

CENTRE FOR HEALTH PROFESSIONS  
EDUCATION (CHPE)

Faculty of Medicine & Health Sciences

Stellenbosch University

South Africa



ANNUAL REPORT

2014

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## THE VISION AND MISSION FOR THE CENTRE FOR HEALTH PROFESSIONS EDUCATION

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### VISION

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The Centre will provide excellent academic leadership in Health Professions Education aimed at the learning practices of students and educational practices of academics, which will facilitate the creation of relevant health care provision in Africa.

### THE CENTRE AIMS TO:

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- Successfully initiate, coordinate and support the use of innovative and evidence-based teaching and learning practices at under and postgraduate level in the Faculty.
  - Develop the capacity of experts in the discipline in the Faculty, nationally and internationally (with a focus on Africa).
  - Significantly improve student success in the Health Professions programmes.
  - Make a significant contribution to the scientific basis of Health Professions Education as an academic discipline.
  - Fulfil a leadership role in establishing positive approaches to community orientation, interdisciplinarity, diversity, learning centredness and a scientific basis, especially in the undergraduate programmes in the Health Professions.
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## CONTENTS

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Foreword by the Deputy Dean (Education): Prof Marietjie de Villiers	01
Message from the Director of the CHPE: Prof Ben van Heerden	02
KEY FOCI AT THE CHPE	04
FACULTY DEVELOPMENT	05
POSTGRADUATE STUDIES IN HEALTH PROFESSIONS EDUCATION	05
WORKSHOPS AND TEACHING AND LEARNING ACTIVITIES	09
INTERPROFESSIONAL EDUCATION AND PRACTICE	09
CLINICAL SKILLS CENTRE	11
GRADUATE ATTRIBUTES	13
SUPPORT FOR UNDERGRADUATE PROGRAMMES	15
STUDENT SUPPORT	18
RESEARCH AT CHPE	20
Publications in peer-reviewed journals – 2014	20
Chapters in books – 2014	20
International and national oral presentations – 2014	21
International and national poster presentations – 2014	22
PROJECTS – CURRENT	23
OTHER ACTIVITIES IN THE CHPE	25
SUBICC	25
SURMEPI	26
CONTRIBUTION TO THE FIELD OF HEALTH PROFESSIONS EDUCATION	27
THE TEAM	31
ADDENDUM A – CURRENT PROJECTS	35

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## FOREWORD BY THE DEPUTY DEAN (EDUCATION)

PROF MARIETJIE DE VILLIERS

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It is indeed a privilege for me to write a few words as foreword to the Centre for Health Professions Education (CHPE) 2014 Annual Report. 2014 was a year when much of the spade work from previous years translated into tangible outcomes and publications.

There is a growing need for medical and health professions educators to be supported in their teaching practice and to recognise the importance of their own professional learning for their teaching role. In addition, we rely on large numbers of clinical supervisors to guide our students through their experiential learning in clinical settings. These supervisors face increasing workloads and are in need of guidance and support towards optimal facilitation of the learning of our undergraduate and postgraduate students.

Educational practice is dynamic and therefore we need to be engaged in ongoing critical review of our curriculum and our teaching and assessment practices. Our teaching staff are generally discipline experts with little background in education and training. The Stellenbosch University Faculty of Medicine and Health Sciences is therefore very fortunate to have the services of a dedicated centre for health professions education to assist us with all of these matters. The work of the CHPE has been recognised in projects such as the Stellenbosch University Rural Medical Education Partnership Initiative (SURMEPI) in that we have been approached by many African partners to assist them in the development of medical education units similar to our CHPE.

We are also particularly keen to develop relevant and local evidence for sound educational practice, therefore the increasing emphasis on conducting and publishing research that will examine the outcomes of our teaching and our student learning. The good number of research publications in 2014 bear testimony to that.

I would like to express my sincere thanks to the Director and staff of the CHPE, for the unfailing efforts to support and improve our educational portfolio.

