine and Healthcare (6th Edition) 2006-2007
- Who's Who in America (61st Edition) 2007

SOCIETIES

- Fellow, Royal College of Obstetricians and Gynaecologists
- South African Society of Obstetricians and Gynaecologists
- South African Paediatric Society
- South African Society of Endocrinology, Diabetes and Metabolism
- International Society of Psychosomatic Obstetrics and Gynaecology, Founding Member
- Fertility Society of South Africa
- South African Medical Association

- Fellow, American College of Obstetricians and Gynecologists
- British Medical Association
- American Society for Reproductive Medicine (AFS)
- Association of Professors of Gynecology and Obstetrics (APGO), Life Member
- Fellow, International College of Surgeons
- Mt. Sinai Medical Society
- Academy of Medicine, Cleveland
- Kansas City Gynecologic Society, Honorary Member
- Cleveland Society of Obstetricians and Gynecologists
- The Society for Reproductive Endocrinologists, Charter Member
- American Society for Reproductive Surgeons, Founder and Charter Member
- Akron Obstetrical and Gynecological Society, Honorary Member
- International Society of Gynecological Endocrinology, Founding Member
- The Endocrine Society
- International Platform Association
- International Society of Gynecologic Endoscopy, Charter Member
- The North American Menopause Society, Founding President
- Council of University Chairs of Ob/Gyn (CUCOG)
- University Chairs of Obstetrics and Gynecology of Ohio (UCOGO)
- The International Society for Clinical Densitometry
- International Society for the Study of Women's Sexual Health (ISSWSH)
- European Menopause and Andropause Society (EMAS)

COMMITTEES

- CARE Committee, University Hospitals (1977-1980)
- Human Investigation and Clinical Research Committee, University Hospitals and CWRU (1977-1980)
- Chairman, MacDonald House Human Research Review Committee (1977-1980)
- Ambulatory Care Committee, University Hospitals (1979-1980)
- Graduate Studies Committee, Reproductive Biology, CWRU (1978-1980)
- Laboratory Space Utilization Committee, University Hospitals (1978-1980)
- Medical Council, Mt. Sinai Medical Center (1980-89)
- Medical Advisory Board, Mt. Sinai Medical Center (1980-89)
- Joint Conference Committee, Mt. Sinai Medical Center (1980-89)
- Credentials and Promotions Committee, CWRU Reproductive Biology (1981-1985)
- Cleveland Society of Obstetricians and Gynecologists, Planning Committee (1981)
- Professional Advisory Committee of the Center for Biomedical Ethics, Case Western Reserve University (1985-1997)
- Cleveland Ob/Gyn Society Long Range Planning Committee (1985-1990)
- CWRU Council on Graduate Education (1988-1999)
- Mt. Sinai Medical Center Suburban Ambulatory Facility Strategic Steering (1988-89)

- CWRU Executive Committee (1990-1999)
- University Hospitals Medical Council (1990-1999)
- Council of Clinical Chairman CWRU (1990-1999)
- CWRU Task Force on Endocrinology and Metabolism (1990-1992)
- Chairman, Council Clinical Chairmen Task Force on Primary Care (1994-1995)
- Board of Governors, Shoreby Club (1994-1999)
- CWRU Gala 2000 Committee (2000)
- CWRU Gala 2002 Planning Committee (2003-2004)
- National Scientific Advisory Committee, First Annual CCF Speaking of Women's Health Summit (April 16-17, 2005)
- Steering Committee, CCF Speaking of Women's Health (2006)

MEDICAL TEACHING EXPERIENCE

66-67 Undergraduate Medical Teaching, University of Cape Town Medical School

68-71 Undergraduate and Postgraduate Teaching. Lecturer and consultant in charge of the Postgraduate Teaching Program in Obstetrics and Gynaecology at the University of Cape Town and the Groote Schuur Hospital

67-73 University of Cape Town School of Physiotherapy, Course in Obstetrics and Gynaecology

71-76 Lecturer, Part-time, Department of OB/GYN, UCT.

71-76 Carinus Nursing College, Cape Town

75-76 Lecturer, Advanced Course in Midwifery, Mowbray Maternity Hospital, Cape Town

76-79 Assistant Professor, Case Western Reserve University School of Medicine, Undergraduate and Postgraduate teaching

79-89 Associate Professor, Case Western Reserve University

89-99 Chairman, Department of Reproductive Biology, Case Western Reserve University

HOSPITAL ADMINISTRATION

67-68 Consultant in Charge, Maternity Block, Groote Schuur Hospital

69-71 Consultant in Charge, Peninsula Maternity Hospital, Cape Town

80-89 Director, Obstetrics and Gynecology, Mt. Sinai Medical Center, Cleveland

89-99 Director, Obstetrics and Gynecology, University Hospitals of Cleveland and University MacDonald Women's Hospital

PRACTICE ADMINISTRATION

70-76 Private Practice, Medipark, Cape Town, South Africa

78-79 Practice Manager, MacDonald Hospital Associates, Cleveland, Ohio

79-00 President, University OB/GYN Specialties, Inc., Cleveland, Ohio

94-99 Board Member, University Faculty Practice Association, Cleveland, Ohio

RESEARCH INTERESTS

General:

- Estrogens and menopause - metabolic and psychosocial aspects
- Premenstrual Syndrome
- In Vitro Fertilization - successful program established 1983

Specific:

- Metabolic aspects of the perimenopausal female, the effects of oophorectomy, and the use of pharmacologic agents, in particular on bone, cardiovascular and hypothalamic pituitary physiology
- Determining "Quality of Life' through instrument validation and application

Groote Schuur Menopause Research Clinic:

- I was responsible for establishing this clinic in 1967 and was consultant in charge until leaving in May 1976. Numerous scientific reports emanated from this clinic

Rapid Medical Research Inc.:

- In 1997, I was responsible for establishing this independent Clinical Research Center with the objectives of expediting and facilitating the above types of research

MEDICAL JOURNAL REVIEWER/EDITOR AND MEDIA POSITIONS

- South African Medical Journal, Referee and Reviewer 1972-1976
- South African Medical Journal, Editorial Contributor 1974-1976
- Examiner in Obstetrics and Gynaecology, University of Cape Town 1971-1976
- Maturitas, Manuscript Referee 1978-
- C.V. Mosby Publishing Company, Manuscript Referee 1980-
- American Journal of Obstetrics and Gynecology, Manuscript Referee 1980-
- Fertility and Sterility, Special Reviewer 1981-
- Obstetrics and Gynecology, Special Reviewer 1981-
- Maturitas, Co-Chief Editor 1983-1993
- Journal of Psychosomatic Obstetrics and Gynaecology, Referee 1985-1990
- NIH Bioengineering Study Section Project Review 1987
- American Fertility Society, Media Spokesperson on "Menopause" 1988-1996
- Menopause Management, Editor 1988-
- Medical Advisory Board, Producers Group, Inc., New York 1988-1990
- Honorary Research Board of Advisors, American Biographical Institute 1988-
- OB/GYN Digest, International Advisory Committee, 1988-1996
- Resident & Staff Physician, Special Reviewer 1988-
- Neurology, Reviewer 1989-
- Journal Clinical Endocrinology and Metabolism, Reviewer 1989-
- Drugs, Reviewer 1990-
- OB/GYN Management, Monthly Editorial Column "Climacteric Practice" 11/90-2/93
- Gynecologic Endocrinology, Advisory Board 1986-1996
- Journal of Endocrinological Investigation, Reviewer 1992-
- Search Your Colleague's Practice on Gynecology, Editorial Board 1992-1995
- Chest, Reviewer 1992-
- Health Words for Women, Editor 1992-
- Osteoporosis International, Reviewer 1992-
- Drug Evaluations, American Medical Association, Consultant, 1992-
- Journal of Musculo-Skeletal Medicine, Reviewer 1993
- Journal of Women’s Health, Reviewer 1993
- Journal of Reproductive Medicine, Reviewer 1993
- University Hospitals Magazine, Editorial Advisory Board 1993
- MENOPAUSE - The Journal of the North American Menopause Society, Founding Co-Editor, 1993-
- Medical Tribune for the OB/GYN, Editorial Advisory Board 19941999
- Pharmaco Economics, Reviewer 1994-
- American Journal of Epidemiology, Reviewer 1994-
- American Journal of Human Biology, Reviewer 1994-
- New England Journal of Medicine, Reviewer 1996-
- United States Pharmacopeial Convention, USP Drug & Disease Therapy 1996-
- Gynecology Digest, International Scientific Editorial Committee 1997-

- Medical Tribune for the Obstetrician/Gynecologist, Medical Editor 1997-1998
- Climacteric, Journal of the International Menopause Society, Editorial Board 1997-2004
- Annals of Internal Medicine 1998-
- British Journal of Obstetrics and Gynaecology 1998 –
- Patient Care 1999-
- Women and Health 1999-
- Journal of General Internal Medicine 2000-
- NBC Cleveland TV Women's Health Expert Morning News 2000-2002
- Women's Health & Urban Life (WH&UL) 2001-
- Human Reproduction Updates 2001-
- Treatments in Endocrinology 2002-
- Journal of Women's Health and Gender-Based Medicine 2003-
- Quality of Life Research 2003-
- BioMed Central 2004-
- International Journal of Impotence Research (The Journal of Sexual Medicine) IJIR 2004-
- International Journal of Gynecology and Obstetrics 2006-

SPECIAL INTERNATIONAL APPOINTMENTS AND NATIONAL ORGANIZATION OFFICES

- South African Representative on the International Society of Psychosomatic Obstetrics and Gynaecology, Elected December 1971
- South African Council of the Royal College of Obstetricians and Gynaecologists, Representative for Members of the College, 1972-1974
- Chairman, South African Council of ISPOG, 1972-1976
- Chairman and Founding Member, South African Inherited Disorders Association, Cape Western, 1974-1975
- Medical Advisory Panel, SAIDA (W.P.), 1974-1976
- Fertility Society of South Africa, Executive Committee, 1977
- Appointed to Advisory Panel, International Health Foundation, Geneva and Brussels, 1976
- Appointed to the Permanent Scientific Advisory Panel, Society for the Study and Therapy of the Menopause, 1977
- Editorial Advisory Board of Maturitas (Elsevier/North Holland Biomedical Press), 1977
- Consultant Flinders University (Adelaide, Australia) Long-term Collaborative Menopause Research Project, 1979
- Panel of Independent Assessors, National Health and Medical Research Council, Canberra, Australia, 1979
- Executive Committee, International Menopause Society, 1980-1996
- International Menopause Society, Executive Committee, 1981
- Consumer Reports, New York, Consultant, 1981
- Vice Regent for Ohio, International College of Surgeons, 1981

- Chairman, OB/GYN Surgical Specialty Group Executive Committee, International College of Surgeons, 1981
- International College of Surgeons, United States Section, Executive Committee of the Obstetric and Gynecologic Surgical Specialties Group, 1981-1990
- Board of Advisors, RESOLVE, 1983-1986
- Vice President, International College of Surgeons, United States Section, 1983
- Executive Committee, International College of Surgeons, United States Section, 1984-1989
- Board of Regents, International College of Surgeons, United States Section 1984- 1995
- International Menopause Society, Executive Committee - Re-elected, 1984
- Re-elected Vice President, International College of Surgeons, United States Section, 1985
- International Society of Gynecological Endocrinology, Founding Committee, 1986
- Re-elected Vice President, International College of Surgeons, United States Section, 1986
- Executive Committee, International Society of Gynecological Endocrinology, 1986-1992
- CME Program and Membership Committees - International College of Surgeons, 1987-
- Advisor on Menopause and Infertility to the International Health Foundation, Geneva and Brussels, 1987
- Vice President, International College of Surgeons, United States Section, 1987-88
- Re-elected Vice President, International College of Surgeons, United States Section, 1988-89
- The North American Menopause Society, Founding President, 1989-92
- Treasurer, International Menopause Society, 1990-93
- International Menopause Society, 1990, Elected President-Elect for 1993-1996
- The North American Menopause Society, Executive Director, 1992-
- President, International Menopause Society, 1993-1996
- American Representative Committee of the Royal College of Obstetricians and Gynecologists 1994-1997, Re-elected 1997 for 1997-2000
- Board of Trustees, Turner's Syndrome Society of the United States, 1995-97
- Council of Affiliated Menopause Societies of the International Menopause Society, U.S. Representative, 1996-1999
- Chairman, Steering Committee, National Menopause Education, Program Association of Academic Health Centers, Washington, DC, January-July, 1996
- Visiting Professor, University of Ferrara, Italy, May-June, 1997
- Medical Health Advisory Board, Society for the Advancement of Women's Health Research, 1997-
- Council of Affiliated Menopause Societies of the International Menopause Society, Secretary 1996-1999

- Coalition on Women's Health and Aging, National Council on Aging, 1998-
- Council of Affiliated Menopause Societies of the International Menopause Society Chairman 1999-2002
- International Advisory Board, the YVY-QOL Institute, Seoul, Korea 1999-
- Women's Health Advisory Council of the National Women's Health Resource Center 2000-
- Honorary President, Satellite Symposium 5th European Congress on Menopause, Sardinia, Italy, June 18-20, 2000
- Steering Committee, 10th World Menopause Congress, Berlin, Germany. 10-14 June, 2000-2002
- Medical Health Advisory Board Executive Committee, Society for Women's Health Research, Washington DC, Elected October 26, 2000-2001
- The Helen Moss Breast Cancer Research Foundation Advisory Board, 2000-
- Council of Affiliated Menopause Societies of the International Menopause Society Chairman 2002-2005
- Steering Committee, 11th World Congress of the International Menopause Society, Buenos Aires, Argentina. 2002-2005
- Chair, Editorial Advisory Board OB.GYN.Net Menopause, 2005-
- Executive Committee of the North American Women's Healthcare Forum, 2003-
- Council of Past Presidents, International Menopause Society, 2005-
- Co-secretary for North America, Scientific Committee 2008 World Congress on Menopause, Madrid, Spain. 2006-2008.

PAST RESEARCH GRANTS

1968 The Herman Bequest, University of Cape Town
1969 Atomic Energy Board, South Africa
1970 Atomic Energy Board, South Africa
1971 Atomic Energy Board, South Africa
Round Table Association, South Africa
National Institutes of Health, Washington (Chemicals and purified hormones and antibodies)
Medical Research Council (with Dr. C. Beardwood)
1972 Atomic Energy Board, South Africa
1973 Medical Research Council (with Dr. P. Beaumont)
1974 University of Cape Town
Ayerst Laboratories, New York
1975 Ayerst Laboratories, New York
1976 University of Cape Town
Ayerst Laboratories, New York
1977 NIH Award No: RR-05410-16
1980 NIH Pharmacia Joint Award, Project Co-Director, Hyskon Adhesion Study
1983 CIBA Geigy, New York
1986 Organon, New York
1989 Wyeth-Ayerst, New York

1989 NIH/NIA: 1 R13 - AG086-16 - Multidisciplinary perspectives on reproductive aging (with F. Kronenberg)
1991 Mead Johnson, Evansville, Indiana
1992 Solvay Pharmaceuticals, Estratab/Estratest Study
1992 Noven Pharmaceuticals, Estrogen Patch Study
1992 NIH RO1-AR4-3003-01 Co-Investigator
1994- Multiple multicenter drug trials, proprietary in nature and not specifically detailed here (Available on request).

PRINCIPAL INVESTIGATOR – NATIONAL MULTICENTER STUDIES

1995-98 Fournier, TS 17β Estradiol Transdermal System
1996- Lipha/Merck AG, Continuous E_2/LNG TDS – Hot Flashes
1998- Solvay, Continuous E_2/LNG TDS – Endometrium
1999- Solvay, Protocol S1673003. Multicenter Efficacy Study Continuous EP Patch -Vasomotor
2000- Endeavor Pharmaceuticals Estrogen vasomotor symptoms study

HONORS AND AWARDS

1979 Organon Australian Visiting Professorship for 1979
1981 Elected Honorary Member Kansas City Gynecologic Society
1981 Diploma of Medical Achievement, Venezuelan Society of OB/GYN
1997 Ruth Gray Lecture Award, Evanston Hospital, Illinois
1989 The New York Academy of Sciences Certificate of Appreciation
1992 The North American Menopause Society, Honorary Founding President
1993 Honorary Fellowship, TSI Foundation, London, England
1993 Honorary Member, Argentine Association for Study of Climacteric
1995 Awarded Honorary Membership, Pacific Northwest Obstetrical and Gynecological Association
1995 Honorary Membership, FLASCYM, Federation of Latin American Societies of Climacteric and Menopause
1996 Awarded Honorary Membership, Polish Menopause Society, Warsaw, Poland
1996 NAMS Award in recognition of “vision and dedication as Founding Trustee 1989-1996”
1996 Life Honorary Past President, International Menopause Society
1996 Awarded Honorary Membership Chilean Menopause Society
1997 Elected to Academy of Medical Sciences of Kazakhstan
1998 The Best Doctors for Women, Good Housekeeping Magazine, Citation
1998 Czech Medical Association, J.E. Purkyne Medal of Honor and Honorary Life Membership for Career-Long Contributions to Women’s Health, Prague, Czech Republic
1999 North American Menopause Society first “Lifetime Achievement Award” for “Remarkable Vision, Outstanding Dedication, and Exemplary Accomplishments”

1999 Faculty and Staff of University MacDonald Women's Hospital. "In recognition of your outstanding leadership, achievement and commitment, we dedicate the Wulf H Utian OB/GYN Fund for Surgical Excellence"

2000 Appointed Arthur H. Bill Professor Emeritus of Obstetrics and Gynecology, effective January 1, 2000

2000 Award of recognition for service to the College and contributions in the field of menopause, Royal College of Obstetricians and Gynaecologists, Sept. 4, 2000

2001 The 2001 Historical Lectureship, Royal College of Obstetricians and Gynaecologists, London

2003 Appointed Visiting Professor, Department of Obstetrics and Gynaecology, Faculty of Health Sciences, University of Cape Town for 2003

2003 Key to Miami Beach and "every women's heart" for services to women's health, the Mayor of Miami Beach, September 17, 2003

2004 Awarded Honorary Membership to the South African Menopause Society, Port Elizabeth, South Africa

2004 Food and Drug Administration's Commissioner's Special Citation "for the collective outstanding performance of the "Menopause and Hormones Information Campaign" that resulted in the launch of a national public awareness outreach campaign"

2004 Case Western Reserve University School of Medicine, certificate of deep appreciation for superb efforts on Campaign for the Future of Academic Medicine

2006 Lifetime Endowment for Wulf H Utian/Wyeth NAMS Annual Lecture to be presented at NAMS Annual Scientific Meeting

2007-10 Appointed Visiting Professor, Department of Obstetrics and Gynaecology, Faculty of Health Sciences, University of Cape Town.

