



# MSc Global Surgery

UNIVERSITY OF CAPE TOWN  
DR PEACE FRANCIS

Supervisors – Professor Salome Maswime & Dr Chivaugn Gordon  
Division of Global Surgery, Department of Surgery, University of Cape Town

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

# Medical Students Exposure to and Perceptions of Global Surgery: A Multi-Site Study

by Peace O. Francis

FRNPEA001

SUBMITTED TO THE UNIVERSITY OF CAPE TOWN  
In fulfilment of the requirements for the degree

MSc Global Surgery

Faculty of Health Sciences  
UNIVERSITY OF CAPE TOWN



June 2024

Supervisors – Professor Salome Maswime & Dr Chivaugn Gordon  
Division of Global Surgery, Department of Surgery, University of Cape Town

Page | 1

# Acknowledgements

I would like to thank and acknowledge my supervisors – Professor Salome Maswime and Dr Chivaugn Gordon for their tireless efforts and support through the various iterations of this project. I would like to thank my family for their support in ensuring I could make the sacrifices necessary to put in the hours to complete this project. I am also acknowledging the support of site-coordinators in the various institutions who assisted in participant recruitment and navigating the ethics requirements of their institutions. I would like to acknowledge the University of Cape Town's Division of Global Surgery for their administrative support throughout my MSc and for their incredible work which sparked my interest in and passion for Global Surgery. To God be all the glory.

# Table of Contents

Title Page.....	1
Acknowledgements .....	2
Table of Contents.....	3
Declaration.....	5
Plagiarism Declaration.....	5
List of Figures.....	6
Synopsis.....	6
Chapter 1.....	7
Review Article - Developing a pipeline of African Global Surgery Scholars.....	7
Chapter 2.....	10
Abstract .....	11
Introduction.....	11
Methods.....	13
Research methodology .....	13
Sampling and Participant Recruitment .....	13
Data Collection and Data Analysis .....	14
Results.....	15
1. Definitions of Global Surgery and its Principles.....	16
2. Undergraduate Exposure to Global Surgery .....	17
3. Benefits of Global Surgery.....	18
4. Perceived Flaws Related to Global Surgery .....	19
5. Roles for Medical Students in Global Surgery .....	20
Discussion.....	21
Understanding of Global Surgery.....	21
Exposure and its Benefits.....	22
A Way Forward for Global Surgery .....	23
Limitations, Future Studies, and Advocacy.....	24
References .....	25
Addendum.....	29



# Declaration

I, Peace O Francis hereby declare that the work on which this dissertation/thesis is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university.

I empower the university to reproduce for the purpose of research either the whole or any portion of the contents in any manner whatsoever.

Signature:

Date: 10 January 2024

# Plagiarism Declaration

1. I know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.
1. I have used the *Vancouver* convention for citation and referencing. Each contribution to, and quotation in, this *Thesis* from the work(s) of other people has been attributed and has been cited and referenced. Any section taken from an internet source has been referenced to that source.
1. This *Thesis* is my own work and is in my own words (except where I have attributed it to others).
1. I have not allowed and will not allow anyone to copy my work with the intention of passing it off as his or her own work.
1. I acknowledge that copying someone else's assignment or essay, or part of it, is wrong, and declare that this is my own work.

Signature

## List of Figures

Figure 1 – The global surgery triad highlighting the interactions and reach of global surgery (*page 8*)

Figure 2 – Outline of Identified Themes (*page 15*)

## Synopsis

Global Surgery is a field that increasingly is relevant to clinicians in a low-and-middle-income countries (LMIC). Despite this, there is a paucity of clear pathways for clinicians in LMICs to access, influence and define this field. In my MSc I have aimed to investigate the understanding of, exposure to and benefits of exposure to Global Surgery in a multi-site South African context. This submission includes two chapters – Chapter 1 is a review article that speaks to my research. The review article is submitted in place of a Literature Review and details the lack of a clear pathway for LMIC clinicians into Global Surgery and offers some suggestions for change. Chapter 2, in place of the results chapter, is a qualitative study that builds on the opinion piece. It is a four-site study taking place in various tertiary education institutions across South Africa. In the study semi-structured interviews are used to explore senior medical students' exposure to and understanding of Global Surgery and to understanding their opinions on the usefulness of this exposure. This cumulative project hopes to add not just insight but suggestions that will hopefully result in a Global Surgery that is more LMIC-shaped.

# Chapter 1

## Review Article - Developing a pipeline of African Global Surgery Scholars

Published in SAMJ 2023

## Developing a pipeline of African global surgery scholars

Global surgery is developing as a new discipline in many countries. Global surgery primarily aims to improve access to quality surgery in low- and middle-income countries (LMICs). Therefore, ensuring appropriate LMIC representation and leadership in global surgery research, projects and innovations is essential. There is a paucity of pathways for students and young clinicians in LMICs to attain training in and exposure to global surgery research and projects. If equity in global surgery leadership and scholarship is truly desired, steps need to be taken to ensure that more students and young clinicians in LMICs are exposed to global surgery as an academic discipline and are offered pathways to practice and leadership. This editorial explores ways of ensuring these steps through increased exposure, increased training and increased funding.

Global surgery is defined as an area of study, research, practice and advocacy that seeks to improve health outcomes and achieve health equity for all people who need surgical, obstetric and anaesthesia care, with a special emphasis on underserved populations and populations in crisis. Global surgery primarily aims to improve access to quality surgery in LMICs.<sup>[1]</sup> Global surgery is developing as a new discipline in many countries. In practice, global surgery varies from interventions that enable the provision of safe and timely essential surgical services to strengthening surgical health systems, especially in district hospitals, to improving access to surgical services through policy and population-wide programmes. With this aim in mind, it is safe to say that investment in the development of global surgery as a discipline can ultimately increase the impact of all surgical disciplines (Fig. 1).

Ensuring appropriate LMIC representation and leadership in global surgery research, projects and innovations is essential, as by its very definition global surgery is particularly relevant to LMICs. There are currently more global surgery educational programmes in high-income countries (HICs), and the representation in international global surgery programmes is skewed in favour of HICs. The paucity of pathways for students and young clinicians in LMICs to attain training in and exposure to global surgery research and projects might be one of the reasons for this skewed representation.

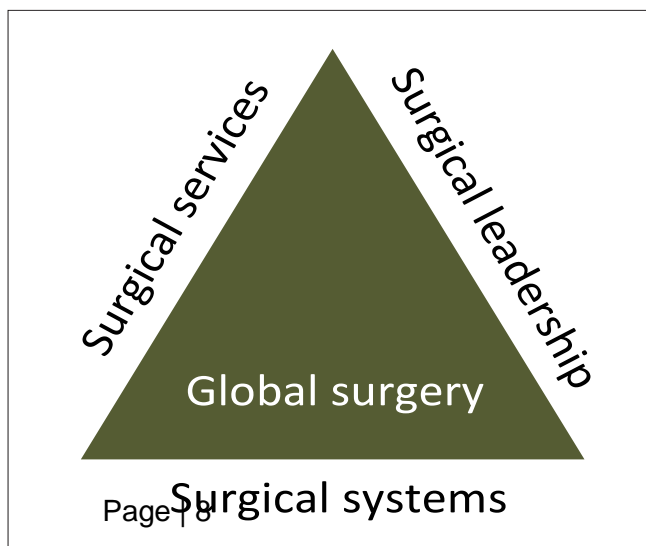


Fig. 1. The global surgery triad highlighting the intersections and reach of global surgery.

Creating a pipeline for African global surgery scholars will promote longevity in the field, and will enable the harnessing of the energy, ideas and cultural competencies contextually relevant to LMICs. The introduction of formalised global surgery programmes will better equip students for work in the discipline of global surgery, and could also increase the credibility of the discipline.<sup>[2]</sup> To enhance equity in global surgery leadership and scholarship, more students and young clinicians in LMICs should be exposed to global surgery as an academic discipline, and provided with pathways to practice and leadership.

In recent years, there has been an increase in interest in the field of global health, of which global surgery is an 'essential component'.<sup>[2]</sup> This increased interest, coupled with the understanding of the field's importance, has resulted in increased academic opportunities such as formalised academic programmes, electives and postgraduate fellowships in global surgery. Over the years, more opportunities for training and exposure to global surgery have emerged, including fellowships through non-governmental organisations (NGOs) such as Operation Smile and the African Paediatric Fellowship Programme, and the increasingly ubiquitous student organisation InciSioN (International Student Surgical Network). However, when one considers programmes housed in academic institutions, most of these are found in HICs, such as the USA and UK. There is a disproportionately higher number of global surgery academic programmes and opportunities to study in HICs. We found a non-exhaustive list of 12 institutions that provide training, research, experience or funding for training in global surgery in the USA alone.<sup>[2]</sup> Taking a comparative look at the Southern African Development Community (SADC) region, which includes 16 of the 54 internationally recognised countries within the African continent, we find that cumulatively, these countries have only five centres of global surgery, with two of these centres offering or in the process of offering formalised programmes such as fellowships, Master's and PhDs in global surgery. Many US fellowships allow, and even encourage, applicants from LMICs. However, these programmes are unfunded or partially funded, making them prohibitively expensive for most applicants from LMICs. A recent international survey done by the InciSioN Collaborative noted that 43% of participants named the lack of an established career paths as a barrier to pursuing a career in global surgery.<sup>[3]</sup> In addition, almost 40% of participants named financial constraints as a barrier. Therefore, it is not enough to motivate for more LMIC applicants to be accepted into these international programmes – more home-grown solutions are needed, alongside an African pipeline for African global surgery leaders. Home-grown solutions mitigate against costs such as visas and living expenses in HICs, and most importantly, ensure that global surgery training is contextual and relevant to LMICs. This African pipeline must take the form of three tracks: increased exposure, increased training and increased funding.

### Increased exposure

While the principles of global surgery – equity, access and safety – have been studied and implemented in Africa for years, the unifying field of global surgery is still gaining traction. To address the growing interest in this field, we must expose African medical students and junior doctors to global surgery, by embedding global surgery into the medical school curriculum and hosting conferences and workshops in African countries, making them more accessible to these future global

surgery leaders. A rigorous alternative would involve funding African global surgery thinkers and leaders to design and host their own global surgery networks and conferences. An example of this is the AfroSurg Collaborative created in 2020,<sup>[4]</sup> which seeks to set a global surgery agenda for the SADC region. AfroSurg allowed medical students and junior doctors to participate in research and research agenda-setting, and exposed them to possible global surgery mentors. This opportunity would not be as accessible if the same conference was held in a HIC.

### Increased training

Ultimately, increases in funding and exposure will lead to both a demand for and the platform to increase global surgery training in Africa. To create credible and competent global surgery leaders in Africa, it is imperative that training in global surgery encompasses formalised exposure to, and involvement in, global surgery research and projects. For this to occur, tertiary institutions in Africa must begin to form and expand global surgery entities and to house degree and non-degree programmes. These programmes can take on many formats, from mentored research assistantships, fellowships, Master's programmes and electives. Without the qualifications and acknowledgements of formalised programmes and curriculums, it is difficult for young clinicians and students to quantify their global surgery qualifications and experience. Formalised programmes also increase the access to mentorship, which is broadly acknowledged as a critical component of a successful career.

### Increased funding

While strides have been taken to ensure that applicants from LMICs can access funding for some large international grants, the grants are often administered through institutions in HICs. For sustainable and long-term change to occur, more investment is needed in African institutions. An example of this is the MEPI (Medical Education Partnership Initiative) grant in Zimbabwe,<sup>[5]</sup> which resulted in short-term and long-term improvements to infrastructure, human resources and research capabilities, which all provide a platform for future academics and clinicians to build on and grow in. The MEPI grant included examples of the development of structured programmes<sup>[5]</sup> in Africa for African clinicians and students – all taking place in a student's home country, minimising the programme cost and ultimately ensuring that available funding generates more utility. This is particularly important for students and junior clinicians, who often do not have much disposable income. Similarly to the funding of the AfroSurg conference, more funding should be earmarked for African-focused and hosted conferences, allowing Africans to set their own agenda and design contextually driven and appropriate solutions. It is also vital that research funding in Africa is broadened to include funding for local global surgery research-related projects. Going even further, there is a need for more local and national government as well as private and NGO investment in global surgery holistically, including global surgery training. African governments and institutions should be investing in global surgery. For this to become reality, increased advocacy within tertiary institutions and governmental departments is necessary to explain the importance and benefit of increased global surgery funding for the health of a population.

Furthermore, it is important to find easy pathways for students and trainees to access global surgery training such as intercalated programmes. This would allow students and trainees the opportunity to seamlessly spend a year in a global surgery training programme in the middle of their degree, and return to the degree programme.

It is also essential to increase awareness of the fact that training in global surgery is training in health systems, training in advocacy and training in transdisciplinary approaches to solving health problems, hence enhancing medical and health sciences training in general.

### Conclusion

To ensure adequate representation of LMICs in global surgery, investment needs to be made of time, effort and money in the creation of clear pathways for training opportunities and funding in global surgery projects and research. While these pathways are wholly lacking in LMICs, a focus on creating these pathways for young aspiring African global surgery leaders, even starting with workshops in undergraduate classrooms, could not only increase surgical access for all, but could in the long term provide longevity, rigorous diversity and new energy to the global surgery mandate on the continent.