## MESSAGE FROM THE DIRECTOR OF THE CHPE

### PROF BEN VAN HEERDEN

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Since its inception in 2006, the Centre for Health Professions Education (CHPE) consistently endeavoured to successfully realise all components of its vision and mission in a way that is characterised by excellence. This report highlights the extensive involvement of the personnel of the CHPE in a variety of teaching and learning activities at both academic as well as administrative support levels and will provide evidence for the exceptional success we had in 2014 in realising our aims.

The diagram on p. 7 neatly summarises all the key foci and functions of our Centre. Many of these foci, such as Faculty Development (building capacity in Health Professions Education), have been ongoing since 2006. This function has, however, under the leadership of Prof Julia Blitz, Sr Elize Archer and others, reached a major milestone in 2014 with the introduction of well-planned short courses for Registrars (a key component of our teaching corps for medical students in the clinical setting) as well as a year-long short course called “Introduction to Teaching in the Health Professions” for staff.

The MPhil in Health Professions Education (HPE) was introduced in 2008. Since then a total of 74 students have registered for the programme. Thirty-nine of these have since graduated, with a record number of 9 graduates in 2014. Extensive planning for a revised programme to be introduced in 2016 was also concluded during this year. There are currently three students enrolled for our PhD in HPE that was introduced in 2011.

2014, after the normal lag period before academic inputs manifest as outputs, has also been the year in which we have seen the largest number of publications in peer-reviewed journals. These, as well as the extensive number of national and international conference presentations, showcase the findings of the excellent educational research work performed by the Centre’s dedicated and enthusiastic academic personnel. Many of these outputs emanate from the well-conceptualised longitudinal research project on the Rural Clinical School lead by Prof Susan van Schalkwyk as principal investigator.

The academic stature of our personnel is further highlighted by the number of invited and keynote scientific presentations at national and international institutions and academic meetings. The work being done by Dr Stephanus Snyman and his team on Interprofessional Education and Practice is receiving increased international attention and recognition by, amongst others, the World Health Organisation.

This is also true for the excellent work done in the Faculty of Medicine and Health Sciences (FMHS) on graduate attributes. Dr Snyman, who coordinates most of this work on behalf of the CHPE, was selected as a member of the CanMEDS 2015 International Advisory Board in 2014.

Another important component of the work done at the CHPE relates to the academic support provided for undergraduate students. This work is often performed in the background with little recognition, but with tangible positive results. I am convinced that the fact that we observed in 2014 the highest success rate in two of the most challenging years of the MB,ChB programme (MB,ChB II and VI) since implementation of the current curriculum in 2008, can to a large extent be

attributed to the selfless work and extraordinary efforts of Dr Aziza Bawoodien and Dr Alwyn Louw in their academic support roles.

A major milestone in terms of international recognition of the CHPE was reached in 2014 when we, together with the Centre for Evidence Based Health Care successfully applied to become an International Collaborating Centre of the international Best Evidence Medical Education (BEME) Collaboration