MICROSURGICAL FALLOPIAN TUBE REPAIR DEMONSTRATIONS

1978 Park Lane Hospital for Women, Johannesburg, South Africa

1979 Flinders University Medical Centre, Adelaide, Australia

1981 Park Lane Hospital for Women, Johannesburg, South Africa

1984 Park Lane Hospital for Women, Johannesburg, South Africa

SEARCH AND EVALUATION COMMITTEES

1984 Appointment Committee, Chair in Obstetrics and Gynecology, University of Turku, Finland

1996 American Medical Writers Association(AMWA), Margaret Mead Journalism Award Committee

1997 AMWA Margaret Mead Journalism Award Committee

1998 AMWA Margaret Mead Journalism Award Committee

1999 AMWA Margaret Mead Journalism Award Committee

OTHER SPECIAL COMMITTEES

1985	Special Study Section Committee for Review of Menopause Research Grants, Department of Health and Human Services (NIH)
1986	Special Site Visitor, NIH Program Project, Harvard Medical School and American Institute for Research, Menopause Project, Boston
1986	Medical College of Virginia, Consultant to Climacteric Study Group, Department of Maternal Child Nursing
1991	Medical Policy Committee, Qualchoice, Cleveland
1992	Consultant on NIMH Proposal and Research, School of Nursing, Georgia State University
1994	Invited member of International Expert Panel on "Detection and Interpretation of Low Bone Mass in the Adult Population" Society for Clinical Densitometry, 3/06/94
1994-6	WHO Scientific Group on Research on the Menopause, Geneva, Switzerland WHO Technical Report Series #866, “Research on the Menopause in the 1990’s”
1997	Perimenopause Committee for Research on Women’s Health for the 21st Century, National Institutes of Health Office on Women’s Health Research
1997	Office on Women’s Health Research, N.I.H., Co-Chairman of Reproduction Committee for Agenda for Women’s Health Research into the Next Century, Washington, DC
1995	Steering Committee for 10th World Congress on the Menopause, 10-14 June 2002, Berlin, Germany
1995	Planning Committee for Workshop on Reproductive Staging, National Institutes of Health, Washington DC, planned for July 2001 (STRAW Conference)
1995	Executive Planning Committee, The Foundation for Better Health Care, North American Women’s Health Care Forum, 2000, 2001, 2002, 2003
2003	FDA Menopausal Hormone Therapy Outreach Education Committee, Washington
2003	WHO/ICUD (International Consultation on Urological Diseases), Committee on female sexual desire, arousal and pain disorders; pathophysiology and treatment
2005	Vice Chair, Israel Health Advancement for Women/Jewish Community Federation of Cleveland Committee (ISHA)
2005	International Advisory Board of the 7th European Congress on Menopause, June 3-7, 2006, Turkey (EMAS)
2006	Planning Committee for the 12th World Congress on the Menopause, Madrid, June 2008.

PHARMACEUTICAL ADVISORY COMMITTEES/CONSULTANCY (PAST)

- CIBA-GEIGY USA
- Organon Steering Committee
- Mead Johnson Laboratories/Bristol Myers Squibb
- Noven Pharmaceuticals
- Upjohn Worldwide Advisory Board on Women's Healthcare
- Merck-Medco Advisory Board on Partners for Women's Health
- Solvay East Coast Advisory Board
- Hoechst Marion Roussel
- Lipha Pharmaceuticals
- Merck KGaA/Solvay International HRT Advisory Board
- Eli Lilly National Scientific Advisory Board
- Solvay Pharmaceuticals
- Johnson & Johnson Leadership Council on Women's Health
- Parke-Davis Advisory Board
- Roche Pharmaceuticals Advisory Board
- Endeavor Pharmaceuticals Advisory Board
- TAP Pharmaceuticals Consultant
- Pfizer Lasofoxifene Global Strategic Advisory Panel
- Berlex Female Health Care National Advisory Board
- Galen/Warner Chilcott Advisory Board
- Aventis Pharmaceuticals Advisory Board
- Nexcura Inc. Medical Editorial Board
- Merck Medical Advisory Board
- Novogyne Advisory Board
- KV Pharmaceuticals
- Theramex Merck, Monaco
- Merrion
- Endoceutics
- Warner Chilcot

PHARMACEUTICAL ADVISORY COMMITTEES/CONSULTANCY (PRESENT)

- Depomed
- Novartis Zoledronic Acid Consultant Advisory Board
- Johnson & Johnson Pharmaceutical Research and Development, Consultant
- Roche/GlaxoSmithKline Boniva OB/GYN Advisory Board
- Pfizer Consultant
- Berlex
- Johnson and Johnson Internal Medicine Therapeutic Advisory Board
- Organon
- Barr/Duramed
- Merck Gynecology Advisory Board
- GSK SERM Global Advisory Board

- ELI Lilly Breast Cancer Risk Reduction Advisory Board
- Novo Nordisk

U.S. CONGRESS ACTIVITIES

03/22/91 Chairman, U.S. Congress Office of Technology Assessment
Workshop, Dirkson Senate Building, Washington, D.C.
"Hormone Replacement Therapy: Policy and Practice"
Report Released 5/19/92 - The Menopause, Hormone Replacement Therapy & Women's Health (U.S. Government Printing Office #052-003-01284-7)
ISBN 0-16-037912-1

05/30/91 A Hearing of the Subcommittee on Housing and Consumer Interests Select Committee on Aging, United States House of Representatives, Rayburn House Office Building
"Women at Midlife: Consumers of Second-Rate Health Care?"
Expert Testimony Assisted in development of HR 1020 Introduced to Congress 2D Session 6/01/92 as "Women's Midlife Health Research Act" by Rep. Marilyn Lloyd

09/07/05 Town Hall Meeting on Menopause, Hart Senate Building. Opening keynote address, and session moderator
"Menopause. What it is and What to Do"

SPECIAL CONSULTANTSHIPS

Play Development Advisor, Plays for Living, New York - "The Birthday Club" - Premiere, New York, February 23, 1995

INVITED FORMAL LECTURES

1967 Medical Association of South Africa, Cape Western Branch.
"Teenage Pregnancy"

1969 South African Society of Obstetrics and Gynaecology, Cape Western Branch, Karl Bremer Hospital
"Pros and Cons of Long-term Oestrogen Admin. to Postmenopause Female"

1970 University of Natal, Durban
"Oestrogens and Menopause"

1970 Medical Association of South Africa, Natal Inland Branch, Pietermaritzburg
"Menopause"

1970 University of Tel Aviv, Tel Hashomer Hospital, Israel
"Oestrogens and Menopause"

1971 South African Society of Physiotherapists Annual Mtg., Cape Town, South Africa
"Role for Physiotherapy in Obstetrics and Gynecology"

1971 University of Cape Town, Postgraduate Refresher Course
"Induction of Ovulation"

1972 Charing Cross Hospital Medical School, London
"Calcium Metabolism, Oestrogens and Osteoporosis"

1972 University of Ohio, Cincinnati School of Medicine
"Estrogens, Oophorectomy and Menopause"
"Induction of Ovulation with Limited Laboratory Facilities"

1972 Medical Association of South Africa, Natal Coastal Branch, Durban
"Management of the Menopause"

1972 University of Witwatersrand, Department of OB/GYN, Johannesburg, South Africa
"Management of the Menopausal Patient"

1973 South African Nursing Association, Cape Western Branch
"Recent Advances in Gynaecological Endocrinology"

1973 South African Medical Congress, Cape Town, South Africa
"Endocrine Aspects of Menopause"

1973 University of Witwatersrand, Dept. of Medicine, Neurology Unit
"Oestrogen, Headache and the Contraceptive Pill"

1973 South African Medical Association, East London Branch
"The Role of Oestrogen in the Treatment of the Menopause"

1974 International Health Foundation, Oestrogens in Menopause ,Geneva
"Definitive Symptoms of Postmenopause - Parabasal Cell Index"

1976 International Congress on Menopause, La Grande Motte, France, June
Chairman Workshop on Climacteric Syndrome

1976 International Symposium on Oestrogens, Bordeaux, France
"Oestrogens and Menopause"

1976 University of Utrecht, Departments of Gynecology and Medicine
"Recent Advances in Oestrogens and Menopause Research"

1977 Cleveland Society of Obstetricians and Gynecologists
"Menopause: The Estrogen Controversy"

1977 Akron Visiting Professor Program, St. Thomas Hospital
"Infertility - Diagnosis and Treatment"

1977 Case Western Reserve University, Current Concepts in Reproductive Endocrinology
"Menopause"

1977 Cleveland Metropolitan General Hospital
"Therapy Oriented Cost/Effect Diagnosis of Secondary Amenorrhea"

1977 International Health Foundation Workshop on Estrogens, Geneva
"Application of Cost-Effectiveness Analysis to Postmenopausal Estrogen Therapy"

1977 University of Athens, Greece and Hellenic Fertility and Sterility Society, Symposium on Menopause

"The Climacteric Syndrome: Rationale for Curative and Preventative Therapy"

1977 University of Cape Town, South Africa
"Current Gynecologic Trends in the United States"
"Cost-Effectiveness Analysis and Estrogen Therapy"

1978 University of Louisville, Kentucky
"Cost-Effectiveness Analysis and Estrogen Therapy"

1978 University of Milwaukee, Milwaukee County General Hospital, Milwaukee, Wisconsin
"Streamlining the Infertility Work-Up"

1978 St. Joseph's Hospital, Milwaukee, Wisconsin
"Menopause"

1978 Diabetes Association of Greater Cleveland
"Menopause and Diabetes"

1978 Akron Visiting Professor Program, St. Thomas Hospital
"Surgical Correction of Infertility"

1978 Youngstown Visiting Professor Program, St. Vincent's Hospital
"Menopause"

1978 Medicine 1978 - Postgraduate Course of Case Western Reserve University
"Glands are Necessary"

1978 Akron Visiting Professor Program, St. Thomas Hospital
"Recent Advances in Menopause Research"

1978 University of Witwatersrand, Johannesburg, South Africa
"Recent Advances in Menopause Research"

1978 2nd International Congress on Menopause, Jerusalem, Israel
Chairman: Workshop on Metabolic Effects
Workshop on Menopause Clinics

1978 Societa Italiana di Ostetrica e Ginecologia and International Health Foundation, International Symposium on Menopause, Rome, Italy
"Vantaggi e limiti della terapia estrogenica"

1978 Central New York Academy of Medicine, Utica, New York
"Estrogen Therapy in Perspective"

1978 Youngstown Visiting Professor Program, St. Elizabeth's Hospital
"Management of Menopause"

1979 American Society of Abdominal Surgeons, Tampa, Florida
"Use and Misuse of Estrogens"

1979 Akron Visiting Professor Program, St. Thomas Hospital, Akron, OH
"Hirsutism"

1979 University of Southern California, Los Angeles, Grand Rounds
"Menopause"

1979 Royal Australian College of General Practitioners (Victoria Branch) and University of Melbourne
"Clinical Presentations and Therapy of Menopause"

1979 University of Queensland, Brisbane, Department of Gynaecology
"Current Work on Tubal Microsurgery"

1979 Royal Women's Hospital, Brisbane
"Amenorrhea: Investigation and Treatment"

1979 Royal Australian College of General Practitioners (Sydney Branch), Prince of Wales Hospital, Sydney
"Gynecology and the General Practitioner"

1979 School of Obstetrics and Gynecology, Royal Hospital for Women, University of New South Wales, Postgraduate Symposium on Menopause
"Organ Changes During Climacteric"

1979 University of Sydney, St. George's Hospital Reunion Week
"Endocrinology of Menopause"

1979 Flinders University School of Medicine, Adelaide, Visiting Professorship Lectures
"Amenorrhea"
"Current Status of Postmenopausal Estrogen Therapy"
"Abnormal Uterine Bleeding"
"Hirsutism"
"Current Status of Fallopian Tube Surgery"
"Hormonal Management Around Menopause"

1979 University of Adelaide, Queen Elizabeth Hospital
"Cost-Effective Therapy-Oriented Diagnosis of Amenorrhea"

1979 Waterbury Hospital Grand Rounds, Connecticut (Yale University affiliate)
"Recent Surgical Advance in the Treatment of Infertility"

1979 Seminar on Current Views on Estriol, Oss, Holland
"The Place of Estriol Therapy After Menopause"

1979 Northern Ohio Pediatric Society, Cleveland
"Teenage Pregnancy"

1979 Mt. St. Mary's Hospital of Niagara Falls and State University of New York at Buffalo
"Estrogen"

1979 Cleveland Society of Obstetricians and Gynecologists
"Endocrinology of the Menopause"

1980 American Society of Abdominal Surgeons, Postgraduate Course, Chicago, IL
"Rational Hormonal Therapy"
"Surgical Treatment for Sterility"

1980 University of Missouri, Kansas City, Postgraduate Course
"Update in Ob/Gyn - Macro vs. Microsurgery: New Frontiers for Gynecologists"

1980 St. Thomas Hospital, Akron, Ohio - Visiting Professor Program
"The Female Climacteric"

1980 Medicine, Postgraduate Course, Case Western Reserve University
"Current Dilemma in the Use of Estrogen in the Menopausal Period"

1980 Fairview General Hospital, Cleveland, Visiting Professor Program

"Applications of Cost-Effectiveness Analysis to Estrogens After Menopause"

1980 St. Luke’s Hospital, Cleveland
"Modern Trends in Tubal Surgery"

1980 West Virginia School of Medicine, Wheeling Division
"Evaluation of Infertility"
"Recent Advances in Tubal Surgery"

1980 College of Medicine and Dentistry of New Jersey, Rutgers Medical School, 2nd Annual Dorothy Marvin Lecture
"The Treatment of Menopause"

1980 The Mt. Sinai Hospital of Cleveland, 12th Annual Shirley and Maurice Saltzman Lecture
"The Endocrine Background to the Clinical Management of Menopause"

1981 University of the Witwatersrand, Johannesburg
"Aspects Relating to the Menopause"

1981 Barberton Citizen's Hospital, OH
"Controversy in Estrogen Therapy"

1981 Northeastern Ohio University College of Medicine, Visiting Professor, St. Elizabeth's Hospital, Youngstown, Ohio
"Menopause - Normal Physiology or Endocrinopathy"

1981 Youngstown Osteopathic Hospital Association, Cafaro Memorial Hospital, Youngstown, OH
"Estrogen Therapy"

1981 Brandeis University Women's Committee, Cleveland Branch
"Life Cycle of a Woman"

1981 Parma Community Hospital and Case Western Reserve University
"Controversies in Estrogen Therapy"

1981 Kansas City Gynecologic Society, Kansas City
"Microtubal Surgery - A Philosophy or a Technique"

1981 Lakewood Hospital Medical Grand Rounds, Lakewood, OH
"The Consequences of Ovarian Aging"

1981 University of Arkansas for Medical Sciences, Postgraduate Symposium
"Menopause and its Management"
"The Menopause Syndrome - Symptom Formation"
"Choice of Hormone, Indications, Monitoring"

1981 Marymount Hospital Grand Rounds, Cleveland
"Macro vs. Microsurgery in Infertility"

1981 Family Practice Center of Akron, Day of Education
"Problems of the Female Menopause"

1981 St. Vincent’s Charity Hospital, Cleveland
"Estrogens and Osteoporosis"

1981 University of Utrecht, The Netherlands
"Advances in Infertility Microsurgery"

1981 Mt. Sinai Medical Center, Cleveland, First Workshop in Infertility Surgery
"Principles of Conservative Pelvic Surgery"

"Prophylaxis of Pelvic Adhesion Formation"
"Reversal of Sterilization in the Female"

1981 Desert Springs Hospital, Third Annual Medical Symposium on Endocrinology and Metabolic Disease, Las Vegas, NV
"Menopause"
"Amenorrhea"
"Microsurgical Techniques in the Treatment of Infertility"

1981 Licking Memorial Hospital, Newark, OH
"Estrogens and Osteoporosis"

1981 Albany Medical College and New York State Department of Health, Albany, New York, Symposium on Controversies in the Management of the Menopause
“The Menopause, A Physiological or Pathological Phenomenon?"
"Patient Management: What's Appropriate?"

1981 Evansville, Indiana, St. Mary's Medical Center
"Menopause, Osteoporosis and Estrogens"

1981 Case Western Reserve University, University Hospitals, Family Practice Grand Rounds
"Osteoporosis"

1981 Suburban Hospital, Cleveland, Grand Rounds
"Current Status of Menopause and HRT"

1982 VIII Venezuelan Congress of Obstetrics and Gynecology, Caracas, Venezuela, Special Invitation Keynote Lecturer
"Recent Advances in Understanding and Treatment of Menopause"

1982 Northern Transvaal Branch of SASOG and University of Pretoria, South Africa
"Estrogens and the Menopause"

1982 SASOG Southern Transvaal Branch, College of Medicine, Johannesburg, South Africa
"Advances in Estrogen Therapy"

1982 SASOG Cape Province Branch, University of Cape Town Postgraduate Medical Center, Cape Town, South Africa
"Effect of Progestins on Estrogen Therapy"
"Recent Progress in Infertility Microsurgery"

1982 Addington Hospital, Durban, Grand Rounds, Durban, South Africa
"Advances in Gynecology”
“Estrogens and the Menopause”
“Recent Developments in Infertility Surgery"

1982 University of Natal and King Edward VIII Hospital, Durban, South Africa
"Recent Advances in Hormone Replacement Therapy after Menopause"

1982 Sharon General Hospital, Sharon, PA
"Estrogen Therapy after Menopause"

1982 American Association of University Women, Painesville, OH
"Research in Female Reproductive Endocrinology"

1982 Michael Reese Hospital and Pritzker Medical School, Chicago
"Menopause as an Endocrinopathy"
"Recent Surgical Advances in Treatment of Infertility"

1982 Youngstown Obstetrical & Gynecologic Society, Squaw Creek, Youngstown, OH
"Recent Advances in Infertility Surgery"

1983 Wayne State University School of Medicine, Detroit, MI, Visiting Professor
"Recent Advances in Infertility Surgery"
"Premenstrual Syndrome - Current Perspective"

1983 Cleveland Metropolitan General Hospital, OB/GYN Grand Rounds
"Practical Treatment of Menopause"

1983 Mt. Sinai Hospital of Hartford, Connecticut, Visiting Professor
"Is Menopause Physiological or Pathological?"

1983 Cleveland Society of Obstetricians and Gynecologists
"The Logistics of In-Vitro Fertilization"

1983 Bloomington Hospital and University of Indiana, Bloomington, IN
"Estrogens, Menopause and Osteoporosis"

1983 Planned Parenthood of Great Lakes Regional Meeting, Cleveland
"In Vitro Fertilization"

1983 11th World Congress on Fertility and Sterility, Dublin, Ireland
"Prevention of Postoperative Adhesions"

1983 Jan Palfijn European Congress on Menopause, Antwerp, Belgium
"Problems of the Untreated Menopause"

1983 St. Michael Hospital, Milwaukee, WI
"Estrogen Replacement Therapy - Pros and Cons"

1983 Fairview General Hospital, Cleveland, OH
"PMS - Diagnosis and Treatment"

1984 University of Stellenbosch, Cape, South Africa
"Logistics in In Vitro Fertilization"

1984 University of Cape Town, Cape, South Africa
"In Vitro Fertilization"

1984 Bloomington Hospital, Bloomington, IN, Community Education Program
"Menopause - A Woman's Transition"
Visiting Professor Conference
"Menopause"

1984 Massillon Community Hospital, Massillon, OH
"Estrogen Replacement Therapy"

1984 First Annual MacDonald House Conference on Reproductive Endocrinology, Cleveland, OH, Hilton South Hotel
"The Fate of the Untreated Climacteric"
"In Vitro Fertilization"

1984 Special Invited Delegation of American Fertility Society to Peoples Republic of China Hosted by China Association for Science and Technology (CAST), May 26 through June 14, 1984

1984 Capital Hospital, Beijing

"Menopause - Meaning, Treatment and Menopause Clinics"