#### P Francis

*Global Surgery Division, Department of Surgery, Faculty of Health Sciences, University of Cape Town, South Africa*  
frnpea001@myuct.ac.za

#### K Chu

*Centre for Global Surgery, Department of Global Health, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, South Africa*

#### M Isiagi

*Global Surgery Division, Department of Surgery, Faculty of Health Sciences, University of Cape Town, South Africa*

#### G Fieggen

*Department of Surgery, Faculty of Health Sciences, University of Cape Town, South Africa*

#### C Gordon

*Department of Obstetrics and Gynaecology, Faculty of Health Sciences, University of Cape Town, South Africa*

#### S Maswime

*Global Surgery Division, Department of Surgery, Faculty of Health Sciences, University of Cape Town, South Africa*

**Funding.** SM is funded through a South African Medical Research Council Midcareer scientist award.

1. Meara JG, Leather AJM, Hagander L, et al. Global surgery 2030: Evidence and solutions for achieving health, welfare, and economic development. *Lancet* 2015;386(9993):569-624. [https://doi.org/10.1016/S0140-6736\(15\)60160-X](https://doi.org/10.1016/S0140-6736(15)60160-X)
2. Krishnaswami S, Stephens CQ, Yang GP, et al. An academic career in global surgery: A position paper from the Society of University Surgeons Committee on Academic Global Surgery. *Surgery* 2018;163(4):954-960. <https://doi.org/10.1016/j.surg.2017.10.019>
3. Incision Collaborative. International survey of medical students exposure to relevant global surgery (ISOMERS): A cross-sectional study. *World J Surg* 2022;46(7):1577-1584. <https://doi.org/10.1007/s00268-022-06440-0>
4. Breedt DS, Odland ML, Bakanisi B, et al. Identifying knowledge needed to improve surgical care in Southern Africa using a theory of change approach. *BMJ Glob Health* 2021;6(6):e005629. <https://doi.org/10.1136/bmjgh-2021-005629>
5. Hakim JG, Chidzonga MM, Borok MZ, et al. Medical education partnership initiative (MEPI) in Zimbabwe: Outcomes and challenges. *Glob Health Sci Pract* 2018;6(1):82-92. <https://doi.org/10.9745/GHSP-D-17-00052>

*S Afr Med J* 2023;113(7):e1104. <https://doi.org/10.7196/SAMJ.2023.v113i7.1104>

# Chapter 2

Qualitative Study

Medical Students Exposure to and Perceptions of Global Surgery: A Multi-Site Study

## Abstract

Global Surgery is a burgeoning field especially in the low-and-middle-income country (LMIC) context. While exposure is increasing, research shows students are often exposed incidentally and not through the formal curriculum. Research also shows that there is no coherent pedagogy around Global Surgery education. In this qualitative, phenomenological study, nine final and penultimate year medical students were interviewed in semi-structured interviews to unpack their understanding of and exposure to Global Surgery. Five themes were extracted from the data – understanding of global surgery and its principles, undergraduate exposure to global surgery, benefits of global surgery, perceived flaws related to global surgery and roles for medical students in global surgery. Participants in this study had a systemic understanding of Global Surgery – they identified clear benefits of Global Surgery including its ability to strengthen health systems through multidisciplinary approaches. Participants also spoke to a lack of Global Surgery exposure in formal curriculum despite seeing many contextual benefits of exposure. As a new field we see the current lack of exposure and lack of established pedagogy as an opportunity for LMICs to define a Global Surgery pedagogy that can shape an aspirational healthcare system.

## Introduction

Global Surgery is a burgeoning field focussed on increasing the advancement of and access to essential surgical, obstetric and anaesthetic care holistically, taking both social and economic factors into account (1). The importance of investment into surgery globally is highlighted by the mortality attributed to surgically treated conditions greater than the combined mortality of conditions such as malaria, tuberculosis, and HIV/AIDS (1). Global Surgery, in its aims, targets changes both at patient and population level and thus can be seen as a vehicle for widespread surgical and health systems strengthening.

Research on surgical outcomes in Africa have highlighted the limitation in the human resources available to do this work (2). Human resources have been heralded as the cornerstone of health care delivery (1). Personnel shortages exist worldwide but disproportionately affect low- and middle-income countries (LMICs), hampering the

aims of Global Surgery and, more broadly, leaps towards universal health coverage and the achievement of the sustainable development goals. One solution to the human resources for health challenge is the mobilisation of medical students to specialities, locations (LMICs, rural areas etc.) and with competencies to adequately fulfil the needs.

Most medical schools in South Africa have adopted a primary care or community-based focus, integrating public health and primary health care principles into their curricula (3,4,5,6, 7, 8, 9) but Global Surgery and its system strengthening perspectives as a developing field are not yet formally integrated. Research done in medical students at the University of Cape Town in South Africa (10) found that less than 25% of participants had knowledge of the Lancet Commission on Global Surgery and less than 40% knew of the World Health Assembly declaration on essential and emergency surgical procedures – arguably two landmarks in the global health and Global Surgery trajectories (10). This finding is in keeping with research done in other areas, including in high-income- countries, where low percentages of undergraduate medical students report formal curricular integration of Global surgery (11). Very few studies interrogate what students mean when they use the term Global Surgery with one study reporting that only 26% of participants were able to rightly select the appropriate definition from five options and another study finding that less 5% of participants had broad knowledge of Global Surgery (new 12, new 13 - Brazil). Furthermore, previous research looking into similar topics have found that published curricular references to Global Surgery focus on postgraduate level and those that speak to an undergraduate level are primarily in HIC institutions and take on the form of mission-based electives with Global Surgery being discussed and understood as international and missional surgery (12,13). As a new field the current research on Global Surgery exposure, training and curricular integration show vast variations in the type of exposure but also around what a Global Surgery curriculum constitutes. This study aims to understand South African medical students' exposure to Global Surgery and their understanding of their health systems in the context of Global Surgery.

# Methods

## Research methodology

This qualitative study used a phenomenological methodology. Phenomenology seeks to delve into an individual's specific viewpoint and 'seeks to understand, describe, and interpret human behaviour and the meaning individuals make of their experiences' (14). This meth methodology was chosen as the aim of this study was to explore and understand the intricacies of medical students' exposure to Global Surgery (14). Furthermore, we aimed to delve into their understandings of Global Surgery and the ways in which it has potentially impacted their perspectives on the healthcare system and possible career trajectories.

## Sampling and Participant Recruitment

Four institutions in South Africa were selected across three provinces with two of the institutions having a formalised Global Surgery programme. Final and penultimate year medical students were selected due to their ability to speak more broadly to the contents of the curriculum as they had traversed most of it. English was chosen as the medium of exchange as English is the language of instruction at South African medical schools. Participants were also required to have exposure to Global Surgery, and this was included in the information and consent forms distributed to all potential participants. The definition of what constituted exposure was defined broadly, however, and Global Surgery all those who agreed to take part in the study were interviewed without having to quantify their exposure and as such interviews had a varied length as the questions were not applicable to some of the participants.

Purposive sampling was chosen to ensure that students, where possible, had enough background knowledge about Global Surgery for the interviews to be meaningful. A smaller sample size was anticipated when taking into consideration the fact that Global Surgery is a new field of study and thus exposure to the field is limited. Furthermore, for the purposes of this study, participants were further limited by year of study which decreases the pool of possible participants. Contacts were found in each institution who had access to possible participants due to their university positions or role in Global Surgery at the institution. In some instances these contacts

were able to recommend appropriate candidates. However, due to low numbers of participants, the study was also promoted at extra-curricular surgical society meetings and through class representatives. Participants were also asked to recommend colleagues who met the inclusion criteria for the study. Various calls for participants to sign up were made through various channels and a possible conclusion for the low uptake is possibly a lack of knowledge around Global Surgery amongst the potential participant pool. This is supported by the answers from participants in the low uptake institutions who acknowledged that they had never heard about Global Surgery before seeing the information and consent form of the study. A total of 9 participants were recruited. Of the 9 participants, the interviews of 2 participants were terminated prematurely when it became clear that the participants did not have any prior knowledge of or exposure to Global Surgery.

## Data Collection and Data Analysis

Semi-structured interviews were conducted using a set of 14 questions as a base. These 14 questions were piloted and refined and validated before the commencement of interviews with participants. In the development of the 14 questions, the available literature was reviewed in order to understand the gaps in the literature. The search strategy included using the PubMed database and using broad Mesh Terms around Global Surgery and medical student education, training and teaching. Over 600 articles were reviewed and the references of suitable articles were reviewed to assist in the development of the questions. In-depth interviews were chosen over focus groups as the priority was to delve deeply into the experiences of participants and to garner rich data and to allow space for participants to show their own understanding without fear of being wrong when around peers (14). Interviews were done via Microsoft Teams. This format of individual in-depth interview allowed for the personalisation of the interview and gave space to delve into the participants' context and personal views (15) while also ensuring that key information was collected across interviews without restricting personal stories (15). The interviews were recorded and transcribed by the researcher. The average duration of interviews was 1 hour and a total of 58 pages were transcribed. NVivo Software was used to aid in the data analysis process. NVivo is a software tool that allows for storage and organisation of data into codes and themes in a simple and efficient manner.

Page | 14

Transcripts were then uploaded to NVivo and transcripts were coded initially according to the questions from the interview guide and additional recurring themes from the interviews. The codes were then reviewed by the second author, who has prior experience in qualitative research, and found to be appropriate.

In review of the data, thematic analysis of the codes was done by both the first and second author, and it was found that the answers participants gave to the questions from the interview guide created five broad themes - definitions of Global Surgery and its principles, undergraduate exposure to Global Surgery, benefits of Global Surgery, perceived flaws of Global Surgery and roles for medical students in Global Surgery. Thematic analysis was chosen due to its propensity to allow for firstly the summarising of the data but also to allow for comparison of similarities and differences in participant perspectives (16)

## Results

The themes derived from the data are presented below.

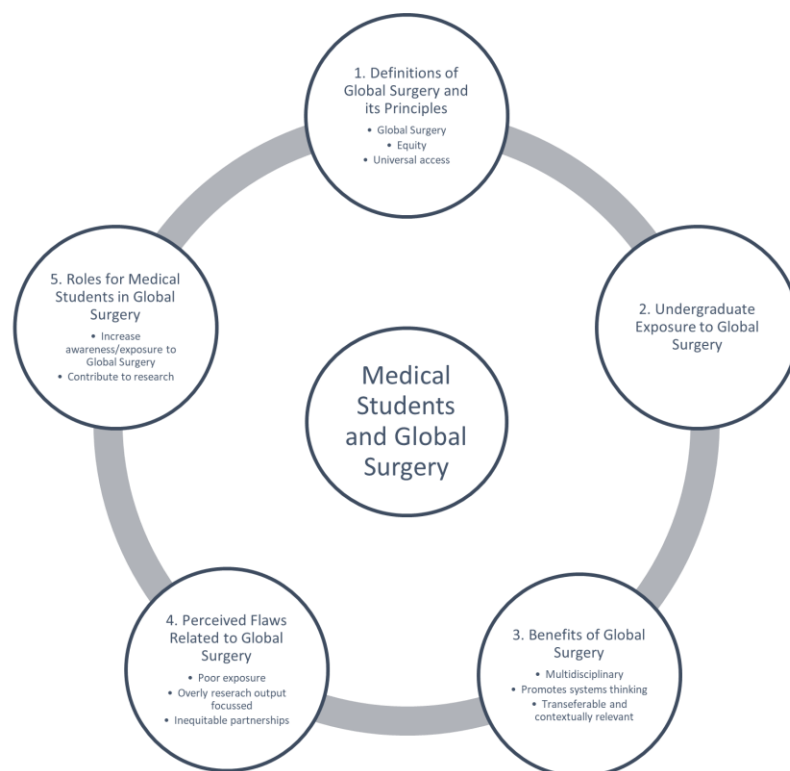


Figure 2: Outline of Identified Themes

# 1. Definitions of Global Surgery and its Principles

## Defining Global Surgery

Most of the participants understood Global Surgery to be a multidisciplinary field. Most answers also included the fact that GS involved improved healthcare quality and access to surgical care:

*'[Global Surgery is about] distributing the surgical care equally between all people and also initiating protocols to ensure that everyone then receives the same quality of surgical care.'* (Participant 7)

Participants also mostly included the contextuality of the focus of GS efforts, for example:

*'[Global Surgery has a] special emphasis on populations in crisis.'* (Participant 4)

## Defining Equitable Healthcare

Participants had very similar understandings of equity as pertains to health/surgery:

*'I would define equity in surgery as a need to have resources in proportion to the needs specific to the population community.'* (Participant 3)

Most participants highlighted the fact that factors such as identity and geography should not have bearing on access to and quality of care:

*'Equity in surgery is about ensuring that people, regardless of where they are, who they are, have relatively equal access to the high-quality care.'* (Participant 4)

## Defining Universal Access to Healthcare/Surgery

Like their understanding of equity in healthcare, participants highlighted demographics when explaining or defining universal access to surgery and highlighted that the care needed to be needed/relevant:

*'I think universal access to surgery would be just the notion that regardless of where you are and what limitations they are in their community, you would have the ability to obtain surgery where relevant.'* (Participant 3)

## 2. Undergraduate Exposure to Global Surgery

Most participants highlighted that their exposure to GS was self-directed or accidental:

*'At the beginning, although I must say the original reason I got involved was because I was very much interested in the public health goals and the notion that surgeons don't typically prioritise public health.'* (Participant 3)

*'[T]hat was done out of my own volition because I'm interested in surgery and I'm doing research in a field that involves me reading a lot about Global Surgery.'*  
(Participant 5)

*" I thought it was very interesting and it almost really seemed like an abstract [perspective to] me because we'd never been exposed to [Global Surgery].'*  
(Participant 2)

Students also highlighted that extracurricular activities and optional societies helped with either their initial exposure or further exposure:

*'I'm part of the Surgical Society and they host various workshops, webinars. They collaborate with the [University's] Global Surgery [programme] with symposiums. So, I've had access through that.'* (Participant 1)

*'So the main times that I've been exposed to it is I'm part of the Surgical Society, so they have posted a few talks on it.'* (Participant 2)