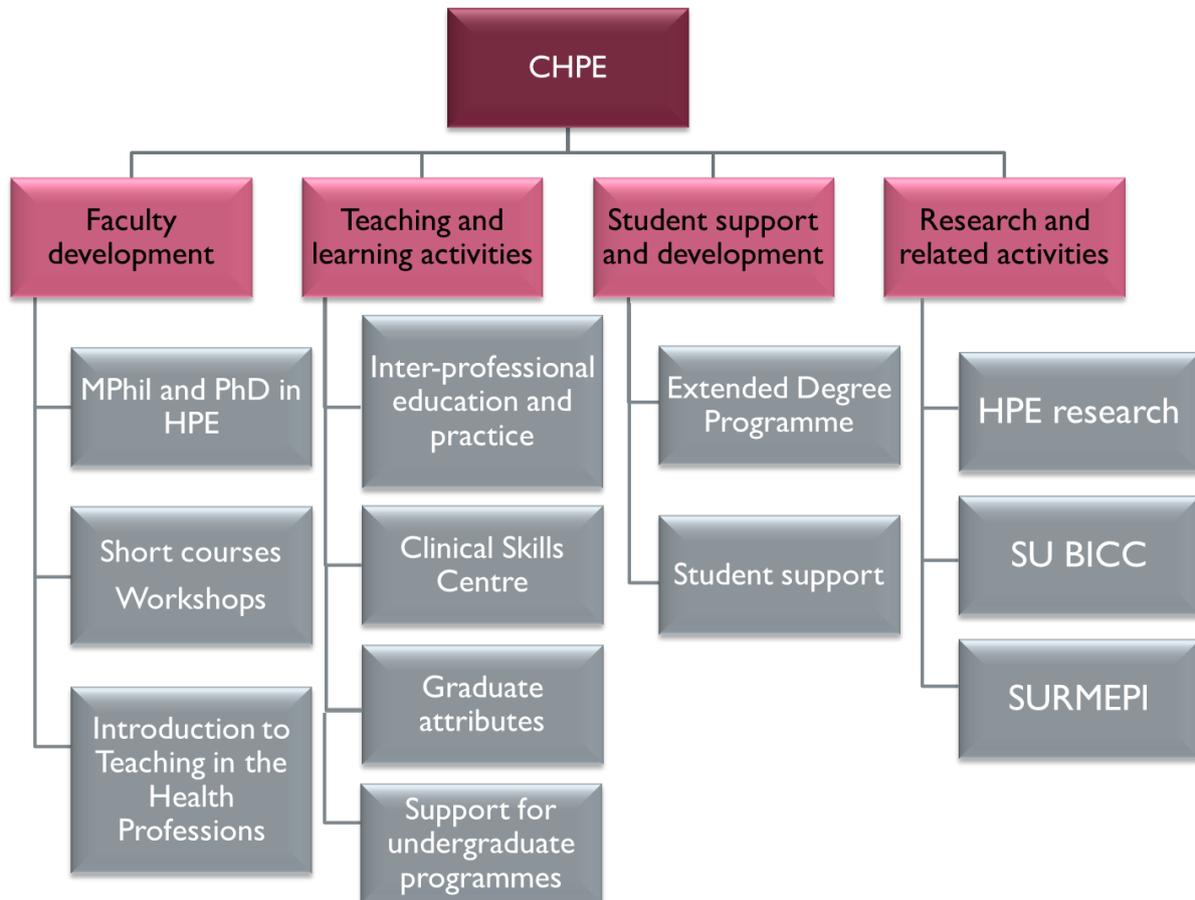
The CHPE was successful in securing funding from a variety of sources without which it would not have been possible to achieve all the successes reported here. These include continued funding from the Clinical Training Grant and SURMEPI, as well as funding that resulted from successful applications for substantial Teaching Development Grants and strategic funding from the FMHS and the University

We are deeply grateful for the successes of 2014. This would not have been possible without the much appreciated active support of our Faculty Management, in particular provided by our Deputy Dean: Education, Prof Marietjie de Villiers.

It is an enormous privilege and blessing for me to be able to work with a team of highly talented, motivated and passionate individuals. These colleagues are not only responsible for the excellent, innovative and often cutting-edge work being done by the CHPE, but they are also actively involved at institutional level as well as nationally and internationally in the field of Health Professions Education.

## KEY FOCI AT THE CHPE

The Centre for Health Professions Education has four main foci, namely Faculty Development, Teaching and Learning activities, Student Support and Development, and Research. Each of these is addressed in the sections that follow (Figure 1).