1984 Tianjing Central Hospital, Tianjing
"Menopause"
"In Vitro Fertilization"

1984 Shanghai Obstetrical-Gynecologic Hospital of #1 Medical School, Shanghai
"Menopause Clinics and Treatment"
“In Vitro Fertilization"

1984 First Hospital of Kuenming, Kuenming
"Menopause - Current Status"

1984 #2 Peoples Hospital, Guangzhou (Canton)
"Menopause and Osteoporosis"

1984 Medical School of Guangzhou (Canton)
"Microsurgery"

1984 Youngstown Hospital Grand Rounds, Youngstown, OH
"In Vitro Fertilization"

1984 University Hospitals of Cleveland, Endocrine Grand Rounds
"In Vitro Fertilization"

1984 University of Toledo, Toledo, OH
"Menopause in Modern Perspective"

1984 Fairview General Hospital, Cleveland, OH, Seminar on New Approaches to Geriatric Care
"Prevention of Osteoporosis"

1984 Akron Obstetrical and Gynecologic Society, Akron, OH
"Microsurgery in an Expanding World of In Vitro Fertilization"

1984 Cleveland Metropolitan General Hospital, Grand Rounds
"Premature Ovarian Failure"

1984 Alpha Omega Dental Fraternity, Annual Meeting, Cleveland, OH
"In Vitro Fertilization"

1985 Mt. Sinai Medical Center of Cleveland
"Update on IVF"

1985 University of Bologna, Bologna, Italy
"Therapeutic Approach to Climacteric and Postmenopause"

1985 Hospital Sant'Anna and Gruppo Piementese e Valdostana di Ostetrica e ginecologia, Turin, Italy
"Detection & Prevention of Osteoporosis: A Gynecologic Responsibility"

1985 The University of Kansas, Department of OB/GYN at Wesley Medical Center, Wichita, KS
"Natural History of Female Menopause"
"In Vitro Fertilization and its Spin-Offs"

1985 Memphis Obstetrical and Gynecological Society, Memphis, TN
"Recent Advances in Infertility Surgery"

1985 The University of Tennessee, Memphis, TN
"Menopause and Estrogen Therapy"

1986 21st Annual Postgraduate Seminar, Cleveland Academy of Osteopathic Medicine, Cleveland, OH
"Recent Advances in Estrogen Therapy"

1986 Wright State University, Dayton, OH, Postgraduate Course on Osteopenia
"Postmenopausal Osteoporosis"

1986 B'Nai Jeshurun Temple on the Heights, Cleveland, OH
"Social and Moral Dilemmas of Modern Infertility Treatments"

1986 The Winterlude Update in Reproductive Endocrinology, University of Ottawa School of Medicine, Ottawa, Canada
"The Climacteric"

1986 The Cleveland Clinic Foundation, Endocrinology Grand Rounds
"An Approach to Infertility"

1986 Lake County Bar Association Family Law Program, Mentor, OH
"The Meaning of Menopause"

1986 Missouri State Medical Assoc. 128th Annual Convention, St. Louis
"Postmenopause - The Place of Estrogen and Progesterone"

1986 Center for Biomedical Ethics, Symposium on the Business of Health Care, Bond Court, Cleveland
"The Business of Reproduction"

1986 Medicine 1986 Postgraduate Course, Case Western Reserve University
"The Status of Estrogen Therapy"

1986 New and Evolving Concepts on the Menopause, Cancun, Mexico, CIBA Foundation Symposium (Co-Chairman)
"Overview - Defining and Understanding Menopause"
"The Endometrial Effects of Transdermal Estrogen"

1986 Flower Hospital, Toledo, OH, Combined Grand Rounds
"Estrogens, Menopause and Osteoporosis"

1986 Stark County Medical Society, Keynote Speaker, Canton, OH
"Recent Advances in Estrogen Therapy"

1986 Israel Society of Gynecologic Endocrinology, Tel Aviv, Israel
"Modern Management of the Menopause"

1986 CIBA-GEIGY Estraderm Launch, San Francisco
"The Climacteric Syndrome"

1986 Western Pennsylvania Osteopathic Association 27th Annual Meeting, West Middlesex, PA
"Contemporary Management of the Menopause"

1986 Akron OB/GYN Society AGM Dinner Lecture, Akron, OH
"Contemporary Management of the Menopause"

1986 Current Perspectives in the Management of the Menopausal and Postmenopausal Patient, Banff, Alberta, Canada
"Overview on the Menopause"
“TTS Estradiol Overall Safety Profile
“Summation”

1986 Brentwood Hospital, Warrensville Heights, OH
"Hormonal Replacement Therapy in Postmenopausal Women"

1986 The College of Wooster, Wooster, OH, Women's Health Day
"Your Middle Years"

1986 University of New Mexico, Albuquerque, New Mexico
"A Present Overview of Estrogen Replacement Therapy"

1986 University of California at Irvine, Departmental Grand Rounds
"Current Insights Into Menopause"

1986 TRW World Headquarters, Cleveland, OH, Wellness Program
"Osteoporosis and Menopause"

1987 Michael Reese Hospital and Pritzker Medical School, Chicago, IL
"Menopause - Perspective and Treatment"

1987 The 23rd Ruth Gray Lecture, Evanston Hospital, IL
"Menopause - Physiology and Medical Management"

1987 University of Chicago, Gyn Departmental Grand Rounds, IL
"Hormone Replacement Therapy"

1987 St. Mary's of Nazareth Hospital, Chicago, IL
"Menopause"

1987 Cleveland Clinic Foundation, Endocrine Grand Rounds, Cleveland
"Understanding the Menopause"

1987 St. Elizabeth Hospital, Youngstown, OH, Family Medicine Grand Rounds
"Hormone Replacement Therapy in the Postmenopausal Woman"

1987 Mt. Sinai Medical Center of Cleveland, Department of Anesthesia Grand Rounds
"Infertility Update"

1987 St. Thomas, U.S. Virgin Islands, Current Perspectives in the Management of the Postmenopausal Patient
"Overview on Menopause"
"Safety and Efficacy of TTS Estradiol"

1987 Cleveland Society of Obstetricians and Gynecologists
"Transdermal Estrogen Therapy"

1987 TRW World Headquarters, Beachwood, OH, Health Lecture Series
"Female Hormones"

1987 Sutter Hospital Symposium, Napa, CA, The Menopausal Patient
"HRT - The Risk/Benefit Ratio in Perspective"

1987 Timkin Mercy Medical Center, Canton, OH
"Estrogen Therapy in Menopause"

1987 26th Annual OB/GYN Spring Symposium, University of Oklahoma College of Medicine and ACOG District VII, Oklahoma City, OK
"Controversies in the Management of Estrogen and Progesterone Therapy"

1987 Mt. Sinai Medical Center New York, OB/GYN Grand Rounds, NYC, NY
"Menopause and Hormone Additive Therapy"

1987 Long Island Family Practice Association, Freeport, RI
"Estrogen Therapy"

1987 North Carolina Academy of Family Physicians, "Mid Summer Family Practice Digest", Keynote Speaker, Myrtle Beach, SC
"Estrogen Replacement Therapy"

1987 Lake Tahoe, NV, Current Perspectives in the Management of the Postmenopausal Patient
"Overview on Menopause"
"Summation"

1987 St. Joseph Hospital Symposium "Controversial Topics of Medicine", Elyria, OH
"Osteoporosis and Estrogen Supplementation"

1987 Universities of Modena and Pavia Schools of Medicine Pain and Reproduction Symposium, Modena, Italy
"Postmenopausal Pain Syndromes"

1987 Lega Per L'osteoporosi Piemonte, Convention on Osteoporosis, Turin, Italy
“Experience with Transdermal Estradiol in Treatment of the Climacteric"

1987 St. John's Mercy Medical Center, St. Louis, MO, Hospital Grand Rounds
"The Menopause - Current Trends in Management"
"New Horizons in Infertility"

1987 GE Lighting Institute World Headquarters, Nela Park, OH
"Menopause"

1987 San Antonio OB/GYN Society Quarterly Meeting, San Antonio, TX
"Hormone Therapy into the 21st Century"

1987 Wilford Hall Air Force Medical Center, San Antonio, Grand Rounds
"Menopause"

1987 Brooke Army Medical Center, Fort Sam Houston, TX, Grand Rounds
"HRT in Perspective"

1987 University of Texas at San Antonio, Health Science Center, OB/GYN Grand Rounds
"Climacteric as an Endocrinopathy"

1987 Niagara, Ontario, Canada Medical Group (CIBA Foundation)
"Recent Advances in Estrogen Therapy"

1987 Toronto, Canada Medical Group (CIBA Foundation)
"Recent Advances in Estrogen Therapy"

1987 Jornada Brasileira de Climaterio Da SOBRAC (1st Brazilian Menopause Conference) Sao Paulo, Brazil
"The Untreated Menopause"
"Clinical Evaluation"
"Non-Hormonal Therapy"
"Hormone Replacement"
"Recent Advances in Hormone Therapy" (Keynote Lecture)

1988 Clinical Update in Obstetrics and Gynecology, Albany Medical College Postgraduate Course, Stratton Mountain, Vermont
"Menopause"
"Getting and Keeping Patients on HRT"

1988 International Health Foundation, Lausanne, Switzerland

"Obstetrical Implications of Pregnancy After Age 30"

1988 Western Reserve Care System Clinical Update in OB/GYN, Vienna, OH
"Oral Contraceptives in the Perimenopausal Woman"
"Transdermal and Oral Estrogen Therapy"

1988 University of Louisville OB/GYN Grand Rounds, Kentucky
"Surrogate IVF Pregnancy"

1988 Current Perspective in Menopause, Banff Springs, Canada
"Menopause in Perspective"

1988 Johnson & Johnson Scientific Advisory Committee, New Brunswick, NJ
"Menopause in Perspective"

1988 NIH/AFS Menopause Meeting, NIH, Bethesda, MD
"Menopause, Hormone Replacement Therapy and Quality of Life"

1988 WHO, Geneva, Switzerland, Menopause Meeting
"From Premenopause to Climacteric"

1988 Menopause Postgraduate Course, Hilton Inn, Cleveland, OH
"Climacteric in Perspective"

6/88 OB/GYN Group, Milwaukee, WI
"What is the Climacteric?"

6/88 Southside OB/GYN Group, Chicago, IL
"Recent Advances in HRT"

6/88 University of Minnesota
"Pathophysiology of Menopause"

6/88 Minnesota Osteoporosis Society, Minneapolis, MN
"Recent Perspectives of Climacteric and HRT"

6/88 OB/GYN Group, Atlanta, GA
"Menopause and HRT"

7/88 Tampa Internal Medicine Group, Tampa, FL
"Menopause and HRT"

7/88 Miami OB/GYN Group, Miami, FL
"Alternate Forms of HRT"

7/88 Cuban Medical Society Bi-Annual Convention, Miami, FL
"What's New in Gynecology - Menopause"

9/88 Emory University, Atlanta, Georgia, Conference - Menopause: A Health Care Challenge
"Fate of the Untreated Menopause"

11/88 Contemporary Management of Menopause, Cleveland Clinic
"Estrogen Replacement Therapy"

11/88 Community Dialogue in Biomedical Ethics, Center for Biomedical Ethics, Case Western Reserve University
"Reproductive Technologies and Who is Using Them"

11/88 Italian Menopause Society 3rd Congress, Bologna, Italy
"The Climacteric Syndrome"
"Tolerability of Transdermal Estradiol"

11/88 Netherlands Society for Study of Climacteric, Meeting on Climacteric in Perspective, Ede, Holland
"The Untreated Menopause"

11/88 International Conference on Reproductive Medicine in the Year 2000, University of Alcala de Henares, Madrid, Spain
"Hormone Replacement Therapy in the Future"
"The Fate of the Neglected Climacteric and the Societal Impact by the Year 2000"

1/89 Cleveland Clinic Foundation, Department of Internal Medicine Grand Rounds, Cleveland, OH
"Some Issues of Hormone Additive Therapy"

1/89 University of Maryland, Davidge Hall, OB/GYN Grand Rounds
"Recent Advances in Menopause Management"
"IVF - Surrogacy - Medical and Ethical Issues"

2/89 University of Cape Town, Cape Town, South Africa, Grand Rounds
"Current Thoughts on Menopause"

4/89 PACE Meeting, Palm Desert Marriott, Palm Springs, CA
"Estrogen Replacement Therapy: Long-Term Benefits and Risks"

5/89 Regional Symposium on Menopause, Loyola University Stritch School of Medicine, Oakbrook, MI
"The Fate of the Untreated Menopause"

5/89 Current Perspectives on Management of Menopause, Hilton Head, SC
"Overview on Menopause"

5/89 Cleveland Metropolitan General Hospital OB/GYN Grand Rounds
"HRT - Risk and Benefit"

6/89 Third Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Estoril, Portugal
"Risk-Benefit Analysis: Quality of Life Enhancement"

7/89 Novo Advisory Group, Copenhagen, Denmark
"The Peri and Post-menopause"

9/89 First International Course on Climacteric, Buenos Aires, Argentina
"The Climacteric"
"Treatment of Osteoporosis"
"Risk and Benefit of HRT"
"Selection and Work-Up of Patients"
"Establishing a Menopause Clinic"

10/89 Board of Trustees, Lakewood Hosp. Ann. Retreat, Lakewood, OH
"Trends in OB/GYN and Opportunities for the Future"

10/89 Symposium on Vaginal Dryness: Overview and Update, Stanhope Hotel, New York
"Hormone Replacement Therapy"

11/89 Symposium: Perspective in Treatment of Menopause, University of Nevada, Las Vegas, NV
"Hormone Replacement in the Menopausal Patient"

1/90 Cleveland OB/GYN Society, Hilton Hotel South, Cleveland
"Menopause, Hormones and Heart Disease"

1/90	Evansville Public Forum, Deaconess Hospital, Evansville, IN "Cold Facts on Hot Flashes"
1/90	Hospital-wide Grand Rounds, Deaconess Hospital, Evansville, IN "Current Postmenopausal HRT"
2/2/90	Eastern Regional Conference on Long-Term Effects of Estrogen Deprivation, Marco Island, FL, Meeting Chairman "Introduction and Overview" "HRT Regimens and Risks"
4/90	Hadassah Women's Organization Keynote Lecture, Nico Malan Opera Theatre, Cape Town, South Africa "Menopause"
5/90	University Hospitals of Cleveland, Women's Auxiliary Annual Gen. Mtg. "Recent Advances in Gynecology"
5/90	47th Annual Scientific Meeting American Geriatrics Society, Atlanta, GA "Risk/Benefit of HRT"
5/90	University Hospitals of Cleveland, Endocrine Grand Rounds "Limits and Possibilities of HRT after Menopause"
7/90	Atlanta Medical Internist Group, Ritz Carlton, Atlanta, GA "New HRT Cycling Alternatives"
7/90	Los Angeles OB/GYN Group, Bistro Gardens, Beverly Hills, Los Angeles, CA "New Trends in HRT"
8/90	Menopause Postgraduate Course, Univ. of Maryland, Baltimore, MD "Overview of Safety of Estrogen Replacement"
9/90	University of Colorado, Postgraduate Lecture Series, Denver, CO "Menopause in Perspective"
9/90	Spanish Society of Gynecology Symposium on Menopause, Hotel de la Gavino, S'Agara, Costa Brava, Spain "Risk-Benefit of Hormone Replacement Therapy"
10/90	Cleveland Clinic Foundation Course on Treating Sexual Problems, Cleveland Clinic, Cleveland, OH "Menopause and Sexuality"
10/90	Canyon Ranch, Tucson, AZ "Managing Menopause"
11/90	St. Margaret's Hospital for Women/Tufts University, Boston, MA "The Long-Term Consequences of Estrogen Deprivation"
11/90	Mercy General Hospital, Sacramento, CA, Women's Health Program "Managing Your Menopause"
12/90	Fairmount Temple Sisterhood, Cleveland, OH "Rx for Sexual Longevity"
12/90	Temple Emanu El Sisterhood, Cleveland, OH "Advances in Women's Health Care"
12/90	Veterans Administration Hospital, Topics in Geriatric Medicine Program, VA Hospital, Cleveland "Current Issues in Menopause and HRT"

1/91 AMICI Medicine, Case Western Reserve Univ., Cleveland, OH
"Help for Infertility"

1/91 University of California, Los Angeles (UCLA) Department of Family Medicine Course on Office Gynecology for the Primary Care Physician, Los Angeles, CA
"Current Perspectives in the Management of the Postmenopausal Patient"

2/91 Operation Hunger sponsored symposium on Menopause, Keynote lecture Transvaal Automobile Club, Johannesburg, South Africa
"Menopause"

4/91 American Association of University Women, Euclid, OH
"Women's Health Issues"

4/91 CIBA-GEIGY Australian Visiting Professor Professional Lecture Series
"Current Concepts on Hormone Replacement Therapy"

4/91 Regent Hotel, Melbourne

4/91 Sheraton Brisbane Hotel, Brisbane

5/91 Regent Hotel, Sydney

5/91 Jefferson Medical College, Department of OB/GYN CME Course, Atlantic City, NJ
"Hormone Replacement Therapy"

6/91 Society of Gynecology and Obstetrics of Monterrey, and College of Medicine Cirujanos de Nuero Leon 15th Annual Meeting, Mexico
"Menopause and Osteoporosis"
"Estrogen Therapy and Cardiovascular Disease"

10/91 Wayne State University Visiting Professor, Hutzel Hospital, Detroit, MI Department of OB/GYN
"HRT - Cancer and Coronary Heart Disease"

11/91 ACOG District V Annual District Meeting, Louisville, KY
"Hormone Replacement Therapy in Menopause"

11/91 Women’s Health Seminar on Taking Control of Menopause, Stouffer’s Tower City Center, Cleveland, OH
"Taking the Mystery out of Menopause - Understanding Hormone Replacement Therapy"

11/91 We're Getting Older, We're Getting Better Symposium, Menorah Park, Cleveland, OH
"Risks and Benefits of HRT after Menopause"

1/92 Westwood Country Club, Women's Health Program, Westlake, OH
"Taking The Mystery Out of Menopause"

2/92 Food and Drug Administration Maternal Health Drugs Advisory Committee, Rockville, MD
"Rationale for Undertaking HRT Research in Women With Previous Breast Cancer"

3/92 Royal Melbourne Hospital/University Hospitals 1992 Reunion Symposium, Royal Melbourne Hospital, Australia
"Preventive Aspects and Costs of Hormone Replacement Therapy at the Menopause"

3/92 Royal Melbourne Women's Hospital, Melbourne, Australia
"Breast Cancer and HRT"

4/92 Seoul National University Hospital, Special Lecture, Seoul, Korea
"Breast Cancer and HRT"

4/92 Inaugural Lecture of 1st Meeting of Korean Menopause Society, Seoul, Korea
"HRT - Perceptions and Realities of Long-Term Use"

4/92 Ewha Women's University Hospital, Special Lecture, Seoul, Korea
"Menopause and Clinical Practice"

4/92 American College of Obstetricians and Gynecologists, Breakfast Seminar (Dowden/CIBA-GEIGY), Mirage Hotel, Las Vegas, NV
"Developing a Menopause Component in Your OB/GYN Practice"

6/92 Seventh Annual Feld Memorial Lecture, Sinai of Detroit and Wayne State University, Detroit, MI
"Current Trends in Menopause Management"

6/92 Sinai of Detroit, Grand Rounds, Detroit, MI
"HRT, The Breast Cancer Issue and Research Needs"

10/92 Harvard Medical School/Massachusetts Gen. Hosp., Boston, MA
"Menopause, HRT and Breast Cancer"

10/92 Menorah Park Center for the Aging, Beachwood, OH
“Is Estrogen for Me?"