*'I was first exposed to Global Surgery and its principles when I was in MBCHB 3 when I attended a Surgical Society conference in Johannesburg (which I had to pay for). That was the first time I really learned about what Global Surgery is and how it*  
Page | 17

*can have an effect on how we deliver surgical services within South Africa.'*

(Participant 7)

Only one university has GS integrated into their formalised undergraduate curriculum:

*'It has been integrated into our university's curriculum as a workshop now in our fifth year of medicine and during our obstetrics rotation [in final year].'* (Participant 3)

### 3. Benefits of Global Surgery

#### Multidisciplinary in Nature

A recurring benefit amongst participants was the multidisciplinary nature of GS:

*'One of the biggest benefits is that it takes a multidisciplinary approach.'*

(Participant 3)

*'[S]eeing global surgery and hearing a bit more about it, you start to [understand] the whole multidisciplinary team from a new perspective. We always talk about doctors, [occupational therapists], physios but Global Surgery bring[s] in different aspects.'* (Participant 2)

#### Systems Thinking

Participants also highlighted the systems thinking and approach GS brings to healthcare:

*'I think it's helped us think about how systems and not just people in the systems are really important to ensuring good outcomes.'* (Participant 4)

*'Global Surgery emphasizes systems thinking [it] look[s] at the system as a whole and see[s] how to improve on things like the financial distribution of things [or the] leadership in the facility.'* (Participant 1)

## Transferability and Contextual Relevance

Participants also highlighted the fact that GS and its principles are transferable beyond surgical fields as well as its relevance to their contexts:

*'I think the sort of the skills that you learn and the principles of you know, equitable care and stuff like that, is very applicable to everybody's practice in everything and just everybody's daily life regardless of practices.'* (Participant 6)

*'I think in whatever field of medicine I got into, even if it's not a surgical...discipline, I think the principles of Global Surgery will apply.'* (Participant 4)

*'The basis of so many things could be fixed by Global Surgery.'* (Participant 2)

*'I definitely think that it is relevant to our context, especially in South Africa where we work with different types of levels of hospitals.'* (Participant 7)

## 4. Perceived Flaws Related to Global Surgery

### Lack of Exposure

A recurrent flaw that most participants highlighted was the lack of exposure to GS and the fact that the field was niche and not widely understood or discussed:

*'[O]ne of the flaws that I noticed immediately just from researching is just the fact that its exposure is quite lacking.'* (Participant 2)

*'[I]t's not really given much exposure in undergraduate studies, so it's not really well known as a field.'* (Participant 1)

*'[I]f you don't go looking, if you don't have a particular interest in surgery - I can promise you I never would have heard about this at all if I didn't have a very particular interest in surgery.'* (Participant 6)

### Overly Research Output Focused

Participants also mentioned the fact that from their exposure GS seemed more focused on academic and research output as opposed to action:

*'[W]e keep them being lectured about it, but to be able to actually get to the practical aspect and getting our hands involved and getting ourselves involved would be a lot better.'* (Participant 2)

*'[T]oo much of an emphasis on academic output, I think maybe if surgeons were encouraged to pursue Global Surgery that might take away time from clinical practice.'* (Participant 5)

### Inequitable Partnerships

Some participants also highlighted inequitable partnerships in GS:

*'I think a lot of the literature is from US based and UK based organisations. I don't think a lot of them actually know what it's like on the ground and having the perspective of South Africa and Africa.'* (Participant 5)

*'I think a frustration from my side is the saviour complex as perpetuated from South-North interactions.'* (Participant 4)

## 5. Roles for Medical Students in Global Surgery

One role described by participants were medical students increasing awareness around GS:

*"So everybody loves saying students are wonderful assists. [W]e, [medical students] usually can be of quite a bit of help but also getting word out to colleagues and other students and getting people involved.'* (Participant 6)

*'Since [the] majority of us don't really have an idea about what Global Surgery is about, I think medical students specifically with regards to student surgical societies*

*in this case play quite a large role in introducing the field of Global Surgery to their peers.'* (Participant 7)

Another possible role cited for students was involvement in GS research:

*'So I think that's also a very applicable part of where medical students can be useful is sort of in the research side of things.'* (Participant 6)

*'So, I think the role for students is to be involved, to host events, to try to help with research projects and to really start growing and establishing themselves as leaders in the field.'* (Participant 4)

## Discussion

### Understanding of Global Surgery

Participants demonstrated coherent understandings of Global Surgery in line with the Lancet commission's definition. Participants had a good grasp of the principles of Global Surgery and could integrate these definitions into answers around relevance, transferability and Global Surgery's flaws and benefits. Participants were able to understand the systemic perspective of Global Surgery and its multidisciplinary nature in achieving key outcomes to improve healthcare for all. The available research around this topic, while sparse and largely quantitative in nature, showed participants who had a poor understanding of Global Surgery, participants who often defined it as purely surgical missions, international surgery provision or general surgery or did not delve into how participants would define Global Surgery but rather asked broadly around awareness of Global Surgery (18, 19, 20). This study was different to most of the studies in this category in that the inclusion criteria selected for participants who had prior experience or knowledge of Global Surgery. With that in mind, the participants of this study by comparison, had a different grasp of what Global Surgery was – highlighting its far-reaching benefits on the healthcare system in general and on health systems. Participants also did not mention factors such as needing to travel abroad to apply Global Surgery. We assume that students in this setting, perhaps because of their knowledge of Global Surgery or because of their location in a middle-

income-country or both, were more intentional in applying Global Surgery principles within their local setting, rather than looking for weaker health systems.

Of note was the difference in structure of answers in participants from the one institution that had integrated Global Surgery into the formalised curriculum. These participants spoke of multiple exposures to Global Surgery and in different forms - from workshops to lectures and prolonged series on understanding Global Surgery. There was increased diversity in the answers of these participants especially as pertained to the flaws and benefits of Global Surgery and these participants were able to articulate more clearly and concisely the definitions of Global Surgery and its principles.

### Exposure and its Benefits

Across the participants mostly seemed to come across global surgery either through their own personal study based on areas of interest or through extracurricular activities where Global Surgery was presented. This was true even of universities where there are formalised Global Surgery academic programmes. In one institution Global Surgery has been integrated into the curriculum and in two institutions some participants admitted that the first time they had even heard about Global Surgery was in reading through the information and consent forms for participation in this study. These findings correlate with the findings of other studies showing the lack of formalised exposure to Global Surgery in comparison to the desired level by students and trainees (10, 20, 21, 22). However, all participants who understood Global Surgery unanimously spoke to its relevance in their context and the role it can play in shaping the aspirational health care system. Participants were certain that Global Surgery provided perspectives and competencies they felt were applicable to the healthcare system in totality even non-surgical disciplines. Interestingly participants did not view Global Surgery as a field that required travel or moving but understood it more as an ideal that all healthcare workers should strive towards. In our study we found that, the more understanding of Global Surgery and its principles participants had, the more they found Global Surgery to be a field they could seamlessly integrate into their practice and furthermore a field they felt had global significance even in high-income countries. Ultimately students highlighted a lack of exposure to, awareness

of and integration of Global Surgery as one its biggest flaws, but simultaneously saw raising awareness of Global Surgery amongst peers as a major possible role of students in Global Surgery.

## A Way Forward for Global Surgery

The coherent message from the participants was that global surgery was relevant and transferable and provided a unique perspective that enhanced their competency as health professionals in their respective contexts. For most of them, their discovery of global surgery was accidental or self-directed. This is in line with other research that found similarly that students often incidentally find out about Global Surgery instead of being actively exposed to it (18). This unstructured exposure can lead to misconceptions and a lack of understanding in Global Surgery (18) but is also an opportunity, especially in LMICs like South Africa. There is a keen interest in Global Surgery and clinicians and academics in LMICs can now shape the discourse of Global Surgery in a new and contextually relevant way. Participants mentioned inequitable partnerships as a flaw in Global Surgery, but perhaps the Global Surgery shaped by LMIC clinicians and academics and shared with interested students could challenges and shape the future of Global Surgery.

HIC countries disproportionately host more Global Surgery academic programmes (23) and events despite the fact that in its definition Global Surgery, while applicable to all settings, is particularly relevant to LMICs (1, 24). While studies are being done on the benefits of Global Surgery and exposure to Global Surgery, these are studies mostly from HICs which often use a definition of Global Surgery which revolves around missional experiences for HIC clinicians in LMIC settings. One such study reports that the outcomes from such a programme includes students' desire for more learnings on international health and increased desires for altruistic practices of medicine (25). While these are beneficial outcomes, our results show that the Global Surgery these South African students are exposed to seems to be giving rise to a better understanding of the healthcare system and ways to enact broad-scale change. These competencies are particularly relevant in the LMIC and more specifically the African health context. There are currently no agreed-upon competencies (12,26)

around Global Surgery education, due to the novelty of the field, and we believe this is an opportunity. LMIC academics and clinicians now have an opportunity to create and help define a Global Surgery pedagogy that speaks more to their needs – one focussed on health systems and systems strengthening, advocacy and ‘transdisciplinary approaches to solving health problems’ (27). This will require a thoughtful approach to curriculum development and increased intentional exposure to Global Surgery in LMIC settings shaped by LMIC clinicians and academics. This Global Surgery Pipeline will not just ensure the aims of Global Surgery are achieved in more contextual and sustainable ways but also can strengthen the health system.

## Limitations, Future Studies, and Advocacy

While this study was limited in terms of the number of participants, the data collected was rich and the aims of exploring exposure and understanding were met and saturation was achieved. By the conclusion of interviews, the same information was repeated by more and more participants and no further new information was elucidated. This, together with the difficulty in find more participants despite the efforts detailed under ‘Sampling and Participant Recruitment’ indicate a lower sample size was more appropriate.

The specific selection of students who had prior knowledge or experience in Global Surgery makes this study in some ways incomparable to other studies exploring medical students’ exposure and perceptions to Global Surgery. However, this very fact provides important information into the effectiveness of exposure, how students are exposed and the effects of the exposure.

This study provides a good starting point for further research into the potential impact of Global Surgery teaching to undergraduates and acts as an advocacy tool to motivate for formal integration of Global Surgery or clear teaching around the systems thinking and principles of Global Surgery in undergraduate medical curriculum. Another avenue would be utilise existing Public Health teaching blocks to highlight Global Surgery principles and the Public Health implications of failure to achieve Global Surgery principles. The participants of this study found their exposure to

Global Surgery to be key in their understanding of their future work as doctors who function in teams, and useful despite where their careers take them.

Our hope is that this study opens the door for more targeted studies that look to defining Global Surgery pedagogy and the benefits of Global Surgery teaching focused on a more systems approach for healthcare workers in the era of sustainable development goals and in particular healthcare workers in LMICs.

## References

1. Meara JG, Leather AJM, Hagander L, Alkire BC, Alonso N, Ameh EA, et al. Global Surgery 2030: Evidence and solutions for achieving health, welfare, and economic development. *Lancet*. 2015;386(9993):569–624.
2. Biccard BM, Madiba TE, Kluyts HL, Munlemvo DM, Madzimbamuto FD, Basenero A, et al. Perioperative patient outcomes in the African Surgical Outcomes Study: a 7-day prospective observational cohort study. *Lancet*. 2018;391(10130):1589–98.
3. Seggie JL. MB ChB curriculum modernisation in South Africa – growing doctors for Africa. *AJHPE*. 2010; 2(1).  
<https://journals.co.za/doi/pdf/10.10520/EJC62431>
4. Ncayiyana D. Medical education challenges in South Africa. *Med Educ*. 1999 Oct;33(10):713-5. doi: 10.1046/j.1365-2923.1999.00547.x. PMID: 10583759.
5. University of the Witwatersrand University Rules and Syllabuses for degrees and diplomas offered in the faculty of health sciences for the 2023 Academic Year. 2023 [cited 2023 Nov 23]. Available from:  
<https://www.wits.ac.za/media/wits-university/students/academic-matters/2023%20Health%20Sciences%20Rules%20and%20Syllabuses-Final.pdf>
6. University of Cape Town Faculty of Health Sciences Undergraduate Studies Handbook. 2023 [cited 2023 Nov 23]. Available from:  
[https://uct.ac.za/sites/default/files/media/documents/uct\\_ac\\_za/49/2023\\_FHS\\_UG\\_Handbook.pdf](https://uct.ac.za/sites/default/files/media/documents/uct_ac_za/49/2023_FHS_UG_Handbook.pdf)

7. University of Kwa-Zulu Natal College of Health Sciences Handbook for 2023. 2023 [cited 2023 Nov 23]. Available from: <https://chs.ukzn.ac.za/wp-content/uploads/2023/05/Health-Scienes-2023.pdf>
8. Stellenbosch University Medicine and Health Sciences Academic Programmes and Faculty Information. 2023 [cited 2023 Nov 23]. Available from: <https://www.sun.ac.za/english/faculty/healthsciences/Documents/CurrentDocs/CalendarEng.pdf>
9. Sefako Makgatho Health Sciences University School of Medicine Calendar 2023 Undergraduate Programmes. 2023 [cited 2023 Nov 23]. Available from: <file:///C:/Users/Administrator/Downloads/2023-Undergraduate-School-of-Medicine-Calendar-nm.pdf>
10. Potter M, Naidu P, Pohl L, Chu K. Medical students' perceptions of global health at the University of Cape Town, South Africa: The gap between interest and education. *Afr J Health Professions Educ.* 2021;13(4):230–5. <https://doi.org/10.7196/AJHPE.2021.v13i4.1338>
11. [InciSioN UK Collaborative](#). National, collaborative evaluation of medical student and faculty perspectives on global surgery – Survey of undergraduate respondents on global surgery education (SURGE): A cross-sectional study. *International Journal of Surgery.*2021;93. [cited 2023 May 24] <https://doi.org/10.1016/j.ijisu.2021.106049>
12. [Jayaram A, Pawlak N, Kahanu A, Nabukenya M, Ozgediz D, Jayaraman S, et al.](#) *Journal of Surgical Research. Academic Global Surgery Curricula: Current Status and a Call for a More Equitable Approach.* 2021;(267):732–744.
13. [Leow J, Kingham TP, Casey KM, Kushner AL.](#) Global Surgery: Thoughts on an Emerging Surgical Subspecialty for Students and Residents. *Journal of Surgical Education.* 2010;67(3):143-148.
14. Ayton D. Chapter 6: Phenomenology. In Ayton D, Tsindos T, Berkovic D, editors. *Qualitative Research – a practical guide for health and social care researchers and practitioners.* Australia: Monash University; 2023. [cited 2023 Nove 24]. Available from: <https://oercollective.caul.edu.au/qualitative-research/back-matter/licensing-and-attribution-information/>