**Figure 1: Key foci at the CHPE**

## FACULTY DEVELOPMENT

Two recent developments in health professions education have had an impact on the content, delivery and assessment of undergraduate curricula at the FMHS at Stellenbosch University. These are the adoption of the CanMEDS graduate competency framework and the response to the Lancet commission on Education of Health Professionals for the 21st century. In addition there is also the updated Stellenbosch University Assessment Policy that prescribes obligatory faculty training on assessment. In the light of these developments, as well as increasing pressure from the national and provincial governments to increase the intake of especially medical students, the need for faculty development has become even more pressing. Clinical teachers, currently tasked with undergraduate education, have not all engaged with the process of developing educational knowledge and skills to any large degree. Teachers involved in facilitating the learning of increasing number of students often struggle to maintain a student-centred approach and, for example, move away from didactic teaching. The abovementioned changes now provide an opportunity to concurrently design faculty development in a way that makes it accessible and amenable to all academics – including newly appointed academics and those jointly appointed with the provincial Department of Health.

A core component of the work in the CHPE therefore, is the development of the health professions educator through its postgraduate programmes and a variety of workshops and short courses to support academics in their teaching role.

### Julia Blitz

## POSTGRADUATE STUDIES IN HEALTH PROFESSIONS EDUCATION

The MPhil in Health Professions Education (HPE) was implemented in 2008 offering health professions educators the opportunity to hone their teaching and learning skills and also deepen their conceptual and theoretical understanding of what it means to be a teacher at a university and specifically in a health professions context. Since then the programme has enrolled 74 students and has had 39 graduates.

We were especially pleased with the record number of students (9) that graduated in December 2014. Seven of the 12 students that enrolled for the programme in 2013, graduated in 2014 and thus within the minimum period of two years. The programme statistics since 2008 are summarised in the table below:

**Table 1: MPhil in HPE Statistics (2008 – 2014)**

Year of Registration	# registered	# discontinued	# graduated min time (2 yrs)	# graduated after 2 years	Total graduates	# still in programme
2008	7	1	1	4	5	1
2009	18	4	1	13	14	0
2010	10	3	2	4	6	1
2011	8	3	1	2	3	2
2012	9	-	1	3	4	5
2013	12	1	7		7	4
2014	10	-				10
<b>TOTAL</b>	<b>74</b>	<b>12</b>	<b>13</b>	<b>26</b>	<b>39</b>	<b>23</b>

During 2014 the postgraduate programme committee of the CHPE embarked on an extensive process of curriculum renewal for the MPhil in HPE programme. This was done to align it more closely to similar programmes in the rest of the world and was also in response to student and lecturer feedback received over the past number years. The process involved the consolidation of modules that were previously offered separately as well as changing a module such as Leadership in Health Professions Education from an elective to a core module. The structure of the new programme is such that students will complete the majority of the core modules during the first year and will have the bulk of the second year available to complete their research assignments. This will hopefully allow more students to complete the programme within two years. The revised programme will be implemented in 2016.



***Five of the 2014 M Phil in HPE graduates.***

*From left to right: Tim Nottidge; Liezl Smit; Walter Liebrich; Dianne Parris; Ilse Crafford*

In 2011, the CHPE received accreditation to offer a PhD in HPE. Three students (Sr Elize Archer, Dr Christina Tan and Prof Julia Blitz) are currently enrolled for this advanced degree.

**Ben van Heerden**

## OTHER FACULTY DEVELOPMENT INITIATIVES

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In order to support Faculty Development in 2014, we decided on the four strategic approaches that are discussed below.

### 1. INTRODUCTION TO TEACHING IN THE HEALTH PROFESSIONS

Core team = Julia Blitz, Elize Archer, Susan van Schalkwyk

The main focus of this initiative was to consolidate previous educational offerings into a coherent course offered over a year. We endeavoured to make it as easy as possible for clinicians to be able to attend the course by scheduling all dates at the beginning of the year and holding sessions on Friday afternoons. This was registered both as a short course and for CPD points. The course was designed on the basis of taking participants through a curriculum design cycle from understanding the current situation of our learners, through learning, teaching and assessment to reflection. We took a practical approach, keeping theoretical input to a minimum. Many members of CHPE staff were involved as well as other clinicians who we identified as having an interest in education.