11/92 Japan Menopause Society Annual Meeting, Tokyo, Japan
Keynote Lecture - "Menopause, Quality of Life, HRT - The Present and Future"

10/92 Yale University, New Haven, CT
"Evaluating Breast Cancer Risk in Postmenopausal HRT"

11/92 Resident Report Program, AFS Annual Meeting, New Orleans, LA
"Hormone Replacement Therapy"

11/92 University Hospitals Consumer Program - A Women's Heart, Landerhaven, Cleveland, OH
"Menopause, Estrogen and Heart Disease"

11/92 Case Western Reserve Univ. Medicine Fall 1992, Independence, OH
"Postmenopausal Hormone Replacement Therapy"

11/92 Dept. of Reproductive Biology, CWRU CME Course, Postmenopausal Osteoporosis, Cleveland, OH
"Estrogen Prevention of Osteoporosis - Risks, Benefits, Options"

11/92 CIBA-GEIGY Japan Head Office, Takarazuka, Japan
"Issues in HRT"

11/92 Japan Menopause Society Symposium, Tokyo, Japan
"Practitioners of HRT - Risk and Benefit in Perspective"

11/92 Academic Medical Group Round Table, Hotel Okura, Tokyo, Japan
"Menopause Clinics - The Cleveland Example"

12/92 Bronx OB/GYN Society Annual Dinner Meeting, Bronx, NY
"Development of a Menopause Program"

12/92 Albert Einstein College of Medicine, Bronx, NY
"HRT and Breast Cancer"

1/93 Department of Anatomy Seminar, Case Western Reserve University, Cleveland, OH
"Trends in Menopause Research"

1/93 Women Aware, Cape Sun Hotel, Cape Town, South Africa
"Managing Your Menopause"

2/93 Temple University, Department of OB/GYN Grand Rounds, Philadelphia, PA
"Menopause in Perspective"
"HRT and Breast Cancer"

2/93 Brotman Med Center 31st Annual Scientific Seminar, Beverly Hills, CA
"Hormone Replacement Therapy – Risk/Benefit and Quality of Life"

3/93 Gyn Grand Rounds, Cleveland Clinic, Cleveland, OH
"Breast Cancer, Menopause and Hormone Replacement Therapy"

3/93 Cleveland OB/GYN Society, Cleveland, OH
"Update on Current Issues in Hormone Replacement Therapy"

3/93 American College of General Practitioners, 30th Annual Convention, Orlando, FL
"Physiology of Menopause"

3/93 National Institute on Aging, Workshop on Directions for Menopause Research, Bethesda, MD
"Ovarian-Function, Therapy-Oriented Definition of Menopause"

4/93 Chile Society for Study of Menopause, Santiago, Chile
"HRT and Breast Cancer"
"Alternate Routes of Administration and Indications"

4/93 Argentine Association for Study of Climacteric, Buenos Aires, Argentina
"HRT and Cardiovascular Disease"
"Duration of HRT and Recommendations for Practice"
"Categorization of Menopause"

4/93 Solon Women's Club, Solon, OH
"Understanding Menopause and ERT"

5/93 University of Ferrara, International Meeting on Bone Density, Ferrara, Italy "Menopause Centers - Concept, and Role in Society"

5/93 North American Menopause Society Postgraduate Course, The Copley Plaza Hotel, Boston, MA
"Estrogens and Breast Cancer"

6/93 United Kingdom Lecture Tour: "Menopause and HRT in Perspective"
1. Dewsbury District Hospital, West Yorkshire, England
2. Victoria Hospital, Blackpool, Lancashire
3. University of Keele, Stoke on Trent, Staffordshire
4. Conquest Hospital, Hastings, East Sussex
5. Ticehurst Hospital, East Sussex

6/93 Royal College of Obstetricians & Gynaecologists, Regents Park, London
Course: Advances in Treatment of the Menopause
"Hormone Replacement Therapy and Breast Cancer - Is There a Relationship"

7/93 International College of Surgeons US Section 55th Annual Meeting, Seattle, WA, Invited Opening Keynote Address:
"HRT in Women in the 21st Century - Maximum Health Benefit with Diminishment of Risks and Surgery"

7/93 International College of Surgeons, US Section, Invited lecture
"Taking Control of Menopause"

10/93 District V Annual Meeting, ACOG, Cincinnati, OH
"Management of the Perimenopausal Years"

11/93 Junior League Sustainers of Cleveland, Cleveland, OH
"HRT"

1/94 University of Florida Grand Rounds, Gainesville, FL
"Menopause, HRT and Breast Cancer"

12/94 American College of OB/GYN, Plaza Hotel, New York, National Press Conference
"The Long-Term Effects of Estrogen Deficiency"

1/95 Canyon Ranch, Tucson, AZ
Guest Lecture, “Menopause in Modern Perspective”
Staff Lecture, “Current Trends in Menopause Management”

1/95 Shoreby Club, Cleveland, OH, Speaker of the Month
"Challenges and Promises in Delivering Women's Health Care in 1995 and Beyond"

2/95 International Society of Gynecologic Endocrinology, Madonna di Campiglio, Italy
“HRT in Climacteric Women”
“Menopause - The Global Perspective”

4/95 Women Aware Charity Lecture, Cape Town, South Africa
"Menopause, HRT and Sexuality"

4/95 OB/GYN Group, Cape Town, South Africa
"Current Trends in Menopause Management"

4/95 Jewish Women’s Benevolent Society, Johannesburg, South Africa
"Menopause and Sexuality"

4/95 Pretoria Physicians Practice Group, Pretoria, South Africa
"Current Trends in HRT"

5/95 Formosan Medical Association, Keynote Opening Lecture, Tainan, Taiwan
"Menopause In Current Perspective"

5/95 Mt. Sinai Medical Center of Cleveland, Cleveland, OH
"Current Trends in Menopause Management"

6/95 Osteoporosis Update, Cleveland Clinic, Marriott Society Hotel, Cleveland, OH
"Treatment of Osteoporosis, Menopausal and Postmenopausal Uses of Estrogen"

6/95 Endocrine Society 77th Annual Meeting, Nurses Society, Washington, DC
"Menopause and Hormone Replacement" (Abstract N2-3, P. 6)

6/95 Contemporary Forums: Advances in Health Care for Women Over 40, New Orleans, LA
"HRT and Breast Cancer - What We Have Learned"

6/95 Pacific Northwest Obstetrical and Gynecological Association Annual Meeting, Kelowna, British Columbia, Canada, Keynote Speaker:
"Hormone Replacement Therapy and Breast Cancer"
"Menopause and the Modern Perspective"
"Primary Preventive Health Care After Menopause"

7/95 27th British Congress of Obstetrics and Gynecology, Dublin, Ireland, Invited Keynote Lecture:
"Direction, Misdirection and Misconception in Menopause Research and Management"

7/95 CIBA/GENEVA Ann. Staff Convention, Dolphin Hotel, Orlando, FL
"Risk/Benefit of HRT"

9/95 NAMS Colloquium on Balancing the Equation of Long-Term HRT, San Francisco, CA
"Clarifying the Role of Long-Term HRT in the Context of Primary Preventive Health Care for Women"

9/95 1995 Annual Scientific Meeting of Royal Australian College of Obstetricians and Gynaecologists, Perth, Western Australia, Invited Keynote Speaker:
"Women's Health Through Menopause: A Modern Perspective"
"HRT and Cancer"

9/95 Australian Society for Psychosomatic Obstetrics and Gynecology, 22nd Annual Congress, Margaret River Hotel, Western Australia
"The Comprehensive Care of Peri and Postmenopausal Women"

10/95 FLACSYN, First Meeting of Latin American Menopause Society, Buenos Aires, Argentina
"Women's Health Through Menopause - A Modern Perspective"
"Dealing with Practical Aspects of HRT"

11/95 Rheumatology Grand Rounds, University Hospitals of Cleveland
"Current Controversies in Postmenopausal HRT"

12/95 Israel Menopause Society, Tel Aviv, Israel, Keynote Lecturer:
"The Challenge of Increased Longevity by Primary Preventive Health Care After Menopause"

2/96 Fairmount Temple Sisterhood, Beachwood, OH
"Staying Well at All Ages"

3/96 University of Florida College of Medicine, Orlando, FL
21st Annual Update in OB/GYN
“Cardiovascular Risks in the Menopause"
"Hormone Replacement Therapy - An Update"
"Breast Cancer and HRT"

3/96 Argentine Symposium on Climacteric, San Martin de Los Andes, Patagonia, Keynote Speaker:
"New Trends for Medical Care of Women After Menopause"
"HRT and Gynecologic Cancer"
"Practicalities of Delivering Health Care After Menopause"

4/96 Ohio Coalition of Nurses with Specialty Certification (OCNSC), Ritz Carlton, Cleveland, OH
"Modern Menopause Including Management of Osteoporosis"

5/96 Managing Women's Health in the Year 2000 - Department OB/GYN, University Hospitals of Cleveland/CWRU Symposium, Marriott Society Center, Cleveland, OH
"Managing Women's Health After Menopause in the Year 2000"
"Osteoporosis, Menopause and HRT: Management Priorities"

5/96 Polish Menopause Society, Warsaw, Poland
"Women's Health Through Menopause"
"HRT and Cancer"

5/96 German (including Swiss and Australian) Menopause Society, Berlin, Germany
"Individualizing Risk: Benefit of HRT"

5/96 National Press Club, Washington, DC, Launch of National Menopause Awareness Month
"Menopause"

6/96 Hungarian Menopause Society, Budapest, Hungary
"Development in the Contemporary Management of Menopause"

7/96 Geauga Regional Hospital, Chardon, OH
"The Changing Perspectives of Menopause"

9/96 University of Cape Town, South Africa, OB/GYN Grand Rounds
"Primary Preventive Health Care for Women Over 50"

11/96 Pieter van Keep Memorial Lecture, 8th International Menopause Society Meeting, Sydney, Australia

12/96 Chilean Menopause Society, 2nd International Symposium, Santiago, Chile
"Menopause in Modern Perspective"
"Practicalities of Delivering Health Care to Women After Menopause"

3/97 1997 Annual Scientific Meeting of the Taiwanese Menopause Society, Tainan, Taiwan
"HRT in Older Women"
"Rationale and Operation of a Menopause Clinic"

4/97 University of Louisville, Louisville, KY, Course - Primary Care Issues in Women's Health
"Approaches to HRT"
"Management of Osteoporosis"
"Newer Benefits to HRT"

5/97 First Meeting of GEORM (del Gruppo Operativo Emiliano Romagnola per la Menopausa), Cervia, Italy, Keynote Lecture:
"Estrogens and Other Components of Contemporary Menopause Management"

6/97 Department of Health, Republic of San Marino and University of Ferrara, San Marino, Italy, Special Lecture:
"Current Issues in Hormone Replacement Therapy"

8/97 Chautauqua Inst. Lectures Hall of Philosophy, Chautauqua, NY
"Menopause and Hormones – the Conflict Between Science and Pseudoscience"

9/97 Merck Satellite on Osteoporosis at the 8th Annual NAMS Meeting, Boston, MA
"Osteoporosis and the Role of the Primary Care Provider"

9/97 3rd Congress of The Polish Menopause and Andropause Society, Warsaw, Poland
"History of the International Menopause Society"
"Osteoporosis and the Primary Care Provider"

10/97 St. Louis University School of Medicine, Menopause and Beyond, Ritz Carlton Hotel, St. Louis, MS
"Menopause in the Context of Primary Preventive Health Care for Women"

11/97 10th US Turner's Syndrome Society Conference, Minneapolis, MN
"Risks and Benefits of ERT"

12/97 Topics in Geriatric Medicine, Case Western Reserve University Claude Pepper Geriatric Center, VA Hospital, Cleveland, OH
"Hormone Replacement Therapy in Elderly Women"

2/98 Second Annual Disease Management Congress, Pasadena, CA
"HRT in Perspective – Historical Through Recent Advances"

3/98 Interactive Forums Symposium on Women's Wellness Programs in the Workplace, Ritz Carlton, Chicago, IL
Keynote Lecture: "Healthcare Issues and Disease Prevention Strategies for the Mature Woman"

4/98 Canyon Ranch, Tucson, AZ
Lecture to Physicians "New Drugs in Menopause Management"
Lecture to Health Staff "HRT and the Older Woman"
Guest Lecture "Navigating the HRT Maze"

5/98 Health Museum of Cleveland, Cleveland, OH
"You Look Marvelous" Program - The Scoop on Menopause

5/98 University of Cape Town, Groote Schuur Hospital, South Africa, Department of OB/GYN Grand Rounds
"Role of Ultrasound Densitometry in Osteoporosis Management"

6/98 Czech Medical Association, Menopause and Quality of Life, Prague, Czech
Invited Opening Keynote Lecture:
"Role of the International Menopause Society in Women's Right to Health After Menopause"

6/98 3rd International Symposium on Women's Health and Menopause, Fondazione Giovanni, Lorenzini, Florence, Italy
"Long-Term Low-Dose Estrogen Versus SERMS"
"Dose, Duration and Starting Age for HRT - The American Viewpoint"

9/98 Women's Health Beyond Midlife Symposium, Case Western Reserve University, Cleveland, Ohio
"Health Across the Feminine Life Cycle"

11/98 18th Brazilian Congress on Human Reproduction, Porto Alegre, Brazil
Keynote Lecture: "Menopause – Where Are We Heading To?
"Basic Premises in the Therapeutic Approach to a Menopausal Woman"

11/98 Jamaican Menopause Society Public Lecture, Kingston, Jamaica, West Indies
"What Is So Important About Menopause?"

11/98 Inaugural Symposium, Jamaican Menopause Society, Kingston, Jamaica, West Indies
"Menopause in the Context of Primary Preventive Health Care"
"Current Concepts in HRT"

11/98 University of West Indies, Jamaica
Department of Community Medicine: "Midlife Women's Health and Public Policy"
Department of OB/GYN: "Menopause and Primary Care"

2/99 University of Cape Town, Department of OB/GYN Grand Rounds, Groote Schuur Hospital, South Africa
"Prescribing HRT in Women at High Risk of Breast Cancer"

2/99 South African Menopause Society, Western Province Inaugural Lecture, Rotanga Junction, South Africa
"Current Trends in Menopause Management"

3/99 Johnson & Johnson, Fourth Annual Leadership Council on Women's Health, Bermuda
"Osteoporosis"

3/99 Perspectives in Women's Health, 4th District ACOG and University of Puerto Rico, San Juan, Puerto Rico
"Management of the Perimenopause"

4/99 Association of Indian Physicians of Northern Ohio, Cleveland Playhouse Club, Cleveland, OH
"Menopause and Preventive Care"

4/99 Solvay Pharmaceuticals Investigators meeting, Atlanta, GA
"Estrogens, Vasomotor Symptoms and FDA Regulations"

9/99 American Society for Reproductive Medicine Annual Scientific Meeting, Toronto, Canada
"Alternates to HRT for Vasomotor Symptoms and Osteoporosis Management"

11/99 2nd International Merck Symposium on Menopause and Osteoporosis, Banalmadena-Costa del Sol, Spain
"Practical Paradigm for HRT Usage in Osteoporosis Prevention"

11/99 American Association of Pharmaceutical Scientists Annual Convention, Symposium on Clinical Studies in Women's Health, New Orleans, LA
"Progress and Issues in Women's Health Through and Beyond Menopause"

12/99 Ladies Home Journal Roundtable Series, New York, NY, Featured Speaker:
"Women's Health Through and Beyond Menopause"

2/00 University of Cape Town School of Medicine, OB/GYN Grand Rounds
"Hormone Replacement Therapy and the Older Woman"

2/00 South African Menopause Society Special Lecture, Victoria & Alfred Hotel, Cape Town, South Africa
"Management of Postmenopausal Women's Health – the Role of SERMS"

4/00 University of Puerto Rico, 5th Symposium on Women's Health, San Juan, Puerto Rico
"Hormone Replacement Therapy and the Older Woman".

4/00 American College of Physicians/American Society of Internal Medicine Annual Scientific Program 2000, Distinguished Lecture, Philadelphia, PA
"Women's Health After Menopause"

5/00 Case Western Reserve University/UH Department of OB/GYN Grand Rounds, Cleveland, OH
"Recent Advances in HRT"

5/00 1st International Congress on Menopause and 4th National Congress, Turkish Society of Menopause and Osteoporosis, Antalya, Turkey
"Progress and Issues in Women's Health Care Beyond Menopause"
"Current Trends in Postmenopausal HRT"
"Algorithms for Postmenopausal HRT Usage"

6/00 University of Pisa, Pisa, Italy, Grand Rounds
"Recent Developments in Postmenopausal HRT"

6/00 2nd Practical Course in Climacteric Medicine, University of Ferrara, Ferrara, Italy
"Progress and Issues in Women's Health After Menopause"

6/00 EMAS Congress Satellite, Chia, Sardinia, Italy, Keynote Lecture
"Long-term HRT in the 21st Century"

10/00 Mini Medical School – The Great Medicine Series, Case Western Reserve University School of Medicine, Cleveland, OH
"Menopause, Gender Difference and Health"

11/00 Fairmount Temple Sisterhood, Cleveland, OH
"Health, HRT and the Older Woman"

11/00 Joint Jamaica and Caribbean Menopause Societies, Kingston, Jamaica, West Indies
"Practical Menopause Management"

1/01 CWRU School of Medicine Reproductive Biology Committee, Phase II
"Contemporary Menopause Management".

1/01 Canyon Ranch, Tucson, AZ
Guests: "Navigating the Hormone Maze"
Medical Staff: "Breaking News in Menopause Management"
Program Development Committee: "Changing Concepts Regarding HRT"

2/01 University of Cape Town, Groote Schuur Grand Rounds, Cape Town, South Africa
"Breaking News in Menopause Management"

3/01 Harvard University and Massachusetts General Hospital Grand Rounds Boston, MA
"Breaking News in Menopause Management".

3/01 Dayton OB/GYN Society Dinner Keynote Lecture, Dayton, OH
"Breaking News in Menopause Management"

3/01 Wright State University and Miami Valley Hospital Grand Rounds, Dayton, OH
"Practical Menopause Management"

4/01 The Cleveland Clinic, Grand Rounds, Cleveland, OH
"Contemporary Menopause Management"

5/01 ACOG 2001 Annual Clinical Meeting, Chicago, IL
NAMS Special Interest Group:
"Breaking News in Menopause Management"

5/01 The Church of God of Cleveland, Cleveland, OH
"Understanding the Meaning of Menopause "

5/01 Riverside Methodist Hospital 2001 Women's Health Symposium, Hyatt, Columbus, OH
"HRT and Heart Disease in Women"
"Clinical Management of the Postmenopausal Woman"

5/01 1st Scientific Meeting of the Asia-Pacific Menopause Federation, Seoul, Korea
Lecture to Japan Group: "Problems Impacting on HRT Prescribing in the USA"
Plenary Lecture: "Rapidly Changing Trends in Postmenopausal HRT"
Satellite, Chairman and Lecture: "Women's HOPE Study, Vasomotor and VMI Results

5/01 Vak Yeong Yoo QOL Institute, Seoul, Korea
"Menopause Related QOL"

6/01 Chang Gung Memorial Hospital at Kaohsiung, Taiwan
Hospital Grand Rounds: "Breaking News in Menopause Management"
OB/GYN Grand Rounds: "Practical Menopause Management"
Special Lecture: "HRT and Heart Disease"

8/01 The American Medical Women's Association 2nd International Conference
Moderator, Panel on Evidence-based Approach to Menopause
Hormone Replacements: Ask the Expert

9/01 2nd World Congress on Controversial Issues in Obstetrics and Gynecology, Paris, France
"Does HRT Enhance Quality of Life?"