15. Rutledge PB, Hogg JLC. In-Depth Interviews. The International Encyclopaedia of Media Psychology. 2020:1-7. [cited 2023 Nov 24]. Available: <https://doi.org/10.1002/9781119011071.iemp0019>
16. Nowell LS, Norris JM, White DE, Moules NJ. Thematic Analysis: Striving to Meet the Trustworthiness Criteria. International journal of qualitative methods. 2017; 16(1):1-13. <https://doi-org.ezproxy.uct.ac.za/10.1177/1609406917733847>
17. Knox S, Burkard AW. Qualitative research interviews. Psychother Res. 2009;19(4-5):566-575 [cited 2023 Nov 24]. Available from: <https://doi.org/10.1080/10503300802702105>
18. InciSioN Collaborative. International Survey of Medical Students Exposure to Relevant Global Surgery (ISOMERS): A Cross-Sectional Study. World J Surg. 2022 Jul;46(7):1577-1584. doi:10.1007/s00268-022-06440-0.
19. Kanmounye US, Mbonda AN, Djiofack D, Daya L, Pokam OF, Ghomsi NC. Exploring the knowledge and attitudes of Cameroonian medical students towards Global Surgery: a web-based survey. PLoS One. 2020;15:1–9. [cited 2023 June 23]. <https://doi.org/10.1371/journal.pone.0232320>
20. Abraham MN, Abraham PJ, Chen H, Henershot, KM. What is Global Surgery? Identifying misconceptions among health professionals. Am J Surg. 2020;220:271-273. [cited 2023 May 25]. <https://doi.org/10.1016/j.amjsurg.2019.11.021>.
21. Patel R, Khundkar R, Peter N, Turner J; Edgcombe H, Makins A, et al. Improving global surgery education for trainees. International Journal of Surgery: Global Health. 2019;2(3). DOI: 10.1097/GH9.000000000000007
22. Gosselin-Tardif A, Butler-Laporte G, Vassiliou M, Khwaja K, Ntakiyiruta G, Kyamanywa P, et al. Enhancing medical students' education and careers in global surgery. Can J Surg. 2014;57(4):224-225; DOI: <https://doi.org/10.1503/cjs.027713>
23. Krishnaswami S, Stephens CQ, Yang GP, Nwomeh BC, Swaroop M, Nadler EP, et al. An academic career in global surgery: A position paper from the Society of University Surgeons Committee on Academic Global Surgery. Surgery. 2018;163(4):954-960. DOI: <https://doi.org/10.1016/j.surg.2017.10.019>

24. Scott EM, Fallah P, Blitzer DN, NeMoyer RE, Sifri Z, GSSA, et al. Next Generation of Global Surgeons: Aligning Interest with Early Access to Global Surgery Education. *J. Surg. Res.* 2019;240:219-226. DOI: <https://doi.org/10.1016/j.jss.2019.03.009>
25. Moren A, Cook M, McClain M, Doberne J, Kiraly L, Perkins RS, et al. A Pilot Curriculum in International Surgery for Medical Students. 2015. *J Surg Educ.* 72(4):9-14. DOI: <https://doi.org/10.1016/j.jsurg.2015.04.027>
26. Pawlak N, Dart C, Aguilar HS, Ameh E, Bekele A, Jimenez MF, et al. Academic global surgical competencies: A modified Delphi consensus study. 2023. *PLOS Glob Public Health.* 2023 Jul 14;3(7):e0002102. doi: 10.1371/journal.pgph.0002102.
27. Francis P, K M Chu, M Isiagi, Graham Fieggen, C Gordon and S Maswime. Developing a Pipeline of African Global Surgery Scholars. *SAMJ.* 2023;113(7):10-11. Available: <https://samajournals.co.za/index.php/samj/article/view/1104/534>

# Addendum

1. Ethics Approval – UCT, SUN, SMU, UKZN
2. Information and Consent Form Template
3. Interview Guide



**UNIVERSITY OF CAPE TOWN**  
**Faculty of Health Sciences**  
**Human Research Ethics Committee**



**Room G50- Old Main Building**  
**Groote Schuur Hospital**  
**Observatory 7925**

**Telephone [021] 406 6492**

**Email: [hrec-enquiries@uct.ac.za](mailto:hrec-enquiries@uct.ac.za)**

**Website: [www.health.uct.ac.za/fhs/research/humanethics/forms](http://www.health.uct.ac.za/fhs/research/humanethics/forms)**

10 February 2020

**HREC REF:036/2020**

**Prof S Maswime**  
Department of Surgery  
J-Floor, OMB

Dear Prof Maswime

**PROJECT TITLE: MEDICAL STUDENTS EXPOSURE TO AND PERCEPTIONS OF GLOBAL SURGERY: A MULTI-COUNTRY STUDY (UNDERGRAD STUDY - MS PEACE FRANCIS)**

Thank you for your response letter dated 04 February 2020, addressing the Issues raised by the Faculty of Health Sciences Human Research Ethics Committee (HREC).

It is a pleasure to inform you that the HREC has **formally approved** the above-mentioned study.

**Approval is granted for one year until the 28 February 2021.**

Please submit a progress form, using the standardised Annual Report Form if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.

(Forms can be found on our website: [www.health.uct.ac.za/fhs/research/humanethics/forms](http://www.health.uct.ac.za/fhs/research/humanethics/forms))

***The HREC acknowledge that the student: Ms Peace Francis will also be involved in this study.***

**Please quote the HREC REF in all your correspondence.**

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please note that for all studies approved by the HREC, the principal investigator **must** obtain appropriate institutional approval, where necessary, before the research may occur.

Yours sincerely

**PROFESSOR M BLOCKMAN**  
**CHAIRPERSON, FHS HUMAN RESEARCH ETHICS COMMITTEE**

Federal Wide Assurance Number: FWA00001637.  
Institutional Review Board (IRB) number: IRB00001938  
NHREC-registration number: REC-210208-007

This serves to confirm that the University of Cape Town Human Research Ethics Committee complies to the Ethics Standards for Clinical Research with a new drug in patients, based on the Medical Research Council (MRC-SA), Food and Drug Administration (FDA-USA), International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use: Good Clinical Practice (ICH GCP), South African Good Clinical Practice Guidelines (DoH 2006), based on the Association of the British Pharmaceutical Industry Guidelines (ABPI), and Declaration of Helsinki (2013) guidelines. The Human Research Ethics Committee granting this approval is in compliance with the ICH Harmonised Tripartite Guidelines E6: Note for Guidance on Good Clinical Practice (CPMP/ICH/135/95) and FDA Code Federal Regulation Part 50, 56 and 312.



### Form FHS006: Protocol Amendment

<b>HREC office use only (FWA00001637; IRB00001938)</b>			
<input checked="" type="checkbox"/> Approved	<input checked="" type="checkbox"/> Type of review: Expedited	<input type="checkbox"/> Full committee	
This serves as notification that all changes and documentation described below are approved.			
Signature HREC Chairperson / Designee		Date	11/11/2021

**Note:** All **Major** amendments must include a **Cover Letter** and a local **PI Synopsis** justifying the changes for the amendment. Please note that incomplete amendment submissions will not be reviewed.

Please email this form and supporting documents (if applicable) in a combined pdf-file to [hrec-enquiries@uct.ac.za](mailto:hrec-enquiries@uct.ac.za) with subject line: FHS006 + (HREC Reference number).

The latest forms are found on our website.

<http://www.health.uct.ac.za/fhs/research/humanethics/forms>

Please also clarify your plan for research-related activities during COVID-19 lockdown.

Comments from the HREC to the Principal Investigator:
<i>Please supply a staff appointment for DR Francis</i>
<b>Note:</b> The approval of this protocol amendment does not grant annual approval. Please complete the <a href="#">FHS016</a> / <a href="#">FHS017</a> form for annual approval at least one month before study expiration.

**Principal Investigator to complete the following:**

**1. Protocol information**

Date (when submitting this form)	29 October 2021	
HREC REF Number	036/2020	
Protocol Title	Medical Students Exposure to and Perceptions of Global Surgery: A Multi-Country Study	
Protocol Number (if applicable)		
Principal Investigator	Prof Salome Maswime	
Department / Office Internal Mail Address	<a href="mailto:Frnpea001@myuct.ac.za">Frnpea001@myuct.ac.za</a> – Department of Surgery	
1.1 Is this a major or a minor amendment? (see <a href="#">FHS006hlp</a> ) Major (tick box) Minor (tick box)	<input type="checkbox"/> Major	<input checked="" type="checkbox"/> Minor
1.2 Does this protocol receive US Federal funding?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No



<p>1.3 If the amendment is a major amendment <u>and</u> receives US Federal Funding, does the amendment require full committee approval?</p> <p><b>Note:</b> Any protocol amendments for <b>Full Committee Review</b> MUST be submitted on the monthly HREC submission dates. (Please email an electronic copy to <a href="mailto:hrec-enquiries@uct.ac.za">hrec-enquiries@uct.ac.za</a>)</p>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<p>1.4 Did the initial study require UCT No-Fault Insurance</p>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

**2. List of Proposed Amendments with Revised Version Numbers and Dates**

**Please itemise on the page below, all amendments with revised version numbers and dates, which need approval.**  
 This page will be detached, signed and returned to the PI as notification of approval. Please add extra pages if necessary.

**3. Protocol status (tick ✓)**

<input type="checkbox"/>	Open to enrolment
<input checked="" type="checkbox"/>	No participants have been enrolled
<input type="checkbox"/>	Closed to enrolment (tick ✓)
<input type="checkbox"/>	Research-related activities are ongoing
<input type="checkbox"/>	Research-related activities are complete, long-term follow-up only
<input type="checkbox"/>	Research-related activities are complete, data analysis only

**4. Proposed changes will affect: (tick ✓ all the categories that apply)**

<b>Protocol</b>	
<input type="checkbox"/>	Study objectives, design (including investigator's brochure, clinical activities, study length)
<input type="checkbox"/>	Study instruments, questionnaires, interview schedules
<input type="checkbox"/>	Sample size
<input type="checkbox"/>	Recruitment methods
<input type="checkbox"/>	Eligibility criteria (inclusion and exclusion criteria)
<input type="checkbox"/>	Drug/device (composition, amount, schedule, route of administration, combination with other drugs/devices, safety information)
<input type="checkbox"/>	Data collection/ analysis



<input checked="" type="checkbox"/>	Principal Investigator. (Please attach revised conflict of interest and PI declaration statements. Refer: sections 7 and 8.4 in the New Protocol Application Form FHS013)
<input type="checkbox"/>	Consent form and information sheet
<input type="checkbox"/>	Recruitment materials (e.g. advertisements)
<input type="checkbox"/>	Administrative (e.g. change in sponsor's name, change in contact information)
<input checked="" type="checkbox"/>	Other. Please specify: Study Sites will be altered
<p><i>*Note: Amendment changes involving study length, sample size, additional sites and eligibility criteria (i.e. inclusion of minors and /or pregnant woman) need to be declared to the Insurance office. Please liaise via <a href="mailto:fhs.sponsorship@uct.ac.za">fhs.sponsorship@uct.ac.za</a> regarding the required documentation and information to be submitted to obtain an updated UCT No-fault Insurance Certificate- it should be included herewith</i></p>	
4.1 In your opinion, will there be any <b>increase</b> in risk, discomfort or inconvenience to participants?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, please provide a detailed justification/explanation:	

4.2 What follow-up action do you propose for participants who are already enrolled in the study?	
<input type="checkbox"/>	Inform current participants as soon as possible
<input type="checkbox"/>	Re-consent current participants with revised consent/assent forms (append)
<input checked="" type="checkbox"/>	No action required
<input type="checkbox"/>	Other. Please describe:

**5. Detailed description of the change(s)**

<p><b>Please attach, for each amendment, a summary of all changes which clearly indicates:</b></p> <ul style="list-style-type: none"> <li>i. Old wording (e.g. <del>strike through</del> text, CHANGED FROM and CHANGED TO)</li> <li>ii. New wording (e.g. <i>italicized</i>, <b>bold</b>, tracked)</li> <li>iii. Detailed rationale/ justification/ explanation for each change</li> </ul>
---



**6. Ethics Review for Amendment Levy – cost including vat**

**Amendment Review Costs including VAT**

Please tick amount to be billed:

<b>Submission Type</b>	<b>Description</b>	<b>New fee (Vat Incl.)</b>	<b>tick ✓</b>
<b>Research funded solely from UCT departmental/ divisional/group budget</b>	Major/ Minor Amendments	R0,00	<input type="checkbox"/>
<b>Non-sponsored student research for degree purposes at UCT/Other Universities &amp; Colleges</b>	Major/ Minor Amendments	R0,00	<input checked="" type="checkbox"/>
<b>Protocol amendment - Major (FHS006 Form)</b>	Clinical Trial & International Grant Funded Research - Any changes to the protocol that requires Full Committee review	R8 000.00	<input type="checkbox"/>
<b>Protocol amendment - Major (FHS006 Form)</b>	Clinical Trial & International Grant Funded Research - Any change to the protocol that requires Expedited review that does not require Full Committee Review	R5 000,00	<input type="checkbox"/>
<b>Protocol amendment - Minor (FHS006 Form)</b>	Clinical Trial & International Grant Funded Research - Minor amendments, administrative changes that do not affect study design e.g. changes to informed consent form, changes in study staff, etc.	R2 250,00	<input type="checkbox"/>
<b>Protocol amendment - Major (FHS006 Form)</b>	National grant funded research - Any change to the protocol that requires Full Committee review	R7 000,00	<input type="checkbox"/>
<b>Protocol amendment - Major (FHS006 Form)</b>	National grant funded research - Any change to the protocol that requires Expedited review that does not require Full Committee review	R2 500,00	<input type="checkbox"/>
<b>Protocol amendment - Minor (FHS006 Form)</b>	National grant funded research - Minor amendments, administrative changes that do not affect study design e.g. changes to informed consent form, changes in study staff, etc.	R1 000,00	<input type="checkbox"/>

**NB: Protocols funded by UCT (e.g. departmental funding / student research) and by certain grant funding organizations (e.g. MRC, NRF, CANSA,) are exempt from these charges.**

Please provide details for Invoicing, either complete section 1 or 2 :

**1. Invoice billing – Directly to Sponsor**

Sponsor's name	
Billing Address of Sponsor:	
Vat Number:	
Contact person:	
Telephone number:	
Email Address:	

**2. Internal Journal Billing:**

Fund Number:	
Cost Centre Number:	
Account Holder Name:	
Division of Account Holder:	



**7. Amendment Submission checklist (tick ✓)**

7.1 Please tick that all the documents are attached before submitting to the HREC. <b>NB: Incomplete submissions will not be processed</b>	
<input checked="" type="checkbox"/>	Latest FHS006 form completed with all sections completed as per our website
<input checked="" type="checkbox"/>	Cover Letter
<input checked="" type="checkbox"/>	PI Justification/ Summary for the reasons for the amendment
<input checked="" type="checkbox"/>	Protocol - Track changes & Clean Copy (where necessary)
<input checked="" type="checkbox"/>	Informed Consent Forms (ICF), if applicable (Any changes made to ICF tracked & clean copy)
<input type="checkbox"/>	Any other additional documentation in support of amendment
<input type="checkbox"/>	Updated no fault insurance certificate (if applicable)

Please email this form and supporting documents (if applicable) in a combined pdf-file to [hrec-enquiries@uct.ac.za](mailto:hrec-enquiries@uct.ac.za) with subject line: FHS006 + (HREC Reference number). The latest forms are found on our website.

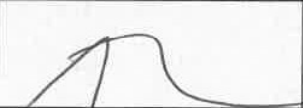
**8. Signature**

My signature certifies that I will maintain the anonymity and/ or confidentiality of information collected in this research. If at any time I want to share or re-use the information for purposes other than those disclosed in the original approval, I will seek further approval from the HREC.			
g	pp	pp	Date
Signature of PI			04/10/2021





## FHS016: Annual Progress Report / Renewal

<b>HREC office use only (FWA00001637; IRB00001938)</b>			
<b>This serves as notification of annual approval, including any documentation described below.</b>			
<input checked="" type="checkbox"/> Approved	Annual progress report	Approved until/next renewal date	30/11/2023
<input type="checkbox"/> Not approved	See attached comments		
Signature Chairperson of the HREC/ Designee			Date Signed 16/1/2023

**Note:** Please email this form and supporting documents (if applicable) in a combined pdf-file to [hrec-enquiries@uct.ac.za](mailto:hrec-enquiries@uct.ac.za).  
 Please clarify your plan for research-related activities during COVID-19 lockdown.  
 Please use the latest form found on our website:  
<http://www.health.uct.ac.za/fhs/research/humanethics/forms>

Comments to PI from the HREC

**Principal Investigator to complete the following:**

<b>HUMAN RESEARCH ETHICS COMMITTEE</b>
<b>16 JAN 2023</b>
HEALTH SCIENCES FACULTY UNIVERSITY OF CAPE TOWN

**1. Protocol information**

Date (when submitting this form)	16 January 2023		
HREC REF Number	036/2020	Current Ethics Approval was granted until	30/11/2022
Protocol title	Expanding the Global Surgery Pipeline: The involvement of Medical Students in Global Surgery		
Protocol number (if applicable)			
Are there any sub-studies linked to this study?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
If yes, could you please provide the HREC Reference number for all sub-studies? <b>Note:</b> A separate FHS016 must be submitted for each sub-study.			
Principal Investigator	Dr Peace Francis		



Department / Office Internal Mail Address	<a href="mailto:Frnpea001@myuct.ac.za">Frnpea001@myuct.ac.za</a> – Department of Surgery
--	--

1.1 Does this protocol receive US Federal funding?	<input type="checkbox"/> Yes	X No
1.2 If the study receives US Federal Funding, does the annual report require full committee approval?	<input type="checkbox"/> Yes	X No

**Note:** Any annual approvals for **Full Committee** review **MUST** be submitted on the monthly HREC submission dates.

(Please send electronic copy for full committee review to [hrec-submission@uct.ac.za](mailto:hrec-submission@uct.ac.za))

**If yes in 1.2 please complete section 1.3 below for invoicing purposes**

**1.3 Ethics Renewal Fee**

Please **(tick ✓)** appropriate box for billing purposes:

<u>Submission Type</u>	<u>Description</u>	<u>New fee (Vat Incl.)</u>	<u>tick ✓</u>
<i>Research funded solely from UCT departmental/divisional/group budget</i>	Annual evaluation of research progress report for re-certification	R0,00	<input type="checkbox"/>
<i>Non-sponsored student research for degree purposes at UCT/Other Universities &amp; Colleges</i>	Annual evaluation of research progress report for re-certification	R0,00	<input type="checkbox"/>
<i>Annual re-certification / Progress report (FHS016 Form)</i>	Clinical Trial & International Grant Funded Research - Annual evaluation of research progress report for re-certification for Full Committee Approval	R7000,00	<input type="checkbox"/>
<i>Annual re-certification / Progress report (FHS016 Form)</i>	Clinical Trial & International Grant Funded Research - Annual evaluation of research progress report for re-certification for Expedited review	R3 710.00	<input type="checkbox"/>
<i>Annual re-certification / Progress report (FHS016 Form)</i>	National grant funded research - Annual evaluation of research progress report for re-certification for Full Committee Approval	R6000.00	<input type="checkbox"/>
<i>Annual re-certification / Progress report (FHS016 Form)</i>	National Grant funded research for Annual evaluation of research progress report for re-certification for Expedited review	R1 500,00	<input type="checkbox"/>

**NB: Protocols funded by UCT (e.g. departmental funding / student research) and by certain grant funding organizations (e.g. MRC, NRF, CANSA,) are exempt from these charges.**

**Please provide details for Invoicing, either complete section 1 or 2 :**

**1. Invoice billing – Directly to Sponsor**

Sponsor's name	
Billing Address of Sponsor:	
Vat Number:	



Contact person	
Telephone number	
Email Address	
<b>2. Internal Journal Billing:</b>	
Fund Number:	
Cost Centre Number:	
Account Holder Name:	
Division of Account Holder:	

**2. List of documentation for approval**

--

**3. Protocol status (tick ✓)**

<input checked="" type="checkbox"/>	Open Enrolment
<input type="checkbox"/>	Closed to enrolment (tick ✓)
<input type="checkbox"/>	Research-related activities are ongoing
<input type="checkbox"/>	Research-related activities are complete, long-term follow-up only
<input type="checkbox"/>	Research-related activities are complete, data analysis only
<input type="checkbox"/>	Main study is complete but sub-study research-related activities are ongoing
<input type="checkbox"/>	Study is closed → Please submit a Study Closure Form (FHS010)

**4. Enrolment**

Number of participants enrolled to date	6
Number of participants enrolled, since last HREC Progress report (continuing review)	6
Additional number of participants still required	10

**5. Refusals**

Total number of refusals (participants invited to join the study, but refused to take part)	0
---	---

**6. Cumulative summary of participants**



Total number of participants who provided consent	6
Number of participants determined to be ineligible (i.e. after screening)	0
Number of participants currently active on the study	0
Number of participants completed study (without events leading to withdrawal)	6
Number of participants withdrawn at participants' request (i.e. changed their mind)	0
Number of participants withdrawn by PI due to toxicity or adverse events	0
Number of participants withdrawn by PI for other reasons (e.g. pregnancy, poor compliance)	0
Number of participants lost to follow-up. Please comment below on reasons for loss of follow-up.	0
Number of participants no longer taking part for reasons not listed above. Please provide reasons below:	

### 7. Progress of study

Please provide a brief summary of the research to date including the overall progress and the progress since the last annual report as well as any relevant comments/issues you would like to report to the HREC:

**Data collection with UCT students took place with no complications or incident. Half the number of participants has been interviewed at Stellenbosch University; progress stalled due to exam season. Ethics approval has been received at UKZN and SMU, but this process took longer than anticipated (8-9 months). All institutions require ongoing UCT HREC approval as a condition of their ethics approval despite the conclusion of the UCT leg of my research.**

### 8. Protocol violations and exceptions (tick ✓ all that apply)

<input checked="" type="checkbox"/>	No prior violations or exceptions have occurred since the original approval
<input type="checkbox"/>	Prior violations or exceptions have been reported since the last review and have already been acknowledged or approved
<input type="checkbox"/>	Unreported minor violations that have occurred since the last review, as well as significant deviations not yet reported, are attached for review

### 9. Amendments (tick ✓ all that apply)

<input type="checkbox"/>	No Prior amendments have been made since the original approval
--------------------------	--



<input checked="" type="checkbox"/>	Prior amendments have been reported since the last review and have already been approved
<input type="checkbox"/>	New protocol changes/ amendments are requested as part of this continuing review (See note below)

**Note:** If new protocol changes are being requested in this review, please complete an amendment form (FHS006).

Specific changes in the amended protocol and consent/assent forms must be **bolded**, *italicised* or tracked and all changes must include a rationale.

### 10. Adverse events

10.1 Please provide below or attach a narrative summary of serious adverse events and/ or unanticipated problems since the last progress report. Please indicate changes made to the protocol and informed consent document(s) as a result (if not already reported to the HREC). Please comment on whether causality to any study procedure or intervention could be established.
Ethics approval at SMU and UKZN took longer than anticipated (on average 8 months) and thus halted progress of study. Exam season at Stellenbosch University hampered participant recruitment.

10.2 Have participants received appropriate treatment/ follow-up/ referral when indicated (e.g. in the case of abnormal or incidental clinical findings, distress or anxiety)?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Not applicable
If yes, please describe:		

### 11. Summary of Monitoring and Audit Activities (tick ✓)

11.1 Was this study monitored or audited by an external agency (e.g. SAHPRA, FDA)?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	X Not applicable

11.2 Did a Data and Safety Monitoring Board publish a report?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	X Not applicable

11.3 If yes, please identify the agency and attach a summary of the findings.				
Agency Name	Report attached	<input type="checkbox"/> Yes	<input type="checkbox"/> No	X Not applicable
	DSMB report attached	<input type="checkbox"/> Yes	<input type="checkbox"/> No	X Not applicable

11.4 Has there been any agency, institutional or other inquiry into non-compliance in this study, or any finding of non-compliance concerning a member of the research team?	
<input type="checkbox"/> Yes	X No
If yes, please explain:	



--

**12. Level of risk (tick ✓)**

12.1 In light of your experience of this research, please indicate whether the level of risk to participants has:	
<input type="checkbox"/>	Increased
<input type="checkbox"/>	Decreased
<input checked="" type="checkbox"/>	Shown no change
If there has been a change, please explain:	

12.2 Please provide a narrative summary of recent relevant literature that may have a bearing on the level of risk.

**13. Insurance**

Please confirm that valid no fault insurance is still in place? (tick ✓)			
<input type="checkbox"/> Yes		<input type="checkbox"/> No – not applicable in this study	
If yes, please complete the following:			
Insurer's name:			
Policy no.		*Coverage Period:	
<i>For UCT sponsored studies please liaise the Insurance office via <a href="mailto:fhs.sponsorship@uct.ac.za">fhs.sponsorship@uct.ac.za</a> regarding the required documentation and information required obtain a renewed UCT No-fault Insurance Certificate.</i>			

**14. Statement of conflict of interest**

Has there been any change in the conflict of interest status of this protocol since the original approval? (tick ✓)	
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If yes, please explain and if necessary, attach a revised conflict of interest statement (Section #7 in the New Protocol Application Form FHS013):	



**15. Signature**

My signature certifies that the above is complete and correct.

Signature of PI

Date 16/01/2023







### Form FHS010: Study Closure Report

<b>HREC office use only (FWA00001637; IRB00001938)</b>			
Noted and filed. This serves as acknowledgement that this study is closed.			
<input checked="" type="checkbox"/> Approved	Study closure report		
<input type="checkbox"/> Not Approved	Study closure report		
Chairperson of the HREC signature		Date	9/12/2023

**1. Principal Investigator to complete the following:**

Date (when submitting this form)	08/12/23
HREC REF Number	036/2020
Protocol Title	Expanding the Global Surgery Pipeline: The involvement of Medical Students in Global Surgery
Protocol number (if applicable)	
Principal Investigator	Dr Peace Francis
Department / Office Internal Mail Address	<a href="mailto:Frnpea001@myuct.ac.za">Frnpea001@myuct.ac.za</a> – Department of Surgery

HUMAN RESEARCH ETHICS COMMITTEE  
 - 8 DEC 2023  
 HEALTH SCIENCES FACULTY  
 UNIVERSITY OF CAPE TOWN

**2. Please confirm (tick ✓)**

This study is closed to enrollment	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Participants have completed all research-related interventions	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Participants have completed all research-related follow-up	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Data analysis is complete	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Your sponsored protocol is closed	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If you answered 'no' to any of the above questions, you must keep your study open until all research activity is completed.		