### 2. REGISTRARS-AS-TEACHERS

Core team = Julia Blitz, Elize Archer, Liezl Smit

This course comprised four hours of practical training in clinical teaching, based on the clinical supervision course designed by Elize Archer. Heads of Departments and Divisions were invited to send newly appointed registrars on the course. We focussed on attitudes and skills that could be of use to registrars as they take on clinical teaching roles, particularly of undergraduate medical students. Formal programme evaluation of attendees during clinical teaching episodes resulted in modification of the content as well as the presentation to make it of more practical use for the registrars.

### 3. ORIENTATION OF NEWLY APPOINTED STAFF

A brochure "Things you might have wanted to ask about teaching and learning", designed by faculty leadership, is now available to inform newly appointed academic staff of teaching and learning support in the faculty. It is used by HR at their new appointees' orientation session.

### 4. CHPE MONTHLY ACADEMIC MEETINGS

These meetings, which are aimed at supporting the professional development of CHPE staff, are held monthly over lunch. We utilised MedEdWorld webinars and KeyLIME podcasts as stimuli for discussions around strengthening our own educational knowledge and skills.

## WORKSHOPS

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In response to the 2012 MB,ChB programme committee pilot project to support module teams with educational input, the gastro-intestinal tract (GIT 271) module team invited us to present two workshops: one on outcomes and the other on MCQ writing. This in turn led to a request to address the Infectious Diseases module team on similar issues.

The CHPE received many other invitations from within the faculty, related to development of educational skills. Amongst these are:

Dept of Surgery	Support for research supervision of registrars
Dept of Paediatrics	Writing multiple choice questions (MCQs) Curriculum Design: a blueprint for teaching and learning
Dept of Internal Medicine	MCQ writing presentation MediClinic Durbanville - clinical supervision course for Physicians
Division of Orthopaedics	OSCE standard setting
Bioethics theory block	Review of assessment
Centre for Evidence-based Health Care	Teaching Evidence-based Health Care in the clinical context
Division of Interdisciplinary Health	Strategic planning: Rehabilitation Reference Group

In addition, numerous ad hoc workshops were offered on request:

- MCQ writing workshops x 5
- Registrars-as-teachers x 2
- Teaching Evidence-based health care in the clinical context for the Centre for Evidence-based Health Care
- Occupational Therapy Faculty development: The traits of Generation Y students.
- Physiotherapy Faculty Development: The challenges of teaching to Generation Y students
- Physiotherapy students: Time management and successful study behaviour.
- Pre-doctoral academy: Department of Interdisciplinary Health Sciences (module on scientific writing)
- Article writing
- Scientific writing