10/01 Focus on HRT Meeting, Windsor Hotel, New Orleans, LA
"Challenges and Considerations for Menopause Management: The Emerging Benefits of HRT"

10/01 12th Annual Meeting, North American Society, New Orleans, LA
"HRT, Dose and Body Weight"
"Evaluation of the Perimenopausal Women"
"Pharmacotherapy after Menopause"

10/01 Johns Hopkins University School of Medicine, OB/GYN Grand Rounds, Baltimore, MD
"The HOPE Data in the Context of Modern Menopause Management"

11/01 NIH and the Smithsonian Institution, NIH Mini-Med School: Women's Health Issues, Washington DC
"Women's Reproductive Health"
"Osteoporosis"

01/02 Adele Searle Mount Nelson 100 Club, Mount Nelson Hotel, Cape Town, South Africa
"Developing Trends in Women's Health Care"

3/02 2nd North American Women's Healthcare Forum, Anaheim, CA
"Hormone Replacement Therapy and Quality of Life"

3/02 Women and Cancer, Memorial Sloan-Kettering Cancer Center, New York City, NY
"Breast Cancer in the Risk/Benefit Equation of Postmenopausal HRT"

3/02 Parexel/Berlex Female Health Care Visiting Faculty Program, Four Seasons, Las Vegas, NV
Opening Keynote Address: "New Directions in Women's Health Care"

5/02 Albert Einstein Medical Center, Grand Rounds, Bronx, NY
"HOPE Data in the Context of Modern Menopause Management".

5/02 Thomas Jefferson University, OB/GYN Grand Rounds, Philadelphia, PA
"HOPE Data in the Context of Modern Menopause Management"

5/02 New York Univ. Advanced Tutorial in Women's Health, NYC, NY
"Overview of Women's Health"
"Does HRT Enhance QOL?"
"Menopausal Medicine is More Than HRT"

6/02 10th World Congress of the International Menopause Society, Berlin, Germany
"Does HRT Enhance Quality of Life?"
"Why Low-Dose HRT is Good"
"CAMS Overview - The NAMS Approach"

6/02 58th Annual Clinical Meeting, Society of Obstetricians and Gynaecologists of Canada, Winnipeg, Manitoba, Canada
"HRT Challenges and Cardiovascular Controversies"

8/02 The Cleveland Clinic Health Talks
"Menopause and HRT: Coping with Controversy"
"What are the Long and Short Term Effects of Menopause?"
"A Balanced Perspective of Current Menopause Treatments"

9/02 The Fifth Athens Congress on Women's Health and Disease, Athens, Greece
"Rapidly Changing Trends in Postmenopausal Hormone Therapy"

10/02 Department of Health & Human Services, National Institutes of Health Scientific Workshop, Menopausal Hormone Therapy, Natcher Conference Center, Bethesda, MD
"Implications of WHI Report for NAMS"

10/02 CWRU & NAMS Co-Sponsored Menopause Update, Tri-C East Campus, Cleveland, OH
"Health Education, Identification of Risk Factors"
"Prescription Intervention"
"Complementary and Alternative Medicine, and Counseling Skills"

10/02 Albany Medical College, 5th Annual Menopausal Management Update, Albany, NY, Keynote Lecture
"Breast Cancer in the Risk/Benefit Equation of Postmenopausal HRT"

11/02 American Association of Health Plans Women's Health Summit, The Capital Hilton, Washington DC
"Current Guidance on the HT Controversy"

11/02 First Founders Commemorative Lecture, Woman's Hospital, Baton Rouge, LA
"Rapidly Changing Trends in Postmenopausal Hormone Therapies"

1/03 National Institutes of Health, Fertility Regulation and Systemic Hormones in HIV-Infected and At-Risk Women, Ritz Carlton Tyson's Corner, McLean, VA
"What is the Role of Hormonal Menopausal Therapy in HIV-Infected and At-Risk Women?"

2/03 Visiting Professor, University of Cape Town, South Africa
Combined postgraduate course on menopause for UCT and University of Stellenbosch:
Menopause Basics Part I
Menopause Basics Part II
Menopause Basics Part III

2/03 Kingsbury Medical Center, Claremont, Cape, Grand Rounds
"Current and Future Status of HT in Contemporary Menopause Management"

2/03 South African Heart Foundation, Public Town Hall Meeting, UCT Business School, Cape Town, South Africa (fundraising event)
"Hormone Replacement Therapy – Understanding the Facts"

2/03 City Park Chris Barnaard Medical Center, Cape Town, Grand Rounds
"Current and Future Status of HT in Contemporary Menopause Management"

2/03 University of Cape Town Department of Obstetrics and Gynecology Grand Rounds, Cape Town, South Africa
"Current and Future Status of HT in Contemporary Menopause Management"

3/03 Wyeth Women's Health Symposium, The Forum, V & A Hotel, Cape Town, South Africa
"HRT – The Future"

3/03 ACOG Quebec Section and the Jewish General Hospital, Montreal, Quebec, Canada, Public Town Hall Meeting
"Modern Menopause Management"

3/03 ACOG Quebec Section, McGill University, and the Jewish General Hospital, Montreal, Canada, Management of Menopause 2003 Symposium
"Menopause - Past, Present and Future"
"Current Hormone Usage in Clinical Practice"

3/03 Memorial Sloan-Kettering Cancer Center, New York City, Women and Cancer: Issues and Answers
"Strategies for Dealing with the Pharmacotherapeutic Controversy in Menopause Management"

4/03 FDLI 46th Annual Education Conference, Regulation, Science, Business and the Law: Formulations for Success, Washington DC
"Lessons from WHI"

4/03 Focusing on the Transdermal, Novartis, Prague, Czech Republic
"HT and the WHI – The American Perspective"

5/03 Johns Hopkins University School of Medicine, 2003 CME Teleconference Series (Same lecture repeated on 6 dates)
"Individualizing Hormone Therapy With Lower-Dose Regimens"

5/03 64th Annual May Day Clinic, OSF Saint Anthony Medical Center, Rockford, IL, Plenary Lecture
"Postmenopausal Hormone Therapy – Coping with the Controversy"

6/03 14th Annual Research Day, Department of OB/GYN, Robert Wood Johnson Medical School, Keynote Lecture, and Judge
"Current and Future Status of Postmenopausal Hormone Usage"

7/03 Cleveland Clinic Department of OB/GYN Grand Rounds, Intercontinental Hotel, Cleveland, OH
"Postmenopausal Hormone Therapy: Understanding the HOPE Study and the Rationale for Low-Dose Therapy"

7/03 Park Lane Hospital, Parktown, Johannesburg, South Africa, Special Grand Rounds
"Postmenopausal Hormone Therapy – Where We Are"

7/03 University of Stellenbosch, Stellenbosch, South Africa, National Teleconference TV Lecture
"Postmenopausal Hormone Therapy – The Light at the End of the Tunnel is not a Train"

10/03 Baptist College of Health Sciences, Memphis, TN, Changing Perspectives for the Perimenopausal Female
"Background and Historical Overview of Menopause"
"Strategies for Dealing with the HT Controversy"
"Female Sexual Dysfunction"

11/03 Beth Levenstein Hospital, Tel Aviv, Israel, ISHA Women's Health Inauguration Lecture
"Placing the Postmenopausal Hormone Controversy in Perspective"

11/03 Hadassah University School of Medicine, Department of Obstetrics and Gynecology Grand Rounds, Hadassah Hospital, Jerusalem, Israel
"The Postmenopausal Hormone Controversy in Clinical Perspective"

1/04 Albert Einstein College of Medicine, Department of Obstetrics and Gynecology Grand Rounds, New York City
"Quality of Life and Hormone Therapy"

1/04 The New York Obstetrical Society, Dinner Lecture, the Yale Club, New York City, NY
"Hormone Therapy – Past, Present and Future"

2/04 University of Stellenbosch, Department of OB/GYN Special Lecture, Stellenbosch, South Africa
"Update 2004 on Current and Future Status of HT after Menopause"

2/04 4th South African Menopause Society Congress, Advanced Postgraduate Menopausal Course, Port Elizabeth, South Africa
"Menopause Past and Present – How We Got to Where We Are"
"Understanding Recent Hormone Studies and Quality of Life"

3/5/04 Combined Meeting of University of Cape Town and University of Stellenbosch, NAMS Visiting Professors, Contemporary Menopause Management, Groote Schuur Hospital, Cape Town, South Africa
"Setting the Scene – the NAMS 2003 HT Position Statement"

3/04 Scientific Symposium at the 2nd Scientific Meeting of the Asia Pacific Menopause Federation, Pattaya, Thailand: The New Direction in Hormone Therapy – Customizing Low Dose Therapy
"Appropriate Use of Low Dose Hormone Therapy for Menopausal Symptoms: Women's HOPE Study"

4/04 5th International Symposium on Women's Health and Menopause, Lorenzini Foundation, Palazzo dei Congressi, Florence, Italy
"Quality of Life Through and Beyond Menopause – Definition and Evaluation"
"NAMS and Other Position Statements on Postmenopausal HT Usage"

5/04 The Cleveland Clinic, Public Seminar, Beachwood, OH
"The Current Accepted Use of Hormones After Menopause"

5/04 IOF World Congress on Osteoporosis, Rio de Janeiro, Brazil Satellite on Bone and Healthy Aging: The Spectrum of Risk
"Health Beyond Menopause"

5/04 IFFS 18th World Congress on Fertility and Sterility, Montreal, Canada Trilogy Lecture: "Menopause Related Definitions"

6/04 Residency Reunion Education Program, Case Western Reserve University, Cleveland, OH
"Understanding the Current Status of Hormone Therapy"

8/04 University of Cincinnati College of Medicine, Covington, KY
Recent Advances in Obstetrics & Gynecology
"Quality of Life – the Real Issue in Menopause Management"
"Finding Common Ground – an Analysis of International Position Statements on Postmenopausal HT"

11/04 IV Latin American FLASCYM Congress on Climacteric, Santiago, Chile
Keynote: "Developing Consensus – An Analysis of National and International HT Position Statements"

2/05 University of Stellenbosch School of Medicine, Stellenbosch, Cape, South Africa
Menopause Basics Course, Part I

2/05 South African Menopause Society, Symposium, Cullinan Hotel, Cape Town, South Africa
"Hormone Therapy in Perspective – Analysis of International Position Statements"

2/05 Christiaan Barnard Memorial Hospital General Grand Rounds, Cape Town, South Africa
"Postmenopausal Hormone Therapy – Where Are We?"

2/05 University of Stellenbosch School of Medicine, Stellenbosch, Cape, South Africa
Menopause Basics Course, Part II

3/05 University of Stellenbosch School of Medicine, Stellenbosch, Cape, South Africa
Menopause Basics Course, Part III

3/05 Witwatersrand University School of Medicine and Park Lane Hospital, Johannesburg, South Africa, Symposium, Keynote Address:
"Breast Cancer in the Risk/Benefit Equation of Postmenopausal Hormone Therapy"

4/05 1st Annual Women's Health Summit, The Cleveland Clinic, Cleveland, OH
"Randomized Controlled Trials, the Media and Women's Health"

9/7/05 Town Hall Meeting on Menopause, U S Senate Hart Senate Building, Washington DC, Opening Keynote Address:
"Menopause - What it is and What to Do"

10/05 International Menopause Society 11th World Congress on Menopause, Buenos Aires, Argentina
Keynote Plenary Lecture: "Setting Goals for Quality of Life"
Wyeth Satellite: "Finding Common Ground – An Analysis of National and International Position Statements on Postmenopausal HT"
NAMS Session: "Practical Application of the NAMS Position Statement on HT"

11/05 Blanchard Valley Regional Health Center Grand Rounds, Findlay, OH
"Current and Future Status of Postmenopausal Hormone Therapy"

1/06 Center for Business Development Meeting on Menopause and Pharmacotherapeutic Development, Philadelphia, PA
Opening Keynote Lecture: “The Role of Pharmacotherapy for Menopause Related Conditions”

3/06 South African Menopause Society, Sun City, South Africa, Keynote Lectures:
“Determining and Achieving Quality of Life Goals for Women after Menopause”
“HT after Menopause – Now that the Dust has Settled on WHI”

3/06 University of Cape Town Department of OB/GYN Grand Rounds, Groote Schuur Hospital, Cape Town, South Africa
“Postmenopausal Hormone Therapy in Current Perspective”

4/06 St John’s Mercy Medical Center, 38th Annual Matt Weiss Symposium, St Louis, MO
”Current and Future Roles for Hormone Therapy after Menopause”

4/06 St. John’s Mercy Medical Center, 38th Annual Matt Weiss Lecture, St Louis, MO
“Women’s Health Care: Setting Goals for Enhancing Quality of Life”

9/16/06 Case School of Dentistry, Daniel Verne Symposium, Health Museum, Cleveland.
“Update on Postmenopausal Hormone Therapy”

10/12/06 Opening Keynote Lecture, 17th Annual NAMS Scientific Meeting, Nashville, Tennessee.
“Menopause Before WHI – The History of a Perfect Storm”.

CONGRESS PRESENTATIONS AND ABSTRACTS

4/68 South African Society of Obstetricians and Gynaecologists, Hermanus
9/68 South African Paediatric Association, 8th Congress, Cape Town
7/69 South African Medical Congress, Pretoria
3/70 South African Society of Obstetricians and Gynaecologists, Bloemfontein
4/70 6th World Congress of Gynaecology and Obstetrics, New York (TV)
5/71 19th British Congress of Gynaecology and Obstetrics, Dublin
7/73 South African Medical Congress, Cape Town
8/73 7th World Congress of Gynaecology and Obstetrics, Moscow (Paper Presented in Absentia)
9/73 22nd Iranian Medical Congress and the 7th International Congress Iranian Gynaecologists and Obstetricians, Ramseh, Iran
7/74 20th British Congress of Gynaecology and Obstetrics, London (Paper Presented in Absentia)
10/74 South African Society of Obstetricians and Gynaecologists, 17th Congress, Johannesburg
10/74 4th International Congress of Psychosomatic Obstetrics and Gynecology, Tel Aviv
6/76 International Symposium on Oestrogens, Bordeaux, France
6/76 International Congress on the Menopause, La Grande Motte, France
10/77 International Symposium on Menopause, Athens, Greece
3/78 The American Fertility Society 34th Annual Meeting, New Orleans
4/78 American College of Obstetricians and Gynecologists Annual Meeting, Anaheim, CA
6/78 2nd International Congress on Menopause, Jerusalem, Israel
6/78 International Symposium on Menopause, Rome
2/79 The American Fertility Society 35th Annual Meeting, San Francisco, CA
3/79 American Society of Abdominal Surgeons 20th Annual Mtg., Tampa, FL
4/79 International Symposium on Percutaneous Steroids, Paris
7/79 6th Congress of Australian Society of Psychosomatic Obstetrics and Gynaecology, Sydney, Australia
9/79 Seminar on Current Views on Estriol, Oss, Holland
9/79 International Health Foundation Workshop, "The Brain as an Endocrine Target Organ in Health and Disease", Bordeaux, France
9/79 6th International Congress of Psychosomatic Obstetrics and Gynecology, Berlin
Main Keynote Lecture: "Health Implications in Women Aged 35-45"
Chairman - Workshop on Premenstrual Syndrome
10/80 International Symposium on Menopause and Obesity, Rome
Chairman of Plenary Session on Therapy
Lecture: "Endocrinology of Menopause and Obesity"

11/80	The Menopause Workshop, Rutgers Medical School: "Endocrinology of Menopause" "Osteoporosis"
3/81	9th Annual Conference on Psychosomatic Obstetrics and Gynecology, Philadelphia, PA, Invited Keynote Lecture: "Estrogens and Menopause
6/81	Third International Congress on Menopause, Ostend, Belgium
1/82	Eighth Venezuelan Congress of Obstetrics and Gynecology - Special invited guest including Postgraduate Course lecture, Round Table Chairman, and Keynote Lectures
3/82	Italian Congress on Psychosomatic Obstetrics and Gynecology, University of Pavia, Italy "Somato-psychic and Psycho-somatic Contribution to Menopausal Symptoms"
3/82	American Fertility Society 38th Annual Meeting, Las Vegas, NV "Efficacy of 32% Dextran 70 in the Prevention of Peritoneal Adhesions and Utility of Second-look Laparoscopy in Infertility Surgery" (with G. diZerega)
10/82	Tenth World Congress of Gynecology and Obstetrics (FIGO), San Francisco, CA "Psychotropic Action and Indication for Sex-Steroid Therapy in the Climacteric"
5/83	International Health Foundation Workshop on: "Recent Advances in Oral Contraception" “Oral Contraception Formulations - Influence on User Compliance and Reliability of the Method"
6/83	11th World Congress on Fertility and Sterility, Dublin, Ireland "Prevention of Postoperative Adhesions"
9/83	Jan Falfijn European Congress on Menopause, Antwerp, Belgium Chairman of Major Plenary Session
9/83	International College of Surgeons XII Western Hemisphere Congress and 1983 Annual Meeting, Cleveland, OH "Development in Infertility Microsurgery" "Logistics of an In Vitro Fertilization Program"
2/84	International Health Foundation, Geneva, Switzerland Workshop on Oral Contraception "The Influence of Oral Contraceptive Formulations on User Compliance and Reliability of the Method"
4/84	40th Annual Meeting - AFS, New Orleans, LA "In Vitro Fertilization" "Intrauterine Insemination"
4/84	25th Annual Meeting, American Society of Abdominal Surgeons "Use and Abuse of Estrogen Treatment after Menopause"

10/84 XI Latin American Congress of Obstetrics and Gynecology, FLASOG, Caracas, Venezuela, Special Invited Guest including Chairman at Plenary Sessions:
"Menopause and Climacteric"
"Advances in Infertility and Microsurgery"

11/84 Fourth International Menopause Congress, Orlando, FL
Chairman of Workshop on:
"Technology and Techniques"

5/85 ACOG 33rd Annual Clinical Meeting, Washington, DC
"Infertility Microsurgery: Part I - Learning the Techniques" - (videotape)

5/85 International Symposium on Menopause, Cleveland, OH
"Menopause in Modern Perspective"
"Cost-effectiveness of HRT"

5/85 Second Annual MacDonald Conference on Reproductive Endocrinology, Cleveland, OH
"Infertility Microsurgery"

9/85 XI World Congress of Gynecology and Obstetrics (FIGO), Berlin, West Germany. Transdermal Estrogen Substitution Symposium:
"Comparative Efficacy and Tolerability of Transdermal Estradiol and of Conjugated Estrogens, Double Blind Multi-Center Study"
Modern Approach to Perimenopausal Years Symposium:
"Non-Hormonal Medication"

9/85 American Fertility Society 41st Annual Meeting, Chicago, IL
"IVF vs. Traditional Therapy in Tubal Disease"