**3. What is the reason for closing the study? (tick ✓)**

Research completed	X	No time	
Terminated due to toxicity/adverse event		PI left UCT or affiliated sites	
Slow accrual		Insufficient funding	
Loss of interest		Research never began	
Other. Please specify:			

**4. For clinical trials, please describe the arrangements for provision of care after research, including (where applicable) post-trial access to the investigational product.**

N/A

**5. Please explain how the research findings have been disseminated to participants, communities, and/or stakeholders.**

Research findings have been compiled into a journal article which will eventually be submitted for publication and will be sent to participants.



**6. Please confirm (tick ✓)**

Have you submitted a final report to the Provincial Health Research Committee?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
--	------------------------------	-----------------------------	---

**Please note:** Researchers must submit final reports to the relevant research co-ordinator/research directorate at City Health Department, GSH, RXH, TBH, PGWC (for non-tertiary hospitals) within six months of completion of the study and may be required to report the findings of the study to other relevant authorities including the PHRC.

**7. Please indicate how, and for how long, the data will be stored and protected.**

Transcripts will be stored for a period of 1 year in the password protected UCT Google Drive. Audio/Video recordings have been deleted.

**8. Please list or attach any papers, abstracts, presentations or other outputs generated from this study.**

Journal Paper is being formulated and has yet to be submitted for publication. This research forms part of an MSc Global Surgery.

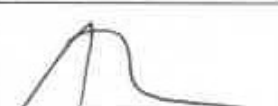
**9. Signatures**

Signature of PI		Date	08/12/23
-----------------	--	------	----------





**FHS016: Annual Progress Report / Renewal**

<b>HREC office use only (FWA00001637; IRB00001938)</b>			
<b>This serves as notification of annual approval, including any documentation described below.</b>			
<input checked="" type="checkbox"/> Approved	Annual progress report	Approved until/next renewal date	30.11.22
<input type="checkbox"/> Not approved	See attached comments		
Signature Chairperson of the HREC/ Designee			Date Signed 7/11/24

**Note:** Please email this form and supporting documents (if applicable) in a combined pdf-file to [hrec-enquiries@uct.ac.za](mailto:hrec-enquiries@uct.ac.za).  
Please clarify your plan for research-related activities during COVID-19 lockdown.  
Please use the latest form found on our website:  
<http://www.health.uct.ac.za/fhs/research/humanethics/forms>

Comments to PI from the HREC	Thank you for your Study Deviation  HREC Chair Signature Date: 9/11/22
------------------------------	---

**Principal Investigator to complete the following:**

**1. Protocol Information**

Date (when submitting this form)	29 October 2021		
HREC REF Number	036/2020	Current Ethics Approval was granted until	28/02/2021
Protocol title	Medical Students Exposure to and Perceptions of Global Surgery: A Multi-Country Study		
Protocol number (if applicable)			
Are there any sub-studies linked to this study?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
If yes, could you please provide the HREC Reference number for all sub-studies? Note: A separate FHS016 must be submitted for each sub-study.			
Principal Investigator	Prof Salome Maswime		




**7. Amendment Submission checklist (tick ✓)**

7.1 Please tick that all the documents are attached before submitting to the HREC. <i>NB: Incomplete submissions will not be processed</i>	
<input checked="" type="checkbox"/>	Latest FHS006 form completed with all sections completed as per our website
<input checked="" type="checkbox"/>	Cover Letter
<input checked="" type="checkbox"/>	PI Justification/ Summary for the reasons for the amendment
<input checked="" type="checkbox"/>	Protocol - Track changes & Clean Copy (where necessary)
<input checked="" type="checkbox"/>	Informed Consent Forms (ICF), if applicable (Any changes made to ICF tracked & clean copy)
<input type="checkbox"/>	Any other additional documentation in support of amendment
<input type="checkbox"/>	Updated no fault insurance certificate (if applicable)

Please email this form and supporting documents (if applicable) in a combined pdf-file to [hrec-enquiries@uct.ac.za](mailto:hrec-enquiries@uct.ac.za) with subject line: FHS006 + (HREC Reference number). The latest forms are found on our website.

**8. Signature**

My signature certifies that I will maintain the anonymity and/ or confidentiality of information collected in this research. If at any time I want to share or re-use the information for purposes other than those disclosed in the original approval, I will seek further approval from the HREC.			
Signature of PI		Date	04/10/2021



Department / Office Internal Mail Address	<a href="mailto:Frnpea001@myuct.ac.za">Frnpea001@myuct.ac.za</a> – Department of Surgery
--	--

1.1 Does this protocol receive US Federal funding?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1.2 If the study receives US Federal Funding, does the annual report require full committee approval?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<p><b>Note:</b> Any annual approvals for <b>Full Committee</b> review <b>MUST</b> be submitted on the monthly HREC submission dates.</p> <p>(Please send electronic copy for full committee review to <a href="mailto:hrec-submission@uct.ac.za">hrec-submission@uct.ac.za</a>)</p>		

If yes in 1.2 please complete section 1.3 below for Invoicing purposes

### 1.3 Ethics Renewal Fee

Please (tick ✓) appropriate box for billing purposes:

<u>Submission Type</u>	<u>Description</u>	<u>New fee (Vat Incl.)</u>	<u>tick ✓</u>
<i>Research funded solely from UCT departmental/divisional/group budget</i>	Annual evaluation of research progress report for re-certification	R0,00	<input type="checkbox"/>
<i>Non-sponsored student research for degree purposes at UCT/Other Universities &amp; Colleges</i>	Annual evaluation of research progress report for re-certification	R0,00	<input checked="" type="checkbox"/>
<i>Annual re-certification / Progress report (FHS016 Form)</i>	Clinical Trial & International Grant Funded Research - Annual evaluation of research progress report for re-certification for Full Committee Approval	R7000,00	<input type="checkbox"/>
<i>Annual re-certification / Progress report (FHS016 Form)</i>	Clinical Trial & International Grant Funded Research - Annual evaluation of research progress report for re-certification for Expedited review	R3 710.00	<input type="checkbox"/>
<i>Annual re-certification / Progress report (FHS016 Form)</i>	National grant funded research - Annual evaluation of research progress report for re-certification for Full Committee Approval	R6000.00	<input type="checkbox"/>
<i>Annual re-certification / Progress report (FHS016 Form)</i>	National Grant funded research for Annual evaluation of research progress report for re-certification for Expedited review	R1 500,00	<input type="checkbox"/>

**NB: Protocols funded by UCT (e.g. departmental funding / student research) and by certain grant funding organizations (e.g. MRC, NRF, CANSA,) are exempt from these charges.**

Please provide details for Invoicing, either complete section 1 or 2 :

#### 1. Invoice billing – Directly to Sponsor

Sponsor's name	
Billing Address of Sponsor:	
Vat Number:	



Contact person	
Telephone number	
Email Address	
<b>2. Internal Journal Billing:</b>	
Fund Number:	
Cost Centre Number:	
Account Holder Name:	
Division of Account Holder:	

## 2. List of documentation for approval

FHS006 (with attached protocol and appendices)
FHS011
New PI application

## 3. Protocol status (tick ✓)

<input checked="" type="checkbox"/>	Open Enrolment
<input type="checkbox"/>	Closed to enrolment (tick ✓)
<input type="checkbox"/>	Research-related activities are ongoing
<input type="checkbox"/>	Research-related activities are complete, long-term follow-up only
<input type="checkbox"/>	Research-related activities are complete, data analysis only
<input type="checkbox"/>	Main study is complete but sub-study research-related activities are ongoing
<input type="checkbox"/>	Study is closed → Please submit a Study Closure Form (FHS010)

## 4. Enrolment

Number of participants enrolled to date	0
Number of participants enrolled, since last HREC Progress report (continuing review)	n/a
Additional number of participants still required	16

## 5. Refusals



Total number of refusals (participants invited to join the study, but refused to take part)	0
---	---

### 6. Cumulative summary of participants

Total number of participants who provided consent	0
Number of participants determined to be ineligible (i.e. after screening)	0
Number of participants currently active on the study	0
Number of participants completed study (without events leading to withdrawal)	0
Number of participants withdrawn at participants' request (i.e. changed their mind)	0
Number of participants withdrawn by PI due to toxicity or adverse events	0
Number of participants withdrawn by PI for other reasons (e.g. pregnancy, poor compliance)	0
Number of participants lost to follow-up. Please comment below on reasons for loss of follow-up.	0
Number of participants no longer taking part for reasons not listed above. Please provide reasons below:	

### 7. Progress of study

Please provide a brief summary of the research to date including the overall progress and the progress since the last annual report as well as any relevant comments/issues you would like to report to the HREC:
<p><b>Due to the unforeseen circumstances of covid-19, the study did not progress as planned. Ethics approval was received just over a month before the national lock-down and the announcement of the global pandemic. There was hope for the study to still progress as the year moved on, however this was not possible. At the start of 2021, the undergraduate student named in the original protocol decided to register for postgraduate studies and a decision was then taken to perhaps find a way to proceed with the study – hence the delay in the amendment and annual report procedure. In light of the global changes due to the virus an attempt has been made to re-work certain aspects of the protocol in order for the research to still take place. The only progress made on the study before international lock-downs was the piloting of the interview questions. Changes to the protocol are explained in detail in the protocol amendment form attached but broadly include changing the study sites – no longer including a site in the United States, Nigeria or Uganda and rather adding sites in Limpopo, Stellenbosch and Kwazulu-Natal (ethics approval dependent), we will also like to modify the PI to be Dr Peace Francis who was an undergraduate student but is now a postgraduate student, we also have changed interviews from in-person to virtual interviews.</b></p>



**8. Protocol violations and exceptions (tick ✓ all that apply)**

<input checked="" type="checkbox"/>	No prior violations or exceptions have occurred since the original approval
<input type="checkbox"/>	Prior violations or exceptions have been reported since the last review and have already been acknowledged or approved
<input type="checkbox"/>	Unreported minor violations that have occurred since the last review, as well as significant deviations not yet reported, are attached for review

**9. Amendments (tick ✓ all that apply)**

<input type="checkbox"/>	No Prior amendments have been made since the original approval
<input type="checkbox"/>	Prior amendments have been reported since the last review and have already been approved
<input checked="" type="checkbox"/>	New protocol changes/ amendments are requested as part of this continuing review (See note below)

**Note:** If new protocol changes are being requested in this review, please complete an amendment form (FHS006). Specific changes in the amended protocol and consent/assent forms must be **bolded**, *italicised* or tracked and all changes must include a rationale.

**10. Adverse events**

10.1 Please provide below or attach a narrative summary of serious adverse events and/ or unanticipated problems since the last progress report. Please indicate changes made to the protocol and informed consent document(s) as a result (if not already reported to the HREC). Please comment on whether causality to any study procedure or intervention could be established.
The only unanticipated problem has been that of the global pandemic disrupting the progress of the study and changes have been broadly described above and included in detail in an FHS006.

10.2 Have participants received appropriate treatment/ follow-up/ referral when indicated (e.g. in the case of abnormal or incidental clinical findings, distress or anxiety)?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Not applicable
If yes, please describe:		

**11. Summary of Monitoring and Audit Activities (tick ✓)**

11.1 Was this study monitored or audited by an external agency (e.g. SAHPRA, FDA)?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Not applicable
11.2 Did a Data and Safety Monitoring Board publish a report?		



<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Not applicable
------------------------------	-----------------------------	--

11.3 If yes, please identify the agency and attach a summary of the findings.

Agency Name		Report attached	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Not applicable
		DSMB report attached	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Not applicable

11.4 Has there been any agency, institutional or other inquiry into non-compliance in this study, or any finding of non-compliance concerning a member of the research team?

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

If yes, please explain:

**12. Level of risk (tick ✓)**

12.1 In light of your experience of this research, please indicate whether the level of risk to participants has:

<input type="checkbox"/>	Increased
<input type="checkbox"/>	Decreased
<input checked="" type="checkbox"/>	Shown no change

If there has been a change, please explain:

12.2 Please provide a narrative summary of recent relevant literature that may have a bearing on the level of risk.




### 13. Insurance

Please confirm that valid no fault insurance is still in place? (tick ✓)			
<input type="checkbox"/> Yes		<input type="checkbox"/> No – not applicable in this study	
If yes, please complete the following:			
Insurer's name:			
Policy no.		*Coverage Period:	
<i>For UCT sponsored studies please liaise the Insurance office via <a href="mailto:fhs.sponsorship@uct.ac.za">fhs.sponsorship@uct.ac.za</a> regarding the required documentation and information required obtain a renewed UCT No-fault Insurance Certificate.</i>			

### 14. Statement of conflict of interest

Has there been any change in the conflict of interest status of this protocol since the original approval? (tick ✓)	
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If yes, please explain and if necessary, attach a revised conflict of interest statement (Section #7 in the New Protocol Application Form FHS013):	

### 15. Signature

My signature certifies that the above is complete and correct.			
Signature of PI		Date	04/10/2021



## Form FHS011: Study deviation

HREC office use only (FWA00001637; IRB00001938)

This serves as acknowledgement of a protocol deviation as described below.

Chairperson of the HREC  
signature/ Designee

Date

9/11/2021

Note: Please note that incomplete submissions will not be reviewed.  
 Please email this form and supporting documents (if applicable) in a combined pdf-file to [hrec-enquiries@uct.ac.za](mailto:hrec-enquiries@uct.ac.za).