11/85 XIV Congress Brasileiro De Ginecologica e Obstetricia, Racife, Brazil
"Menopause in Perspective"
"Non-Hormonal Therapy"

3/86 1st International Congress on Gynecological Endocrinology, Madonna di Campiglio, Italy
"The Climacteric Syndrome"

3/86 International College of Surgeons, Las Vegas, NV
"The Menopause"

9/86 American Fertility Society 42nd Annual Meeting, Toronto, Canada
Presentation with James M. Goldfarb and Leon A. Sheean
"Improved Hamster Penetration Assay Results After Freeze-Thawing Sperm in Egg Yolk Citrate"

4/87 5th International Congress on the Menopause, Sorrento, Italy
Schering Lecture: "Benefit/risk Ratio of Oral Contraceptives in the Woman Above 40"
Chairman, CIBA International Symposium on "Benefits of Transdermal Estradiol Substitution"
Ayerst Lecture "Historical Perspectives into the Climacteric – Where We Were"
Workshop - Transdermal Estrogen Delivery Systems

4/87	Satellite Menopause Meeting, Rome, Italy "Osteoporosis"
4/87	Fifth World Congress on In Vitro Fertilization and Embryo Transfer, East Virginia, with Leon A. Sheean and James M. Goldfarb “Surrogate Pregnancy and IVF” “Isolation of Motile Sperm Populations from Oligospermic and Astheospermic Semen Samples: Simple Washing vs. Density Gradient Centrifugation
9/87	American Fertility Society 43rd Annual Meeting, Reno, NV “Density Gradient Sperm Preparation for Intrauterine Insemination (IVI) Using Percoll” with Leon A. Sheean and James M. Goldfarb “Alternate Routes of Postmenopausal Therapy”
3/88	2nd International Congress on Gynecological Endocrinology, Crans-Montana, Switzerland “Transdermal Estradiol in Perspective”
3/88	Society for Gynecologic Investigation “Gonadotropin Dependent Production and Release of Steroid Hormones in the Rat Ovary - Two Separate Entities (George I. Gorodeski, Leon A. Sheean, Wulf H. Utian)
5/88	ACOG 36th Annual Meeting, Boston, MA (Presented by George Gorodeski) “Effect of CA and MG on In Vitro Steroid Synthesis by Rat Ovarian Tissue Homogenates (George Gorodeski, Leon A. Sheean, Wulf H. Utian)
10/88	American Fertility Society 44th Annual Meeting, Atlanta, GA Real Meaning of Menopause (Round Table)
10/88	XII World Congress of Gynecology and Obstetrics - FIG, Rio de Janerio, Brazil Symposium on Menopause
4/89	VI World Congress IVF and Alternate Assisted Reproduction, Jerusalem, Israel "In Vitro Fertilization - Surrogate Gestational Pregnancy"
9/89	1st Meeting - North American Menopause Society/New York Academy of Sciences "The Menopause in Perspective - From Potions to Patches"
11/89	American Fertility Society 45th Annual Meeting, San Francisco, CA "Modern Protocols for Postmenopausal HRT"
3/90	2nd Congress of the International Society of Gynecological Endocrinology, Jerusalem, Israel "Menopause - Overview of Recent Advances and Current Challenges"
4/90	25th Congress South African Society of Obstetricians and Gynaecologists, Cape Town, South Africa, Chairman, Symposium - Menopause - The State-of-the-Art

6/90	The Endocrine Society 72nd Annual Meeting - Atlanta, GA "Hormonal regulation of Ectocervical Epithelial Cell Differentiation" Gorodeski G, Eckert RL, Utian W, Rorke EA Presented by E. Rorke. (Abstracts p. 199)
6/90	Fourth Italian Congress on Obstetrical and Gynaecological Sciences SGO), Elba Island, Italy (6/4-6/9) "Postmenopausal Transdermal Estradiol in Perspective"
10/90	6th International Congress on the Menopause, Bangkok, Thailand Upjohn Lecture and Chairman of Symposium "Impact of Menopause" Chairman, CIBA International Symposium on Menopause and Lecture: "Risk Versus Benefit of HRT" Organon Lecture: Menopause Clinics Chairman Plenary Session on Patient Care, and Lecture: "Menopause and Quality of Life"
3/91	12th Annual Meeting, the Society of Behavioral Medicine, Washington, DC, Chairman and Discussant, Plenary Session on Menopause
4/91	The Australian Menopause Society Congress, Adelaide, Australia “Cancer and Hormone Replacement Therapy” “Transdermal Oestrogen” “Management of the menopause in the USA”
6/91	73rd Annual Meeting, The Endocrine Society, Washington, DC “Sex Steroids and Growth Factors Differentially Regulate Growth and Differentiation of Cultured Human Endometrial Stromal Cells. J. C. Irwin, WH Utian and RL Eckert “Histamine Increases Transiently Cytosolic Calcium Levels in Cultured Human Ectocervical Cells, GI Gorodeski, WH Utian (Abstracts p.325)
9/91	2nd Annual Meeting, The North American Menopause Society, Montreal, Canada "Overview on Current Status of Menopause - Medical and Political" President's Address "Sexual Function in Menopausal Women", Walters MD, Kingsberg S, Boyle M, Utian W
9/91	31st Annual Meeting of the American Society Cell Biology, Boston, MA "Human Ectocervical Cell Cultures Grown on Porous Filters: Electrical and Morphological Characteristics", GI Gorodeski, WH Utian (Abstract #2079, J Cell Biol 115, 358a, 1991)
9/92	3rd Annual Mtg., NAMS, Cleveland, OH "President's Address - Future Challenges" "Menopause Clinics - Concept and Role in Society"
11/92	American Society for Cell Biology, 32nd Annual Mtg., Denver, CO “Extracellular ATP Regulates Paracellular Transport in Human Uterine Ectocervical Cells”, G.I. Gorodeski, M.F. Romero, U. Hopfer and W.H. Utian. (Abstract #1270, Mol Biol Cell 3, 219a, 1992)

6/93 7th International Congress on the Menopause, Stockholm, Sweden
Keynote Lecture: "HRT - Anticipation, Actuality and Compliance"
Workshop Lecture: "Non-Gynecologic Cancer and HRT"

9/93 4th Annual Mtg., North American Menopause Society, San Diego, CA
Plenary: "NAMS/Gallup Survey of Women's Attitudes About Menopause"
Free Communication: "Effects of a Combined Estrogen-Androgen Preparation on Sexual Behavior and Lipid Metabolism in Surgically Menopausal Women", Sherwin B, Youngs D, Utian WH, Jurgens R and Daily R
Poster: "The Efficacy of Flexible Polypropylene (Pipelle) Endometrial Biopsy in Menopausal Women", Ben-Ozer S, Peskin J, and Utian WH
Poster: "Evaluation of HRT and Serial Bone Mineral Density Measurements", Peskin J, Utian WH, Ganley J and Boyle M

10/93 American Fertility Society Annual Meeting, Montreal, Canada
"Estrogens and Breast Cancer"

9/94 5th Annual Mtg., North American Menopause Society, Washington, DC
"What is Optimum Comprehensive Care and How Well Are We Meeting This Goal?"
"How to Establish a Menopause Clinic"

9/94 Scientific Free Communication - GI Gorodeski, WH Utian & MN Levy
"Estrogen Increases Coronary Flow By a Nitric Oxide Related Mechanism"

11/94 Italian Menopause Society 5th Annual Meeting, Rome, Italy Invited Keynote Speaker
"Women's Health Through Menopause - A Modern Perspective"

12/94 34th Annual Mtg. American Society for Cell Biology, San Francisco, CA
"Basic Regulation of Paracellular Permeability in Human Cells by Two Distinct Nucleotide Receptors", Gorodeski GI, Hopfer U, Utian WH, (Molec Biol Cell 5, 84a, 1994)

2/95 International Society of Gynecologic Endocrinol, Madonna di Campiglio, Italy, 4th World Congress
"Estrogens and Myocardial Vessels"

5/95 ACOG 43rd Annual Meeting, San Francisco, CA
"Comprehensive Evaluation After Menopause"

7/95 27th British Congress of Obstetrics and Gynaecology, Dublin, Ireland
"Direction, Misdirection, and Misconception in Menopause Research and Management"

9/95 6th Annual Mtg. North American Menopause Society, San Francisco, CA
"Progesterone Attenuates the Estrogen-induced Increase in Coronary Flow", Gorodeski GI, Yang T, Utian WH, Levy M

11/95 The Gerontological Society of America 48th Annual Scientific Meeting, Los Angeles, CA
"Menopausal Women's Preferences and Evaluations of Gynecological Care", Rose JH and Utian WH

5/96	9th World Congress on Human Reproduction, Philadelphia, PA Invited Lecture: "HRT and Breast Cancer"
6/96	11th Congress of the European Association of Gynecologists and Obstetricians (EAGO), Budapest, Hungary Invited Plenary Chairman "Role of Progestins in HRT"
9/96	7th Annual Mtg. of The NAMS, Chicago, IL “Estrogen Increases Transendothelial Cation Selectivity: A Novel Vasculoprotective Mechanism”, Cho MM, Utian WH, Gorodeski GI
9/97	8th Annual Mtg. of The NAMS, Boston, MA “Effects of Estrogen on Cardiac Stunning in Female Rabbits”, Levy M, Utian WH, Gorodeski GI
10/97	IV European Congress on Menopause, Hofburg Palace, Vienna, Austria “U.S. Dose Ranging Study with Oesclim in Highly Symptomatic Postmenopausal Women”
5/98	ACOG 46th Annual Meeting, New Orleans, LA “The Role of Ultrasound in the Assessment of Osteoporosis”
6/98	Czech Medical Association, Menopause and Quality of Life, Prague, Czech “Long-Term Low Dose Estrogen Versus SERMS”
10/99	9th International Menopause Society World Congress on the Menopause, Yokohama, Japan. “Determinants and Quantification of Quality of Life After Menopause - The Utian Menopause Quality of Life Score (UMQOL)”
10/99	Kyoto Satellite Symposium of the 9th International Menopause Society World Congress on the Menopause, Kyoto, Japan. “Hormone Replacement Therapy and the Older Woman”
7/00	5th EMAS European Congress on Menopause, Copenhagen, Denmark “Quality of Life Aspects With Continuous Combined HRT”
10/00	ASRM 2000, Annual Scientific Meeting, Moderator of Symposium on “Alternative Menopausal Therapies”
12/00	8th World Congress of Gynecological Endocrinology, Florence, Italy “Measurement of Quality of Life – Utilization of the UQOL Instrument” “Improved Amenorrhea, Favorable Vasomotor and Lipid Effects, and Endometrial Safety with Lower Doses”, Archer DF, Lobo RA, Utian WH and Pickar JH
2/01	South African Menopause Society, Stellenbosch, South Africa “Dealing with the Declining Rationale for Long-term Hormone Therapy”
4/01	ACOG 2001 Annual Clinical Meeting, Chicago, IL “New HRT Dosing Options for Menopausal Symptom Relief” Poster Session: “ Vasomotor Symptoms and Vaginal Atrophy“
5/01	2001 American Geriatrics Society Ann. Scientific Meeting, Chicago, IL Session Moderator and Presenter “The Theoretical Case for HRT in Older Women”

5/01 4th International Symposium Women's Health and Menopause, Washington, DC
Utian WH, Janata JJ, Kingsburg S, "Measuring Menopause-Related QOL Across Communities and Cultures"

6/01 83rd Annual Meeting of the Endocrine Society, Denver, CO
Poster: "Lower HRT Doses and Effects on Vasomotor Symptoms and Vaginal Maturation Index"
Clinical Symposium Chairman: "Current Developments in Menopause Management"

10/01 12th Annual Mtg. of The North American Menopause Society, New Orleans, LA
Utian WH, Janata JJ, Kingsberg S, "Components and Quality of Life After Menopause – The Utian Quality of Life Score (UQOL)"

5/02 ACOG 50th Annual Clinical Meeting, Los Angeles, CA
Utian WH, Pickar JH, " Lower Doses of Hormone Replacement Therapy: Effect on Body Weight and Role of Body Mass Index in Treatment Response"

6/02 11th World Congress on Human Reproduction, Montreal, Canada
"Menopause and heart Disease"
"Advances in SERM Therapy"

6/02 10th World Congress of The International Menopause Society, Berlin, Germany
"Components and Quantification of Quality of Life After Menopause – The UQOL"
"Comparison of HRT Effects on Hot Flushes and the Greene Climacteric Scale"

10/02 13th Annual Mtg. of The NAMS, Chicago, IL
Lecture: "2002 NAMS Gallup Survey on Quality of Life"
"
Posters:
Heuer MA, **Utian WH,** Schear M, Wright DC. "Trough serum levels of estradiol, estrone, and FSH following topical application of Estrasorb"
Utian WH, Pickar JH. "Effects of lower doses of hormone replacement therapy on urinary symptoms".
Utian WH, Janata JJ, Barbier S, Ciaccia AV, Rosen A, Taylor MB. "Use of the Utian Quality of Life instrument in a postmenopausal treatment trial: Pilot study comparing Raloxifene to placebo".
Utian WH, Leonard TW, Davis AD, Vega RY. "The safety and efficacy of a new synthetic 10-component, modified release conjugated estrogens tablet".

10/13-15/2002 58th Annual Meeting, ASRM, Seattle
Poster: **Utian WH,** Leonard TW, Davis, AD, Vega R. Efficacy and safety study of new synthetic 10-component, modified release conjugated estrogens tablet for treatment of vasomotor symptoms in postmenopausal women.
Round Table: SERMS in Menopause Management

April 27-30, 2003 51st Annual Clinical Meeting, A.C.O.G., New Orleans.
Poster: Leonard TW, **Utian WH**, Bon C, Vega RY and Barth ST. "A cumulative vasomotor index for analysis of hot flush severity in a 12-week clinical trial".

September 17-20,2003 14th Annual NAMS Meeting, Miami, Florida.
Lecture: "The 2003 NAMS Hormone Therapy Advisory Report".
Poster: "The impact of conjugated estrogens/trimegestone on health-related quality of life in a double-blind, randomized, placebo-controlled study".

February 27, 2004 4th South African Menopause Society Congress, Port Elizabeth, South Africa.
Welcome Function Key Note Address: An analysis of current international guidelines of menopausal hormone usage.
Lecture: Quality of life and clinical conundrums in menopause management.

March 9-12, 2004 2nd Scientific Meeting of the Asia Pacific Menopause Federation, Pattaya, Thailand.
Lecture: HT beyond osteoporosis protection – quality of life.

March 19 – 20, 2004 2nd World Congress on Women's Mental Health, Washington DC.
1. Quality of life through and beyond menopause – definition and evaluation.
2. Comparing the NAMS and other organizational position statements on postmenopausal hormone therapy.

May 1-5, 2004 ACOG 52nd Annual Clinical Meeting, Philadelphia, Penn.
Poster: Simon JA, Nachtigall LE, Davis SR, **Utian WH,** Lucas JD and Braunstein GD : Transdermal testosterone patch improves sexual activity and desire in surgically menopausal women.

October 7-10,2004 15th Annual Meeting, The North American Menopause Society
Poster: **Utian WH,** Speroff L. and Ellman H. Comparison of a novel oral estrogen therapy (estradiol acetate) to micronized estradiol and conjugated equine estrogens for relief of menopausal symptoms.

October 28-31, 2004 International Society for the Study of Women's Sexual Health (ISSWSH), Atlanta, Georgia.
1. Podium Presentation: **Utian W**, Braunstein G, Buster J, Lucas J, Simon J. Testosterone Transdermal Patch Improved Sexual Activity and Sexual Desire in Surgically Menopausal Women: Results from Two Phase II Studies.
2. Podium Presentation: **Utian W**, Maclean DB, Symonds T, Symons J, Somayaji V, Sisson M. A Methodology Study to Validate a Structured Diagnostic Method Used to Diagnose Female Sexual Dysfunction and its Subtypes in Postmenopausal Women.

October 12 ,2006 17th Annual Meeting, NAMS, Nashville, Tennessee. Poster.
Simon JA, Zborowski J, Snabes M, and **Utian WH**.
Bio-E-Gel, an effective, low-dose, transdermal estradiol gel, is well-tolerated in treatment of menopausal symptoms.

MEDICAL FILMS/VIDEOTAPES

1985 Infertility Microsurgery - Learning the Techniques
1986 Menopause - Changes for the Better - Lifetime TV Show Host

CLOSED WORKSHOPS/SCIENTIFIC SYMPOSIA

1987 The National Forum on the Long-Term Effects of Estrogen Deprivation, Laguana Niguel, CA
1988 The Second Annual Symposium on the Long-Term Effects of Estrogen Deprivation, St. John, U.S. Virgin Islands
1988 The International Health Foundation, Lausanne, Switzerland
Oral Contraceptives After Age 30
1988 International Expert Meeting on Menopause Research, Paris, France
1988 Bio-Science Advisory Committee Meeting, Johnson & Johnson, Future of Climacteric, New Brunswick, NJ
1988 Consensus Development on Progestogens
1989 The Third Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Estoril, Portugal
1990 The Fourth Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Taormina, Sicily, Italy
1990 Forging a Women's Health Research Agenda, Symposium sponsored by the National Women's Health Resource Center and NIH, Washington, DC, Member of Menopause Panel
1991 The Fifth Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Vancouver, Canada
1991 American Board of Obstetrics and Gynecology, Impact of Subspecialization on Residency Training and Practice of Obstetrics and Gynecology, Chicago, IL
1992 CUCOG Annual Meeting, Orlando, FL
1992 The Sixth Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Rancho Bernardo, San Diego, CA
1993 National Institute on Aging, Workshop on Directions for Menopause Research, Bethesda, MD
1993 The Seventh Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Victoria Island, Vancouver, British Columbia
1993 International Consensus Conference on Hormone Replacement Therapy and the Cardiovascular System, American Heart Association and AFS, Hyatt Regency, Bethesda, MD,
Chairman of Workshop on "Progestins, Androgens: Compliance Issues"
1994 World Health Organization, Geneva, Switzerland. Scientific Group Meeting on Research in the Menopause in the 1990's
1994 The Eighth Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Santa Barbara, CA
1995 CUCOG Annual Meeting, Orlando, FL

1995 Healthy Women 2000 - Menopause, Osteoporosis and Health Issues, Hart Senate Building, Washington, DC (With First Lady Hilary Clinton

1995 The Ninth Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Aspen, CO

1996 The Tenth Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Sante Fe, NM

1996 Biological and Clinical Effects of Soy, Santa Barbara, CA

1997 The Eleventh Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Newport, RI

1998 The Twelfth Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Los Cabos, Mexico

1998 1st Clinical Synthesis Meeting on HRT, European Oncology Institute, Lancet and MRC, Milan, Italy

1999 Thirteenth Annual Symposium on the Long Term Effects of Estrogen Deprivation, Banff, Canada

2000 The Fourteenth Annual Symposium on the Long Term Effects Of Estrogen Deprivation, Telluride, CO

2000 International Menopause Society Closed Workshop on Cardiovascular Disease and HRT, The Royal Society of Medicine, London, England

2001 International Menopause Society Closed Workshop on Cancer and HRT, Pisa, Italy

2001 The Fifteenth Annual Symposium on the Long Term Effects of Estrogen Deprivation, Elbow Beach Resort, Bermuda

2001 Staging Reproductive Aging Workshop (STRAW), NIH/NAMS/ASRM, Park City, UT

2002 The Sixteenth Annual Symposium on the Long-Term Effects of Estrogen Deprivation, Ritz Carlton Half Moon Bay Resort, San Francisco, CA