Please clarify your plan for research-related activities during COVID-19 lockdown

### Principal Investigator to complete the following:

#### 1. Protocol Information

Date (when submitting this form)	29 October 2021	
HREC REF Number	036/2020	
Project Title	Medical Students Exposure to and Perceptions of Global Surgery: A Multi-Country Study.	
Protocol number (if applicable)		
Principal Investigator	Prof Salome Maswime	
Department / Office Internal Mail Address	<a href="mailto:Frnpea001@myuct.ac.za">Frnpea001@myuct.ac.za</a> – Department of Surgery	

#### 2. Protocol deviation description

Please describe the deviation below, including the reason why the deviation occurred.

Due to the unforeseen circumstances of covid-19, the study did not progress as planned. Ethics approval was received just over a month before the national lock-down and the announcement of the global pandemic. There was hope for the study to still progress as the year moved on, however this was not possible. At the start of 2021, the undergraduate student named in the original protocol decided to register for postgraduate studies and a decision was then taken to perhaps find a way to proceed with the study – hence the delay in the amendment and annual report procedure. In light of the global changes due to the virus an attempt has been made to re-work certain aspects of the protocol in order for the research to still take place. The only progress made on the study before international lock-downs was the piloting of the interview questions. Changes to the protocol are explained in detail in the protocol amendment form attached but broadly include changing the study sites – no longer including a site in the United States, Nigeria or Uganda and rather adding sites in Limpopo, Stellenbosch and Kwazulu-Natal (ethics approval dependent), we will also like to modify the PI to be Dr Peace Francis who was an undergraduate student but is now a postgraduate student, we also have changed interviews from in-person to virtual interviews.

#### 3. Follow-up actions

3.1 Please describe any follow-up action(s) taken or planned as a result of this deviation e.g. DSMB reporting, report to sponsor, informing participants.




Stakeholders at old sites have been informed about the inability to undertake research at those sites and new supervisors are being found in the new locations.

3.2 Please describe what action(s) have or will be taken to prevent similar deviations in future.

The new current study design allows for it to continue despite future covid-19 waves.

**4. Principal Investigator's acknowledgement of responsibility**

This signature indicates the PI has reviewed the deviation, taken appropriate follow-up action and implemented or plans to implement preventative steps where possible.

Signature of PI		Date	04/10/2021
-----------------	---	------	------------

# Expanding the Global Surgery Pipeline: The...

LETTER RETURNED

Activity

Show All

Comments

History

22/Aug/22 9:27 AM **LATEST**

Your request status changed to **Letter Returned** with resolution **Completed**.



19/Aug/22 6:47 PM

**Peace Francis**

I have read and understood the agreement and I accept it.

19/Aug/22 3:21 PM

Your request status changed to **Letter Issued**.



19/Aug/22 3:21 PM

**M Adonis**

Dear Researcher,

- You have received institutional permission for your request. Please confirm via e-mail or the service desk that you have read, understood and accepted the agreement.
- You do not need to fill anything on the document.
- You may not proceed with research until you have accepted this agreement.

Kind regards,

Monique

[Institutional Permission\\_Standard Agreement 3567.pdf](#)



## INSTITUTIONAL PERMISSION:

### AGREEMENT ON USE OF PERSONAL INFORMATION IN RESEARCH

**Name of Researcher:** Dr Peace Francis

**Name of Research Project:** Expanding the Global Surgery Pipeline: The involvement of Medical Students in Global Surgery

**Service Desk ID:** IG - 3567

**Date of Issue:** 19 August 2022

The researcher has received institutional permission to proceed with this project as stipulated in the institutional permission application and within the conditions set out in this agreement.

<b>1 WHAT THIS AGREEMENT IS ABOUT</b>	
What is POPI?	<p>1.1 POPI is the Protection of Personal Information Act 4 of 2013.</p> <p>1.2 POPI regulates the entire information life cycle from collection, through use and storage and even the destruction of personal information.</p>
Why is this important to us?	<p>1.3 Even though POPI is important, it is not the primary motivation for this agreement. The privacy of our students and employees are important to us. We want to ensure that no research project poses any risks to their privacy.</p> <p>1.4 However, you are required to familiarise yourself with, and comply with POPI in its entirety.</p>
What is considered to be personal information?	<p>1.5 'Personal information' means information relating to an identifiable, living, individual or company, including, but not limited to:</p> <p>1.5.1 information relating to the race, gender, sex, pregnancy, marital status, national, ethnic or social origin, colour, sexual orientation, age, physical or mental health, well-being, disability, religion, conscience, belief, culture, language and birth of the person;</p> <p>1.5.2 information relating to the education or the medical, financial, criminal or employment history of the person;</p>

	<p>1.5.3 any identifying number, symbol, e-mail address, physical address, telephone number, location information, online identifier or other particular assignment to the person;</p> <p>1.5.4 the biometric information of the person;</p> <p>1.5.5 the personal opinions, views or preferences of the person;</p> <p>1.5.6 correspondence sent by the person that is implicitly or explicitly of a private or confidential nature or further correspondence that would reveal the contents of the original correspondence;</p> <p>1.5.7 the views or opinions of another individual about the person; and</p> <p>1.5.8 the name of the person if it appears with other personal information relating to the person or if the disclosure of the name itself would reveal information about the person.</p>
<p>Some personal information is more sensitive.</p>	<p>1.6 Some personal information is considered to be sensitive either because:</p> <p>1.6.1 POPI has classified it as sensitive;</p> <p>1.6.2 if the information is disclosed it can be used to defraud someone; or</p> <p>1.6.3 the disclosure of the information will be embarrassing for the research subject.</p> <p>1.7 The following personal information is considered particularly sensitive:</p> <p>1.7.1 Religious or philosophical beliefs;</p> <p>1.7.2 race or ethnic origin;</p> <p>1.7.3 trade union membership;</p> <p>1.7.4 political persuasion;</p> <p>1.7.5 health and health related documentation such as medical scheme documentation;</p> <p>1.7.6 sex life;</p> <p>1.7.7 biometric information;</p> <p>1.7.8 criminal behaviour;</p> <p>1.7.9 personal information of children under the age of 18;</p> <p>1.7.10 financial information such as banking details, details relating to financial products such as insurance, pension funds or other investments.</p>

	1.8 You may make use of this type of information, but must take extra care to ensure that you comply with the rest of the rules in this document.
<b>2 COMMITMENT TO ETHICAL AND LEGAL RESEARCH PRACTICES</b>	
You must commit to the use of ethical and legal research practices.	2.1 You must obtain ethical clearance before commencing with this study. 2.2 You commit to only employing ethical and legal research practices.
You must protect the privacy of your research subjects.	2.3 You undertake to protect the privacy of the research subjects throughout the project.
<b>3 RESEARCH SUBJECT PARTICIPATION</b>	
Personal information of identifiable research subjects must not be used without their consent.	3.1 Unless you have obtained a specific exemption for your research project, consent must be obtained in writing from the research subject, before their personal information is gathered.
Research subjects must be able to withdraw from the research project.	3.2 Research subjects must always be able to withdraw from the research project (without any negative consequences) and to insist that you destroy their personal information.
Consent must be specific and informed.	3.3 Unless you have obtained a specific exemption for your research project, the consent must be specific and informed. Before giving consent, the research subject must be informed in writing of:  3.3.1 The purpose of the research, 3.3.2 what personal information about them will be collected (particularly sensitive personal information), 3.3.3 how the personal information will be collected (if not directly from them), 3.3.4 the specific purposes for which the personal information will be used, 3.3.5 what participation will entail (i.e. what the research subject will have to do), 3.3.6 whether the supply of the personal information is voluntary or mandatory for purposes of the research project, 3.3.7 who the personal information will be shared with,

	<p>3.3.8 how the personal information will be published,</p> <p>3.3.9 the risks to participation (if any),</p> <p>3.3.10 their rights to access, correct or object to the use of their personal information,</p> <p>3.3.11 their right to withdraw from the research project, and</p> <p>3.3.12 how these rights can be exercised.</p>
Consent must be voluntary.	3.4 Participation in the research project must always be voluntary. You must never pressure or coerce research subjects into participating and persons who choose not to participate must not be penalised.
Using the personal information of children?	<p>3.5 A child is anybody under the age of 18.</p> <p>3.6 Unless you have obtained a specific exemption in writing for your research project, you must obtain</p> <p>3.6.1 the consent of the child's parent or guardian, and</p> <p>3.6.2 if the child is over the age of 7, the assent of the child, before collecting the child's information.</p>
Research subjects have a right to access.	3.7 Research subjects have the right to access their personal information, obtain confirmation of what information is in your possession and who had access to the information. It is strongly recommended that you keep detailed records of access to the information.
Research subjects have a right to object.	<p>3.8 Research subjects have the right to object to the use of their personal information.</p> <p>3.9 Once they have objected, you are not permitted to use the personal information until the dispute has been resolved.</p>
<b>4 COLLECTING PERSONAL INFORMATION</b>	
Only collect what is necessary.	4.1 You must not collect unnecessary or irrelevant personal information from research subjects.
Only collect accurate personal information.	<p>4.2 You have an obligation to ensure that the personal information you collect is accurate. Particularly when you are collecting it from a source other than the research subject.</p> <p>4.3 If you have any reason to doubt the quality of the personal information you must</p>

	verify or validate the personal information before you use it.
<b>5 USING PERSONAL INFORMATION</b>	
Only use the personal information for the purpose for which you collected it.	<p>5.1 Only use the personal information for the purpose for which you collected it.</p> <p>5.2 If your research project requires you to use the personal information for a materially different purpose than the one communicated to the research subject, you must inform the research subjects and Stellenbosch University of this and give participants the option to withdraw from the research project.</p>
Be careful when you share personal information.	<p>5.3 Never share personal information with third parties without making sure that they will also follow these rules.</p> <p>5.4 Always conclude a non-disclosure agreement with the third parties.</p> <p>5.5 Ensure that you transfer the personal information securely.</p>
Personal information must be anonymous whenever possible.	5.6 If the research subject's identity is not relevant for the aims of the research project, the personal information must not be identifiable. In other words, the personal information must be anonymous (de-identified).
Pseudonyms must be used whenever possible.	5.7 If the research subject's identity is relevant for the aims of the research project or is required to co-ordinate, for example, interviews, names and other identifiers such as ID or student numbers must be collected and stored separately from the rest of the research data and research publications. In other words, only you must be able to identify the research subject.
Publication of research	<p>5.8 The identity of your research subjects should not be revealed in any publication.</p> <p>5.9 In the event that your research project requires that the identity of your research subjects must be revealed, you must apply for an exemption from this rule.</p>
<b>6 SECURING PERSONAL INFORMATION</b>	
You are responsible for the confidentiality and security of the personal information	<p>6.1 Information must always be handled in the strictest confidence.</p> <p>6.2 You must ensure the integrity and security of the information in your possession or under your control by taking appropriate and reasonable technical and organisational measures to prevent:</p> <p>6.2.1 Loss of, damage to or unauthorised destruction of information; and</p>

	<p>6.2.2 unlawful access to or processing of information.</p> <p>6.3 This means that you must take reasonable measures to:</p> <p>6.3.1 Identify all reasonably foreseeable internal and external risks to personal information in your possession or under your control;</p> <p>6.3.2 establish and maintain appropriate safeguards against the risks identified;</p> <p>6.3.3 regularly verify that the safeguards are effectively implemented; and</p> <p>6.3.4 ensure that the safeguards are continually updated in response to new risks or deficiencies in previously implemented safeguards.</p>
Sensitive personal information requires extra care.	6.4 You will be expected to implement additional controls in order to secure sensitive personal information.
Are you sending any personal information overseas?	<p>6.5 If you are sending personal information overseas, you have to make sure that:</p> <p>6.5.1 The information will be protected by the laws of that country;</p> <p>6.5.2 the company or institution to who you are sending have agreed to keep the information confidential, secure and to not use it for any other purpose; or</p> <p>6.5.3 get the specific and informed consent of the research subject to send the information to a country which does not have data protection laws.</p>
Be careful when you use cloud storage.	<p>6.6 Be careful when storing personal information in a cloud. Many clouds are hosted on servers outside of South Africa in countries that do not protect personal information to the same extent as South Africa. The primary example of this is the United States.</p> <p>6.7 It is strongly recommended that you use hosting companies who house their servers in South Africa.</p> <p>6.8 If this is not possible, you must ensure that the hosting company agrees to protect the personal information to the same extent as South Africa.</p>
<b>7 RETENTION AND DESTRUCTION OF PERSONAL INFORMATION</b>	
You are not entitled to retain personal information when you no longer need it for the purposes of the research project.	7.1 Personal information must not be retained beyond the purpose of the research project, unless you have a legal or other justification for retaining the information.