2002 The Surgeon General's Workshop on Osteoporosis and Bone Health, The Westin Grand, Washington DC

2003 WHO/ICUD 2nd International Consultation on Sexual Dysfunctions, Paris, France

2003 The Seventeenth Annual Estrogen Symposium: Therapeutic Options for Menopausal Health, The Equinox, Manchester, VT

2004 The Eighteenth Annual Therapeutic Options for Menopausal Health Conference, Chateau Vaudreuil, Montreal, Canada.

2004 5th Workshop of the IMS, Postmenopausal Osteoporosis, Pisa, Italy

2005 19th Annual Consultant Conference on Therapeutic Options for Menopausal Health, Seattle, WA

2006 20th Annual Consultant Conference on Therapeutic Options for Menopausal Health, Halifax, Nova Scotia, Canada

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2. Effortil Postoperatively
   S Afr Med J 44:883, 1970
3. The 'Mutilated Ovary' Syndrome
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4. Oestrogens in Oophorectomised Women
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5. Therapeutic Abortion
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6. Reliability or Unreliability of Medical Representatives
   S Afr Med J 47:286, 1973
7. Septic Abortion and Septic Shock
   S Afr Med J 47:639, 1973
8. Menopause, Hormones and Aging
   S Afr Med J 47:716, 1973
9. Hormone Replacement Therapy for Menopausal Symptoms
   Lancet ii: 733, 1973
10. Effect of Exogenous Oestrogens on Minor Psychiatric Symptoms in Postmenopausal Women
    S Afr Med J 48:1093, 1974
11. Oestrogen Therapy and "Eternal Youth"
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12. Oestrogen Therapy and Menopausal Flushing
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13. Oestrogen Therapy and Endometrial Cancer
    Br Med J 2:577-8, 1977
14. Plasma-Oestrogen and Climacteric Symptoms
    Lancet i: 1099-1100, 1978
15. Postmenopausal Osteoporosis
    Lancet ii: 1979
16. Mental Tonic Effect of Postmenopausal Estrogens
    Maturitas 2:73, 1980
17. Vaginal Function in Postmenopausal Women
    J Am Med Assn 249:194-5, 1982
18. Maternal Bonding with In Vitro Fertilization
    New Engl J of Med 309:115, 1983
19. Adhesion Prevention
    Fertil Steril 41:785, 1984
20. Successful Pregnancy After In Vitro Fertilization and Embryo Transfer From an Infertile Woman to a Surrogate
    New Engl J of Med 313:1351-1352, 1985

21. Estrogen and Alternative Therapies for Osteoporosis
    Int Corres Soc OB/GYN 27:5-6, 1986
22. Treatment of Adenomatous Hyperplasia without Atypia
    Int Corres Soc OB/GYN 28:2-3, 1987
23. The Role of Progesterone in the Treatment of Premenstrual Syndrome
    Int Corres Soc OB/GYN 29:2-3, 1988 (No. 6)
24. Is ERT Suitable for a Patient with Adenocarcinoma of the Breast who is Receiving Prophylactic CMF Chemotherapy?
    Int Corres Soc OB/GYN 30:6, 1989 (No. 3)
25. Is it Safe to Place Mildly Hypertensive Patients on the Birth Control Pill?
    Int Corres Soc OB/GYN 31:5-6, 1990
26. Thrombocytopenia in a Middle-aged Woman
    Consultant 32, 18-21, 1992
27. Management of Septated Ovarian Cyst and Breast Lesion in Postmenopausal Women
    Int Corres Soc OB/GYN 33:3, 1992
28. Pre-Hysterectomy Endometrial Sampling
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29. Treatment of Recurrent Endometriosis
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30. Ovarian Management During Radical Hysterectomy in the Premenopausal Patient
    Utian WH & Goldfarb JG, Obstet Gynecol 1993; 82, 1042
31. Treatment of Patient with Antiphospholipid Syndrome, Menorrhagia and Dysmenorrhea
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32. Tamoxifen: Proper Long-term Adjuvant Therapy for Breast Cancer 27 Years Earlier
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33. Do Menopause and Hormonal Replacement Therapy Influence Body Cell Mass and Body Fat Mass?
    Am J Obstet Gynecol 173, 669, 1995
34. Uveitis and Estrogen
    Int Corres Soc OB/GYN 40, 7-8, 1999 (No. 2)
35. ERT in Patients with Thrombophlebitis or Myocardial Infarction
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36. Hormone Therapy and Risk of Gynecologic Cancers
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37. Response to Comment on NAMS 2003 HT Panel Position Statement
    Menopause 11, 237-238, 2004

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November 1990	Better Histories for Women Over 40
December 1990	Preventive Screening With An Eye To Costs
January 1991	Counseling Patients About Nutrition

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  The Journal of the Japan Menopause Society, 1; 4:1993
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- “Response of The North American Menopause Society to the AHA Science Advisory regarding HRT and CVD”. Maturitas, 40, 11-12, 2001
- Guest Commentary “Estradiol Valerate/Dienogest”. Drugs, 62:56-56, 2002
- “Why Evidence-based Guidelines on Hormones Aren’t All Alike”. OBG Management, 16, 10-12, 2004
- “Bioidentical Hormones: Separating Science from Marketing”, The Female Patient Primary Care Edition, 2005;30:23-24
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- Semantics, Menopause-related Terminology, and the STRAW Reproductive Aging System, 8:398-401, 2001
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Jan/Feb 2001 Supplement No. 1	Key Information from NAMS 11th Annual Meeting Satellite Symposia
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Jan/Feb 2006 Vol. 15 – No. 1	Women's Voices for Change – A New Voice for Women and a New Partner for NAMS
Mar/Apr 2006 Vol.15 – No. 2	The Psychosocial and Socioeconomic Burden of Menopausal Vasomotor Symptoms
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Sept/Oct 2006 Vol.15 – No. 5	Is evidence-based medicine a pipe dream?
Nov/Dec 2006 Vol. 15 – No. 6	The dramatic growth of NAMS – and now the NAMS Foundation!
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12. **Utian WH**. Cholesterol, coronary heart disease and oestrogens. S Afr Med J 45:359, 1971.
13. **Utian WH,** Davey DA. The incidence and significance of clinical foetal distress in labour. S Afr Med J 45:608-11, 1971.
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Published July 4, 1991
ISBN: 0-13-546268-1
Prentice Hall Press, New York, 1991

Italian Edition
Vivere Bone La Menopausa
Published March 1992
ISBN: 88-200-1267-7
Sperling and Kupfer Editori, Milan, 1992

First Fireside Edition, 1992
ISBN: 0-671-76655-4
Fireside - Simon & Schuster, New York, 1992

Italian Edition - Paperback
Vivere Bene La Menopausa
Published December 1996
Wulf H. Utian and Ruth Jacobowitz
ISBN 8-7824-684-0
Sperling Paperback

The Menopause and Hormonal Replacement Therapy
- Facts and Controversies
Published September 3, 1991
Regine Sitruk-Ware and Wulf H. Utian
ISBN 0-8247-8564-9
Marcel Dekker, Inc., New York, 1991

French Edition
Menopause et Traitement Hormonal Substitutit
Published December, 1994
Regine Sitruk-Ware and Wulf H. Utian
ISBN 2-87671-084-6
Frison-Roche, Paris, 1994

Spanish Edition
Menopausia y Tratamiento hormonal sustitutivo
Hechos y Controversias
Published May, 1995
Regine Sitruk Ware and Wulf H. Utian
ISBN 84-7537-138-8
Ancora SA, Barcelona, 1993

COURSES, WORKSHOPS AND CONFERENCES ORGANIZED/CHAIRED

1979 Postgraduate Course in Gynecologic Endocrinology & Infertility
Case Western Reserve University, Cleveland, OH

1981 First Workshop in Fertility Surgery
Mt. Sinai Medical Center of Cleveland, Case Western Reserve University

1982 Gynecologic Microsurgery: The Nursing Application
Mt. Sinai Medical Center of Cleveland

1982 Workshops in Fertility Surgery
Mt. Sinai Medical Center of Cleveland, Case Western Reserve University (Basic/Advanced)

1982 Organizing Committee - The Physical and Mental Health of Aged Women, Center on Health and Aging
Case Western Reserve University, Cleveland, OH

1983 Controversial Aspects of Obstetrics and Gynecology
Harley Hotel of Cleveland

1983 Women's Wellness Day
Mt. Sinai Medical Center of Cleveland

1983 Third Annual Workshop in Fertility Surgery (Advanced)
Mt. Sinai Medical Center of Cleveland

1983 Third Annual Workshop in Fertility Surgery (Basic)
Mt. Sinai Medical Center of Cleveland

1983 International College of Surgeons Western Hemisphere Meeting, Obstetrical and Gynecologic Program, Cleveland, OH

1984 Women's Wellness Day
Mt. Sinai Medical Center of Cleveland

1984 Fourth Annual Workshops in Fertility Surgery
Mt. Sinai Medical Center of Cleveland

1984 XI Latin American Congress of Obstetrics and Gynecology, Organized Two Plenary Sessions: Menopause; Infertility Microsurgery

1984 Fourth International Congress on Obstetrics and Gynecology, Organizing Committee, Orlando, FL

1985 Workshops for the In Vitro Fertilization of Human Oocytes
Mt. Sinai Medical Center of Cleveland

1985 Women's Wellness Day
Mt. Sinai Medical Center of Cleveland

1985 A Morning on Menopause - An International Informational Meeting
Mt. Sinai Medical Center of Cleveland

1985 Workshop for IVF
Mt. Sinai Medical Center of Cleveland

1985 International Symposium on Menopause - The Controversial Climacteric, Hilton Inn South, Cleveland, OH
Mt. Sinai Medical Center and the International Menopause Society

1985 5th Annual Workshops in Fertility Surgery

Mt. Sinai Medical Center of Cleveland

1985 In Vitro Fertilization Workshop
Mt. Sinai Medical Center of Cleveland

1986 In Vitro Fertilization Workshop
Mt. Sinai Medical Center of Cleveland

1986 1st International Congress on Gyn Endocrinology Scientific Committee, Italy

1986 International College of Surgeons, U.S. Section, OB/GYN Program

1986 New and Evolving Concepts in Menopause, Co-Chairman with Dr. Morris Notelovitz (Florida), Cancun, Mexico

1986 Current Perspectives in the Management of the Menopausal and Postmenopausal Patient, Co-Chairman with Dr. Howard Judd (UCLA), Banff Springs, Canada

1987 Current Perspectives in the Management of the Menopausal and Postmenopausal Patient, Co-Chairman with Dr. Robert Lindsay (Columbia University), Virgin Islands

1987 5th International Congress on the Menopause, Organizing Committee, Sorrento, Italy

1987 Current Perspectives in the Management of the Menopausal and Postmenopausal Patient, Co-Chairman with Dr. Robert Lindsay (Columbia University), Tahoe, NV

1987 An Evening on Menopause - For Women and Men, Too, Landerhaven, Lyndhurst, OH

1988 Current Perspectives in the Management of the Menopausal and Postmenopausal Patient, Co-Chairman with Dr. Robert Lindsay (Columbia University), Banff Springs, Canada

1988 Menopause - Midlife Preventive Medicine for Women
Hilton Inn South, Cleveland, OH

1988 Current Perspectives on Menopause, Co-Chairman with Dr. Robert Lindsay (Columbia University), Hyatt Regency, San Francisco, CA

1989 PACE (Patterns of Administering Cycle/Continuous Estrogens) Post-Study Meeting, Palm Desert Resort, Palm Springs, CA

1989 Current Perspectives in the Management of the Menopausal and Postmenopausal Patient, Hilton Head, SC

1989 Menopause - Staying in Control, A Health Seminar for Women, Keynote Speaker - Shirley Jones, Stouffer's Tower City Plaza Center, Cleveland, OH

1989 Multidisciplinary Perspective on Menopause, Co-Sponsored by The New York Academy of Sciences and The North American Menopause Society (Inaugural Meeting) with F. Kronenberg, PhD and M. Flint, PhD

1989 Symposium on Vaginal Dryness: Overview and Update, Stanhope Hotel, New York, Co-Chair with Gloria Bachmann

1991 Chairperson, Roundtable Discussion "An Assessment of 17B Estradiol in Postmenopausal Women" for Healthcare Communication Network, The Boulders, Carefree, AZ

1991 Chairperson, Roundtable Discussion "Controversies in the Management of the Menopause", Reid-Rowell, Palm Springs, CA

1991 Chair, U.S. Congress Office Technology Assessment Workshop, Dirkson Senate Building, Washington, DC
"Hormone Replacement Therapy: Policy and Practice"

1991 Obstetrics and Gynecology Update 1991,
Department of Reproductive Biology, CWRU, Ritz Carlton Hotel, Cleveland, OH

1991 2nd Annual Meeting of The North American Menopause Society, Queen Elizabeth Hotel, Montreal, Canada

1991 Organizer and Moderator, "Taking Control of Menopause: A Health Seminar for Women", Stouffer's Tower City Plaza Center, Cleveland, OH

1992 Organizer and Moderator, "Obstetrics and Gynecology Update 1992", Stouffer's Tower City Plaza Center, Cleveland, OH CWRU CME Course

1992 Organizer and Moderator, "Menopause - You're Questions Answered", Stouffer's Tower City Plaza Center, Cleveland, OH Consumer Education

1992 3rd Annual Meeting of The North American Menopause Society, Stouffer's Tower City Plaza Center, Cleveland, OH

1992 Organizer and Moderator, "Postmenopausal Osteoporosis - Prevention, Diagnosis, Treatment"
CWRU Department of Reproductive Biology CME Program, Forum Center, Cleveland, OH

1993 National Institute on Aging, Workshop on Directions for Menopause Research, Bethesda, MD

1993 The North American Menopause Society Postgraduate Course: Menopause - The Background and Skills for Effective Therapy, The Copley Plaza Hotel, Boston, MA

1993 4th Annual Meeting of The North American Menopause Society, San Diego Hyatt Regency, San Diego, CA

1993 Organizer and Moderator, "Menopause - His and Hers", A Health Seminar for Men and Women, Stouffer's Tower City Plaza Center, Cleveland, OH

1994 5th Annual Meeting of The North American Menopause Society, The Washington Hilton, Washington, DC

1994 Organizer and Moderator, "Menopause - Confronting the Controversies", A Public Health Seminar, Stouffer's Tower City Plaza Center, Cleveland, OH

1995 NAMS Colloquium on Balancing the Risk: Benefit Equation of Long-Term Hormone Replacement Therapy, Co-Moderator with Fred Naftolin (Yale), San Francisco, CA

1995 6th Annual Meeting of The North American Menopause Society, San Francisco Marriott, San Francisco, CA

1995 Organizer and Moderator, The Menopause Clinic - A Practical Workshop, Cleveland Menopause Clinic, Cleveland, OH

1995 The Birthday Club/Plays for Living: Menopause Education Program, Stouffer's Tower City Plaza Center, Cleveland, OH

1996 7th Annual Meeting of The North American Menopause Society, Chicago, IL

1996 Menopause: Confronting the Controversies, University Hospitals Consumer Education Program, Holiday Inn, Westlake, OH

1996 Menopause: Confronting the Controversies, University Hospitals Consumer Education Program, Executive Caterers at Landerhaven, Lyndhurst, OH

1996 Scientific Committee, 8th International Menopause Congress, Sydney, Australia

1997 Selective Estrogen Receptor Modulators, Moderator, Eli Lilly Satellite Symposium at NAMS Meeting, Boston, MA

1997 8th Annual Mtg. of The North American Menopause Society, Boston, MA

1997 Co-Organizer, Course on Women's Health for Solvay Pharmaceuticals Senior Staff, Cleveland, OH

1998 9th Annual Meeting of The North American Menopause Society, Toronto, Canada

1999 10th Annual Meeting of The North American Menopause Society, New York Hilton, NYC, NY

1999 Co-Organizer and Moderator, "Hormones and Aging" and "Quiz the Experts", Kyoto Satellite Symposium of the 9th International Menopause Society World Congress on the Menopause

2000 11th Annual Meeting of The North American Menopause Society, Orlando, FL

2000 Organizer and Moderator, "Evaluating ERT/HRT for Postmenopausal Women" and "Quiz the Experts", Council of Affiliated Menopause Societies, Ibero-American Regional Planning Meeting on Best Medical Practice, Gainesville, FL

2000 ASBMR 22nd Annual Meeting, Toronto, Canada
ASBMR/NAMS Joint Symposium: Clinical Issues and HRT Planner and Moderator

2001 12th Annual Meeting of The North American Menopause Society, New Orleans, LA

2002 Organizer and Moderator, "Justifying the Trend to Lower Doses of HRT", "Tibalone" and "Quiz the Experts", WPO/YPO Educational Program: Menopause and Women's Health, Shoreby Club, Cleveland, OH

2002 13th Annual Meeting of The North American Menopause Society, Chicago, IL

2002 NAMS and Case Western Reserve University, Co-Sponsored Postgraduate Course, "Menopause Basics", Tri-C East Campus, Cleveland, OH

2003 14th Annual Mtg. The North American Menopause Society, Miami, FL

2004 Advanced Postgraduate Menopausal Course, The South African Menopause Society, Port Elizabeth, South Africa

2004 15th Annual Meeting of the North American Menopause Society, Washington, DC

2004 Vulvodynia and Sexual Pain Disorders in Women, A State of the Art Conference, Atlanta, GA, Sponsored by NIH, NAMS and ISSWSH, W Utian and Vivian Pinn, Director of the NIH Office of Women's Health Research, Co-Chairs

2005 16th Annual Mtg., of The North American Menopause Society, San Diego, CA

2006 17th Annual Mtg. of The North American Menopause Society, Nashville, Tennessee.

PAST AND PRESENT RESEARCH SUPPORT

Funding Agency	PI	Duration	Title	Direct Costs
Herman Bequest	W. Utian	1968-70	Metabolic Effects of Ovariectomy	$ 30,000
Atomic Energy Board	W. Utian	1969-72	Radiodensometric Bone Evaluation	10,000
Round Table Assn.	W. Utian	1971	Risk/Benefit of Estrogen Therapy	20,000
S.A. Medical Research Council with C. Beardwood	W. Utian	1971	Gonadotropin Excretion in Response to Audiostimulation	27,500
S.A. Medical Research Council with PJV Beaumont	W. Utian	1973	Bromergocryptine & Galactorrhea	25,000
University of Cape Town	W. Utian	1974-76	Interdisciplinary Investigation of Menopausal Estrogens	50,000
Ayerst Labs	W. Utian	1974-76	Interdisciplinary Investigation of Menopausal Estrogens	125,000
NIH	W. Utian	1977	RR-D5410-16 Adhesion Prevention	10,000
NIH/Pharmacia	W. Utian	1980-81	Hyskon Prevention Adhesion Study	100,000
CIBA-GEIGY	W. Utian	1983-85	Transdermal Estrogen Therapy	125,000
Organon	W. Utian	1986-88	OD-14, Hot Flashes & Bone Mass	56,000
Wyeth-Ayerst	W. Utian	1989-	Estrogen-Progestin Study	53,000
NIH	Kronenberg/ Utian	1989-	Multidisciplinary Perspectives on Reproductive Aging	35,997

Mead Johnson	W. Utian	1991	Megestrol Acetate In Postmenopausal Women After Treatment for Breast Cancer	150,000
Solvay	W. Utian	1992	Randomized Trial Estratest HS and Estratab in Sexual Functioning	42,980
Noven	W. Utian	1992	Transdermal Estradiol in Treatment of Menopausal Symptoms	26,895
NIH 1 R01 AR43303-01	W. Utian (Co-Invest)	12/93-11/98	Test the hypothesis that loss of estrogen in women unleashes the production and/or action of cytokines, such as IL-6, in the marrow microenvironment which are in turn responsible for an upregulation of hematopoietic progenitors of osteoclasts and increased osteoclast development	413,119
NIH	W. Utian (Co-Invest)	4/92-4/99	A Clinical Trial to Determine the Worth of Tamoxifen for Preventing Breast Cancer	14,300
Upjohn	W. Utian	9/94-11/96	Evaluation of Endometrial Histology and Bone Mineral Density in Postmenopausal Women Receiving Ogen/Provera HRT	194,000

Fournier	W. Utian (National PI on 26 site study)	12/94-12/96	Double-Blind Multicenter Placebo Controlled Clinical Trial in Parallel Groups to Measure Efficacy and Safety of 12 Weeks Treatment with TS 17 on Vasomotor Symptoms in Menopausal Patients	45,000
Wyeth-Ayerst	W. Utian	8/95-2/99	Prospective Double-Blind Randomized Study of Lower Doses of Premarin and MPA in Postmenopausal Women	194,000
Lipha Pharmaceuticals /Merck Darmstadt	W. Utian (US Project Consultant and PI/ Coordinator	1997	Multicenter Dose Finding Study Comparing the Efficacy of EMD90-171, a Once-a-week Estradiol Levonorgesterol Combination Transdermal System (TDS), with Placebo or the Treatment of Vasomotor Symptoms Assoc. with Menopause	
Parke-Davis	W. Utian	1998-	Quality of Life Validation Study	15,000

MULTIPLE GRANTS BEYOND THIS TIME SUBJECT TO CONFIDENTIALITY AGREEMENTS AT RAPID MEDICAL RESEARCH INC.

COURSES ATTENDED

1981	AFS, In Vitro Fertilization
1982	Eastern Virginia Medical School, In Vitro Fertilization
1982	Serono Symposia, Carmel, CA, In Vitro Fertilization
1983	Bourn Hall, Cambridge, England, In Vitro Fertilization
1986	Residency Training Accreditation Course, New York
1986	Center for Biomedical Ethics, CWRU, Closed Workshop, "Ethical Aspects of Human Fetal Tissue Transplantation"
1987	Research Directions in Osteoporosis, NIH, Washington, DC
1987	Gynecology and Infertility Laser Surgery Workshop, Mt. Sinai Medical Center of Cleveland
1987	Food and Drug Administration Conf. on Osteoporosis, Bethesda, MD
1994	Law-Medicine Center, Case Western Reserve University, National Health Care Reform: The Legal Issues
1996	Mandel Center for Non-Profit Organizations, Case Western Reserve University, Board and Administrative Responsibilities in Non-Profit Organizations
2001	International Society of Clinical Densitometry Course on Bone Densitometry, New Orleans, LA
2006	Harvard Business School Course on Excellence in Nonprofit Governance, Boston, Mass.

TELEVISION APPEARANCES

Date	**Channel**	**Program**	**Title**
09/06/77	5 - WEWS	Morning Exchange	Menopause
09/21/77	3 - WKYC	News	Menopause
10/17/77	Greek Nat'l TV	News/Discussion	Estrogen Therapy
11/08/77	43	Coffee Shoppe	Menopause
11/30/77	3 - WKYC	News	Microsurgery
06/10/78	Italian Nat'l TV	News	Menopause
07/27/78	3 - WKYC	News	Microsurgery
08/02/78	5 - WEWS	Morning Exchange	Infertility
05/02/79	3 - WKYC	Zapp Show	Tubal Reversal
05/29/79	8	News	Pregnancy Tests
07/07/80	5 -WEWS	Morning Exchange	Menopause - Book
07/09/80	3 -WKYC	Dave Patterson Show	Your Middle Years
07/15/80	43	AM Show	Menopause
09/09/81	5 - WEWS	News	Microsurgery
09/20/81	3 - WKYC	News	Microsurgery
10/15/81	3 - WKYC	Dave Patterson Show	Infertility/PMS
04/27/82	5 - WEWS	Morning Exchange	PMS
08/19/82	3 - WKYC	Dave Patterson Show	PMS/Menopause

10/03/82	3-5-8	All News Stations	In Vitro Fertilization
10/16/82	3 - WKYC	Dave Patterson Show	IVF/ET
12/16/82	5 - WEWS	Live on 5/Wilma Smith	IVF/ET
02/03/83	ABC Cincinnati	Braun & Company	Labor/Delivery/IVF
2/21-25/83	3 - WKYC	11:00 News	Infertility
02/22/83	5 - WEWS	Morning Exchange	Hope for Childless
03/09/83	5 - WEWS	Morning Exchange	IVF/ET
05/28/83	5 - WEWS	Live on 5	PMS
09/20/83	5 - WEWS	6:00 & 11:00 News	Microsurgery
11/05/83	3 - WKYC	6:00 & 11:00 News	First In Vitro Birth
11/06/83	3 - WKYC	6:00 & 11:00 News	First In Vitro Birth
11/06/83	5 - WEWS	6:00 & 11:00 News	First In Vitro Birth
11/06/83	8	6:00 & 11:00 News	First In Vitro Birth
11/07/83	8	6:00 & 11:00 News	First In Vitro Birth
11/08/83	5 - WEWS	Morning Exchange	First In Vitro Birth
11/14/83	3 - WKYC	11:00 News	Medical Miracles
12/07/83	8	PM Magazine	Infertility
03/05/84	3 - WKYC	AM Cleveland	IVF First Baby
04/11/84	5 - WEWS	Live on 5	Women's Wellness
04/28/84	3 - WKYC	Cleveland Challenge	Medical Research
05/02/84	5 - WEWS	Dorothy Fuldheim	Interview - Infertility
06/22/84	8	6:00 & 11:00 News	Embryo Cryo
08/02/84	27 Youngstown	6:00 & 11:00 News	In Vitro Fertilization
08/26/84	8	Evening News	Midwives
09/12/84	8	Evening News 11:00	Microsurgery
09/21/84	3 - WKYC	AM Cleveland	New Conceptions
10/19/84	5 - WEWS	Live on 5	In Vitro Fertilization
11/05/84	3 - WKYC	AM Cleveland	IVF - First Birthday Baby Micchia
11/22/84	8	Evening News	In Vitro Fertilization
11/23/84	8	Evening News Infertility	Costs of Treating
05/10/85	3 - WKYC	AM Cleveland	Menopause
05/22/85	5 - WEWS	Live on 5	Fertility Drugs
05/23/85	5 - WEWS	News	Smoking & Infertility
08/23/85	VIACOM	Eastwatch	Menopause
08/27-29/85	All National Networks, Local Stations and Newspapers Nationally		World's First Post-Hysterectomy Surrogate Preg.
08/30/85	5 - WEWS	Morning Exchange	Surrogate-IVF Pregnancy
11/18/85	25	MEDI-SCENE	Infertility
11/21/85	3 - WKYC	News	IVF - Surrogate
04/16/86	International News Coverage		IVF-Surrogate Pregnancy

07/17/86	NTL	Phil Donahue	IVF-Surrogate Pregnancy
08/12/86	NTL	Phil Donahue Show	IVF-Surrogate Pregnancy
08/29/86	5 - WEWS	Morning Exchange	Menopause
09/12/86	5 - WEWS	Morning Exchange	Estrogens
09/16/86	National Press Conference, Plaza Hotel, New York - All Media		The Transdermal Estrogen
10/05/86	LIFETIME	Health Network	Menopause -
10/12/86			Changes for the Better
11/04/86	PBS	NOVA	High-Tech Babies
11/21/86	WTAE-ABC	News	TTS Estrogen
11/28/86	PA	Evening News	TTS Estrogen
02/08/87	PBS	MEDI-SCENE	Menopause and Estrogen
03/02/87	3 - WKYC	AM Cleveland	Cleveland Menopause Clinic
03/03/87	5 - WEWS	Morning Exchange	Cleveland Menopause Clinic
03/15/87	LIFETIME	Physicians Journal	Patients & Medicine Update
04/05/87	LIFETIME	Physicians Journal	Management of Menopause Update
04/28/87	Fox TV	High-Tech Babies National Special	Surrogate - IVF
04/30/87	5 -WEWS	Morning Exchange	Surrogate-IVF With All Parties Involved
08/16/87	NBC	National News	IVF-Surrogate Legal Case
08/24/87	PBS	MEDI-SCENE 1-Hour Special	Changing Medicine for Women: The Bitter Pills
10/15/87	5 - WEWS	Morning Exchange	Menopause - For Men and Women
01/24/88	LIFETIME	OB/GYN Update	Osteoporosis
02/03/88	5 - WEWS	Live on 5	Menopause
03/03/88	LIFETIME	Doctors Sunday	A New Look at Cardiovascular Risk in Post-Menopausal Women
04/02/88	CBS	Phil Donahue	Women's Health
06/13/88	3 - WKYC	Evening News	Menopause
09/06/88	3 - WKYC	AM Cleveland	Menopause

06/08/89	5 - WEWS	Morning Exchange Shirley Jones	Menopause with
06/17/89	3 - WKYC	NBC Sunday Today Shirley Jones	Menopause with
01/07/90	LIFETIME	Family Practice	HRT - Update
01/21/90	5 - WEWS	Health Matters	Osteoporosis
01/24/90	Public TV 25	McNeil-Lehrer News	Estrogen & Menopause
04/09/90	South African TV	Antenna	Menopause
07/23/90	CBS	CBS This Morning Host: Paula Zahn	Menopause
07/23/90	CNN	Sonya Live	Menopause
07/24/90	Continental Cablevision Norwalk, CT	Fairfield Exchange Hosts: Rebecca Surran and David Smith	Menopause
07/25/90	Atlanta Interfaith	A Women's Place Host: Angela Rice	Menopause
07/27/90	5 - WEWS	Morning Exchange	Menopause
07/30/90	KFMB-CBS	Sun-Up San Diego	Menopause
07/30/90	KGTV-ABC	Staying Healthy	Menopause
08/07/90	National Satellite Television Tour News Programs and Talk Shows, 23 Cities		Managing Your Menopause
09/05/90	KKTV-CBS Colorado Springs	News at Noon	Menopause
09/05/90	KRSO-ABC Colorado Springs	Health Report	Menopause
09/05/90	KTVD Denver	About Town	Menopause
09/06/90	KMGH-CBS Denver	News	Menopause
09/06/90	KUSA-ABC Denver, Colorado	Good Afternoon	Menopause
06/28/91	TV-2 Monterrey, Mexico	News	Menopause
09/09/91	NBC National	Cover to Cover w/Robin Swoboda	Hormone Therapy
10/10/91	8 - CBS	News	Menopause & HRT
10/18/91	5 - WEWS	Morning Exchange	One Hour on PMS
03/31/92	3 - ABC	Evening News	Menopause/HRT
05/27/92	8 - CBS	CBS Evening News Dan Rather	Eye on America - Menopause
06/03/92	8 - CBS	Noon News - Local	Menopause
09/10/92	5 - WEWS	News at 11:00 p.m.	Pregnancy after Menopause
03/24/93	CNN	News Meeting	NIH, Menopause

04/01/93	5 - WEWS	Morning Exchange	NIH, Menopause
04/19-20/93	Argentina - Multiple	National Networks -	Menopause
05/06/93	8 - CBS	News	Malpractice Pressure & Premature Retirement
05/14/93	5 - NBC	Live on 5	Menopause & HRT
07/03/93	Lifetime TV	Special Facts with Debbie Reynolds	Menopause Myths
09/03/93	CBS - San Diego	News	Menopause Edu.
10/27/93	5 - WEWS	Morning Exchange	Menopause – His and Hers
10/28/93	5 - NBC	Live on 5	Menopause – His and Hers
04/27/94	8 - CBS	Evening News	South Africa
05/20/94	American Medical TV	Distribution	Menopause
05/27/94	5 - ABC	World Evening News with Peter Jennings	Menopause
10/28/94	WSB TV-2	Atlanta	Hot Flash
11/01/94	PBS	Women's Health	Menopause - Moderator of Live Call-In Panel
12/06/94	MedEdNet Satellite Network	Obstetrics & Gynecology Estrogen	Comprehensive Health Care Menopause
08/08/95	5 - WEWS	Live on 5	Hormones & Mood
10/11/95	5 - WEWS	Morning Exchange	Menopause - Plays for Living Program
05/31/96	National - Multiple	Live from National Press Club, Wash, DC	Natl Menopause Awareness Month
10/17/96	5 - WEWS	Morning Exchange	Menopause - NAMS
02/19/97	ABC - National	Prime Time Live	HRT
06/20/97	5 - WEWS	Morning Exchange	HRT & Longevity
08/14/97	5 - WEWS	Morning Exchange	Designer Estrogens
09/04/97	CNN - National	News	NAMS 1997 Gallup Survey
09/09/97	FOX TV-8	News	NAMS 1997 Gallup Survey
09/24/97	Polish National TV	News	Menopause
03/01/98	Channel 19 - CBS	News	Menopause
03/23/98	FOX-TV News	Health Program	Male Menopause
07/24/98	5 - WEWS	Morning Exchange	ERT/Patch
09/03/98	5 - WEWS	Morning News	Estrogen Research
09/17-18/98	Multiple	Canadian TV	NAMS Gallup

			Survey
10/98	Public TV		Menopause
11/27/98	Jamaican Natl TV	Sunrise	Menopause
04/05/00	3 - WKYC	News/Health	Women Heart Disease
04/19/00	3 - WKYC	Morning News	Hot Flashes
05/24/00	3 - WKYC	Morning News	Overactive Bladder
07/06/00	3 - WKYC	Morning News	Birth Control Pills
07/26/00	3 - WKYC	Morning News	Irritable Bowel Syndrome
08/09/00	3 - WKYC	Morning News	Sexual Arousal
08/16/00	19/43	Evening News	Long Cycle OC's
08/30/00	5 - WEWS	Live on 5	NAMS and Menopause
09/08/00	NBC Florida	News	Testosterone Patch
09/20/00	3 - WKYC	Morning News	Heart Disease
10/12/00	3 - WKYC	News with Fred Griffith	World Menopause
12/13/00	3 - WKYC	Morning News	HRT & Heart Disease
12/20/00	3 - WKYC	Morning News	HRT & Cancer
08/06/01	NBC	National news	EVA Trial Evista/Alendronate
08/14/01	Health Channel		Menopause
10/04/01	CBS New Orleans	Evening News	NAMS/Menopause
12/09/01	15/17 Cleveland	Mr. Robinson	Women's Health
05/26/02	5 - WEWS	News with Fred Griffith	Osteoporosis
05/26/02	KYC	Golden Opportunities	Osteoporosis
06/06/02	NTV Turkey	National News	Menopause
06/20/02	3	World News/Peter Jennings	HRT
07/10/02	CBS	Evening News/Dan Rather	WHI and HRT
07/21/02	KYC	Golden Opportunities	Sexual Dysfunction
08/09/02	8 FOX	Morning News	Alternates to HRT
08/26/02	15/45 Cleveland	Larry Robinson	Menopause & WHI
09/01/02	15/45	Larry Robinson	Menopause & WHI
11/20/02	CBS Evening News	Dan Rather	HRT and conflict
01/28/03	15/45 Cleveland	Larry Robinson	Menopause Estrogen
01/29/03	15/45 Cleveland	Larry Robinson	Male Menopause
05/18/03	KYC	Golden Opportunities	Osteoporosis
01/22/04	TV5 ABC	Evening News	PMDD and PMS
01/29/04	TV5 ABC	Evening News	Menopause Research
02/11/04	TV5 ABC	Evening News	NAMS/Menopause
06/29/04	TV5 ABC	Evening News	New VMS Drug
11/15/05	TV5 ABC	Evening News	PMS

12/05/05	National – Multiple	News	Bioidentical HT
12/27/05	CBS	National Evening News	Bioidentical HT
01/12/06	NBC	Good Company	Menopause
01/24/06	TV5 ABC	Morning News	HPV Vaccine
03/05/06	SABC(South Africa)	House Calls (1 Hour Live)	Menopause
06/21/06	Bravo	Health/Family	Redefining Menopause
07/31/06	WB 11 NYC	News Factfinders	Bio-identical HT
08/09/06	TV5 ABC	News	Sexual dysfunction
08/28/06	CBS	Early Show	Menopause 1
08/29/06	CBS	Early Show	Menopause 2
08/30/06	CBS	Early Show	Menopause 3
11/01/06	CBS	Evening News	Bioidenticals
11/14/06	CBS/19	Local News	Sexual dysfunction
11/15/06	CNN	Larry King Live	Bioidenticals
11/16/06	CNBC	Boomer Generation	Menopause market

HOSPITAL POSITIONS HELD

EMPLOYER	POSITION	SPECIALTY	DATE STARTED	DATE LEFT
Coronation Hospital P.O. Box 117 Industria, Transvaal	Intern	Gen. Surgery	12/01/62	12/31/62
Johannesburg Gen. Hospital Hospital Hill, Johannesburg	Intern	Gen. Medicine	2/01/63	7/31/63
Coronation Hospital	Intern	Gen. Surgery	8/01/63	11/30/63
Dr. Henry Stein Southdale Ctr. Robertsham, Johannesburg	Locum	Gen. Practice	12/01/63	12/31/63
Johannesburg Gen. Hospital	Sr. House Officer (Jr. Resident)	Gynaecology	8/01/64	1/31/65
Queen Victoria Maternity Hosp. Hospital Hill, Johannesburg	Sr. House Officer (Jr. Resident)	Obstetrics	2/01/65	7/31/65
Grey's Hospital Pietermaritzburg, Natal	Sr. Medical Officer (Resident)	Gen. Surgery	8/01/65	1/31/66
Groote Schuur Hospital Observatory, Cape Town	Registrar (Sr. Resident)	Obstetrics and Gynaecology	2/01/66	12/31/67
Groote Schuur Hospital and University of Cape Town	Full-Time Consultant, Lecturer, Specialist under supervision	Ob/Gyn, Medicine, Gen. Endocrinology	1/01/68 8/01/69	2/28/71 12/31/69

Self-Employed (Priv. Pract.) 924 Medipark, Foreshore, Cape Town	**Obstetrician and Gynaecologist**	**Obstetrics and Gynecology**	**3/01/71**	**7/30/76**
Case Western Reserve Univ.	**Assistant Professor**	**Repro. Biology**	**8/01/76**	**6/30/79**
Case Western Reserve Univ.	**Associate Professor**	**Repro. Biology**	**7/01/79**	**11/30/89**
Mt. Sinai Medical Center Cleveland, Ohio	**Director**	**Obstetrics and Gynecology**	**8/01/80**	**11/30/89**
Case Western Reserve Univ.	**Arthur H. Bill Professor & Chairman**	**Repro. Biology**	**12/01/89**	**12/31/99**
University Hosp. of Cleveland	**Director**	**Dept. of Obstetrics and Gynecology**		
Cleveland Clinic Foundation	**Consultant**	**Gynecology/Women's Health**	**12/01/00**	**Present**

For copies of the work submitted for the degree see Volume 2