<p>If personal information is retained, you must make sure it remains confidential.</p>	<p>7.2 If you do need to retain the personal information, you must assess whether:</p> <p>7.2.1 The records can be de-identified; and/or whether</p> <p>7.2.2 you have to keep all the personal information.</p> <p>7.3 You must ensure that the personal information which you retain remains confidential, secure and is only used for the purposes for which it was collected.</p>
<p><b>8 INFORMATION BREACH PROCEDURE</b></p>	
<p>In the event of an information breach you must notify us immediately.</p>	<p>8.1 If there are reasonable grounds to believe that the personal information in your possession or under your control has been accessed by any unauthorised person or has been disclosed, you must notify us immediately.</p> <p>8.2 We will notify the research subjects in order to enable them to take measures to contain the impact of the breach.</p>
<p>This is the procedure you must follow.</p>	<p>8.3 You must follow the following procedure:</p> <p>8.3.1 Contact the Division for Institutional Research and Planning at 021 808 9385 and <a href="mailto:permission@sun.ac.za">permission@sun.ac.za</a>;</p> <p>8.3.2 you will then be required to complete the information breach report form which is attached as Annexure A.</p> <p>8.4 You are required to inform us of a information breach within 24 hours. Ensure that you have access to the required information.</p>
<p><b>9 MONITORING</b></p>	
<p>You may be audited.</p>	<p>9.1 We reserve the right to audit your research practices to assess whether you are complying with this agreement.</p> <p>9.2 You are required to give your full co-operation during the auditing process.</p> <p>9.3 We may also request to review:</p> <p>9.3.1 Forms (or other information gathering methods) and notifications to research subjects, as referred to in clause 3;</p> <p>9.3.2 non-disclosure agreements with third parties with whom the personal information is being shared, as referred to in clause 5.4;</p> <p>9.3.3 agreements with foreign companies or institutes with whom the personal</p>

	information is being shared, as referred to in clause 6.5.
<b>10 CHANGES TO RESEARCH</b>	
You need to notify us if any aspect of your collection or use of personal information changes.	<p>10.1 You must notify us in writing if any aspect of your collection or use of personal information changes (e.g. such as your research methodology, recruitment strategy or the purpose for which you use the research).</p> <p>10.2 We may review and require amendments to the proposed changes to ensure compliance with this agreement.</p> <p>10.3 The notification must be sent to <a href="mailto:permission@sun.ac.za">permission@sun.ac.za</a>.</p>
<b>11 CONSEQUENCES OF BREACH</b>	
What are the consequences of breaching this agreement?	<p>11.1 If you do not comply with this agreement, we may take disciplinary action or report such a breach to your home institute.</p> <p>11.2 You may be found guilty of research misconduct and may be censured in accordance with Stellenbosch University or your home institute's disciplinary code.</p>
You may have to compensate us in the event of any legal action.	<p>11.3 Non-compliance with this agreement could also lead to claims against Stellenbosch University in terms of POPI and/or other laws.</p> <p>11.4 Unless you are employed by or studying at Stellenbosch University, you indemnify Stellenbosch University against any claims (including all legal fees) from research subjects or any regulatory authority which are the result of your research project. You may also be held liable for the harm to our reputation should there be an information breach as a result of your non-compliance with this agreement.</p>
<b>12 CONTACT US</b>	
Please contact us if you have any questions.	Should you have any questions relating to this agreement you should contact <a href="mailto:permission@sun.ac.za">permission@sun.ac.za</a> .

## Annexure 'A'

### Instruction:

Please send this Notice to [permission@sun.ac.za](mailto:permission@sun.ac.za). If you have any difficulty completing the Notice, please contact the Division for Institutional Research and Planning at 021 808 9385. You must confirm that the Notice was received.

### NOTIFICATION OF INFORMATION BREACH

Name of Researcher: \_\_\_\_\_

Name of Research Project: \_\_\_\_\_

Service Desk ID: \_\_\_\_\_

A security breach happens when you know (or you **reasonably believe**) that there has been:

- (a) loss of Personal Information ("PI")
- (b) damage to PI
- (c) unauthorised destruction of PI
- (d) unauthorised access to PI
- (e) unauthorised processing of PI

Date and time of security breach:	
Brief description of the security breach (what was lost and how). Please identify the equipment, software and/or physical premises and whether it is by hacking, lost device, public disclosure (email), theft or other means:	
Name of the person/s responsible for the security breach (if known):	
Is the security breach ongoing?	
Describe the steps taken to contain the security breach:	
What steps are being taken to investigate the cause of breach?	



**Research & Innovation**  
**Sefako Makgatho University Research Ethics Committee (SMUREC)**

---

Dr P Francis  
University of Cape Town  
Department of Surgery

Dear Dr Francis

**RE: DR P FRANCIS – PERMISSION TO COLLECT DATA AT SEFAKO MAKGATHO HEALTH SCIENCE UNIVERSITY**

SMUREC **NOTED** an e-mail dated 04 May 2022 requesting permission to conduct a study at SMU.

SMUREC **NOTED** that the researcher has already received approval from University of Cape Town, Faculty of Health Sciences Human Research Ethics Committee (HREC).

**Title:** Expanding the Global Surgery Pipeline: The involvement of Medical Students in Global Surgery

**Researcher:** Dr P Francis  
**Supervisor:** Professor Salome Maswime & Dr Chivaugn Gordon SITE  
**Coordinator:** (Sefako Makgatho University) – Dr Pududu Archie Rachuene  
**Department:** University of Cape Town, Department of Surgery  
**Protocol Ref No:** **HREC REF:036/2020**  
**Type of Research:** Degree  
**Approval date:** 10 February 2020

SMUREC provided reciprocal **APPROVAL** for the above mentioned study to be conducted at SMU.

Yours Sincerely,

**PROF C BAKER**  
**CHAIRPERSON SMUREC**

07 July 2022

8 December 2022

Dr Peace Francis  
Department of Surgery  
University of Cape Town  
Email: [FRNPEA001@myuct.ac.za](mailto:FRNPEA001@myuct.ac.za)

Dear Dr Francis

**RE: PERMISSION TO CONDUCT RESEARCH**

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), provided Ethical clearance has been obtained. We note the title of your research project is:

*"Expanding the Global Surgery Pipeline: The involvement of Medical Students in Global Surgery".*

It is noted that you will be constituting your sample as follows:

It is noted that you will be constituting your sample as follows:

- by conducting interviews with 5<sup>th</sup> and 6<sup>th</sup> year (Zoom, Skype or telephone interviews recommended) at UKZN.
- with a request for responses on the website. The questionnaire must be placed on the notice system <http://notices.ukzn.ac.za>. A copy of this letter (Gatekeeper's approval) must be simultaneously sent to ([govenderlog@ukzn.ac.za](mailto:govenderlog@ukzn.ac.za)) or ([ramkissoob@ukzn.ac.za](mailto:ramkissoob@ukzn.ac.za)).

Please ensure that the following appears on your questionnaire/attached to your notice:

- Ethical clearance approval letter;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using the 'Microsoft Outlook' address book. Identity numbers and email addresses of individuals are not a matter of public record and are protected according to Section 14 of the South African Constitution, as well as the PAIA and POPI Act. For the release of such information over to yourself for research purposes, the University of KwaZulu-Natal will need express consent from the relevant data subjects. Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

**Dr KE CLELAND: REGISTRAR**

**Office of the Registrar**

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 7971 Email: [registrar@ukzn.ac.za](mailto:registrar@ukzn.ac.za) Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)

# Information Form

## Study Title

Expanding the Global Surgery Pipeline: The involvement of Medical Students in Global Surgery

## Researcher & Supervisors

Researcher: Dr Peace O. Francis; Supervisors: Professor Salome Maswime (UCT), Dr Chivaugn Gordon (UCT)

Site Coordinator:

## Background and Purpose

You are being asked to take part in a qualitative research project which forms part of a MSc Global Surgery through the University of Cape Town, South Africa. This study is taking place with supervisors from four institutions, including a supervisor from your institution. .

For the purposes of this study, Global Surgery can be defined as a field of study that highlights that there is a high burden of peri-operative mortality and surgical diseases, that access to surgical care in lower-and-middle-income countries (LMICs) is limited and aims to create and promote initiatives to improve surgical outcomes. There is a need for more African clinicians working in Global Surgery due to the burden of surgical diseases in Africa. African countries have a low surgical specialty density, a low operative volume and high perioperative mortality rate when compared to global averages and recommended figures. Increasing human resources in Global Surgery is a key step in increasing access to safe, affordable surgical care. Medical students are a key resource and research shows that exposure to specialities during studies result in higher retention of students in the particular specialty. There is gap in literature exploring medical students' exposure and perceptions of Global Surgery. It was found that in an institution heralded for its Global Health profile, students held perceptions on Global Surgery contrary to evidence. It is important to explore this topic as it might reveal key themes that could assist in human resource building. The design of this study is also aimed at garnering rich data and exploring the differences in exposure and perceptions in students in institutions with a formal Global Surgery presence and in institutions without such.

You have been selected by the local supervisor due to your seniority in medical studies and your knowledge of and exposure to Global Surgery and its principals.

## Procedures

Data collection in this study will take the format of semi-structured interviews. During the interview I will ask you some questions and may ask some follow-up or clarifying questions. I expect that the interview will take between one and two hours. With the permission of the participant, the interview will be audio recorded. The interviewee will also be taking notes during the interview. Due to adherence to covid restrictions, the interview will be done virtually through Zoom/Microsoft Teams depending on your preference.

## Privacy and Confidentiality

Your name nor the name of your institution will be included in the research report, but analysis will be made using whether your university has a formal Global Surgery presence or not. Efforts will also be taken to ensure that your name, and your institution are not included in the

recording and will be omitted in the transcription of the interviews. Each participant will be given a numeric code in order to organise transcriptions and any names mentioned will be changed. The recorded interview will only be accessed by the researcher, supervisors, and research assistants where relevant. All recordings will be stored in the cloud with password access to limit external access. Once all recordings have been transcribed, the recordings will be deleted. Transcribed notes will be saved as documents on a password protected google drive. Transcription will be done by a research assistant. While all these measures have been put in place, it is important to note that there is always a risk of accidental breach of confidentiality.

The hope is to eventually publish the study results.

## Risks and Benefits

The risks of the study include possible reproach for possibly highlighting gaps in global surgery exposure in your institution. However, this risk will be mitigated through anonymity both of the student and of the institution the data was collected from all publications. It is important to note that questions have been structured to be broad and focused on exposure and personal perception.

While there is no remuneration for participation in the study, you may benefit from the framework the interview provides to reflect on the significance of Global Surgery, its future and your role as aspiring or current clinician. The study may give guidance as to how to make Global Surgery more visible and appealing to undergraduate students. Your participation will contribute to a greater understanding of students' perception and exposure to Global Surgery.

## Withdrawal of Participation

Should you decide at any time during the interview that you would no longer like to participate, you may withdraw consent and the audio-recording and transcription of the interview will be deleted.

## What Happens at the End of the Study?

Upon conclusion of the study a research report will be drawn up with results of the study. This report will be circulated via email to participants who have requested access to results. The study will be submitted for publication.

Should the study be prematurely concluded for any reason, a report will be written on the collected data and circulated via email to participants who have requested access to results, or all recordings and transcriptions will be deleted, and participants will be informed via email of the termination of the study.

## Request for More Information

You may ask any questions about the study at any time. You may also contact Dr Peace Francis at [frnpea001@myuct.ac.za](mailto:frnpea001@myuct.ac.za) or Professor Salome Maswime at [Salome.maswime@uct.ac.za](mailto:Salome.maswime@uct.ac.za) should you have any questions after the interview. This study has received ethical approval from the University of Cape Town Human Research Ethics Committee which you can contact at [hrec-enquiries@uct.ac.za](mailto:hrec-enquiries@uct.ac.za)

Thank you for your consideration of this study

Dr Peace O. Francis

# Consent to Participate in Research Study

## Study Title

Expanding the Global Surgery Pipeline: The involvement of Medical Students in Global Surgery

## Researcher

Dr Peace O. Francis

## Consent

I confirm that the researcher has explained the elements of informed consent to me. I know that my participation is voluntary. The purpose of the research together with the risks, benefits, privacy and confidentiality have all been explained. The procedures of the study have been outlined to me. I confirm that I understand all the information and consent to participating in this research study and consent to have the interview audio-recorded.

I would like to be sent a copy of the results of the study: Yes/No (*please circle the appropriate choice*)

---

Participant Name and Surname

---

Date

---

Signature of Participant

## Interview Guide

1. For the purposes of this study we will use the Lancet Commission on Global Surgery's definition of Global Surgery - An area of study, research, practice, and advocacy that seeks to improve health outcomes and achieve health equity for all people who need surgical, obstetric and anaesthesia care, with a special emphasis on underserved populations and populations in crisis
2. We will summarise the principles of Global Surgery to focus on equity and universal access to surgical care.

	Question	Rationale
1	<p>Given the definitions provided, how would you define:</p> <ol style="list-style-type: none"> <li>a. global surgery,</li> <li>b. equity in surgery, and</li> <li>c. universal access to surgery?</li> <li>d. Do you think this field has global significance? Please explain your answer</li> </ol>	This question aims to uncover what the interviewee understands about Global Surgery and sets the foundation/frame of reference for the other questions.
2	<ol style="list-style-type: none"> <li>a. When in your medical career where you exposed to Global Surgery or its principles (equity and universal access to surgery), and</li> <li>b. how were you exposed?</li> </ol>	This question seeks to understand where students are encountering Global Surgery – personal interest, curriculum, mentors, media etc.
3	What further exposure to Global Surgery have you had? E.g. mentors, curriculum, personal study etc.	Similarly, to question two, this question seeks to see where Global Surgery is found in the interviewee's context.
4	Are there ways in which you think Global Surgery is relevant to your country and context (i.e. the health challenges and strengths you have noticed as pertain to the health system you form part of)? Why/Why not?	This question is the first exploratory question aimed at understanding the interviewee's perceptions of Global Surgery <i>and</i> their context.
5	In your opinion, what are some of the flaws and benefits of Global Surgery?	This question aims to continue exploring the interviewee's perceptions of Global Surgery but also explores their deeper understanding of Global Surgery.
6	<ol style="list-style-type: none"> <li>a. What do you think the future of Global Surgery should be?</li> <li>b. Do you feel that you would like to contribute to the field of Global Surgery? Please Explain your answer</li> <li>c. If so, is there a particular area of interest?</li> </ol>	This question aims to continue exploring the interviewee's perceptions of Global Surgery but also explores their deeper understanding of Global Surgery.

7	What do you think are potential roles for medical students in Global Surgery if any?	This question is hoping to bring the topic of Global Surgery closer to home and understand how/if the interviewee is able to find themselves in Global Surgery.
8	Do you think access to safe surgical care gets the same attention as other health issues that impact profoundly on populations? Why/why not?	This question aims to continue exploring the interviewee's perceptions of Global Surgery but also explores their deeper understanding of Global Surgery.