**Julia Blitz, Elize Archer, Susan van Schalkwyk**

## TEACHING AND LEARNING ACTIVITIES

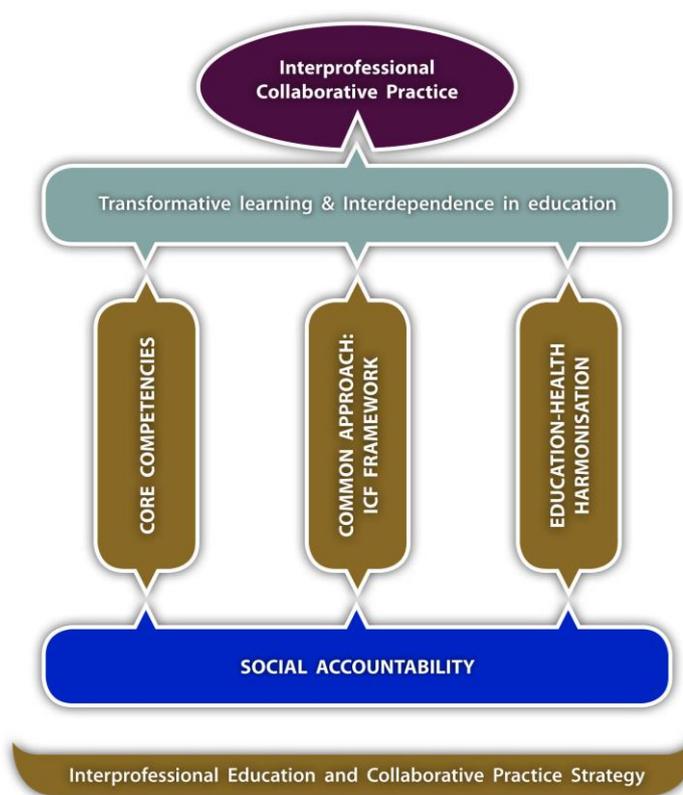
Another core function of the CHPE is that of supporting teaching and learning activities in the faculty specifically, although not exclusively, for undergraduate programmes. Apart from the faculty development initiatives described above, the Centre is involved in supporting key teaching and learning foci (such as Interprofessional Education and Practice and the fostering of graduate attributes) and also manages the Faculty's Clinical Skills lab.

### INTERPROFESSIONAL EDUCATION AND PRACTICE

In 2010/11 the Interprofessional Education and Collaborative Practice (IPEP) strategy at the Faculty of Medicine and Health Sciences was revised by a working group of representatives from all undergraduate programs (medicine, human nutrition, physiotherapy, occupational therapy and speech-language and hearing therapy), as well as postgraduate nursing.

The revised strategy considered the pivotal role IPEP can play in equipping students as agents of change to effectively address the health needs of individuals and populations. To institutionalise a culture of IPEP, **three focus** areas were identified (see Figure 2):

1. **Core competencies** for interprofessional collaborative practice.
2. An interprofessional care and collaboration framework, based on the International Classification of Functioning, Disability and Health (**ICF**) as common language between professions.
3. Trust relationships and **capacity building** among faculty and service providers in modelling interprofessional collaborative practice.



**Figure 2: The Interprofessional Education and Collaborative Practice strategy.**

The IPEP portfolio is managed by Stefanus Snyman. Ten IPEP facilitators assist students and service providers at various health facilities where students are placed to improve patient outcomes and strengthen health systems by working together. This IPEP initiative was selected in 2012 as one of four in the world to form part of the Institute of Medicine's Global Forum on Innovation in Health Professions Education. Subsequently Stefanus Snyman was also invited in 2014 to join the In-2-Theory Network, an international network with a remit to develop social science theory, and explore its practical application to interprofessional collaborative practice and interprofessional education.

The ICF, as interprofessional collaboration and care framework, is currently being taught in all undergraduate curricula. In a study on the rural clinical platform, the value of the ICF to facilitate clinical reasoning, to elicit the non-linear complexity of health and to serve as framework in the iterative "juggling" during patient interactions, was confirmed. The value of the ICF was further

highlighted as a catalyst in strengthening the interdependence between the university and service providers. For example, the university was requested to train health professionals in three health districts to use the ICF in the management of their patients. This work was recognised recently with a posting on the WHO's Health Workforce website: <http://tiny.cc/isfnpe>.

Dr Snyman is a member of the secretariat of the WHO's Functioning and Disability Reference Group (FDRG) and principal investigator and facilitator of a partnership (213 partners from 36 countries) to develop a mobile application based on the ICF.

Close collaboration with the Interdisciplinary Teaching and Learning Unit at the University of the Western Cape resulted in quarterly IPE World Cafés being conducted, with anything from 150-450 students attending these full day workshops. The aim of these workshops is to develop students' competency to work effectively in teams, to clarify the different professions' roles, to manage interprofessional conflict, to practice collaborative leadership and to set person-centred goals when managing a patient as a team.

Our IPEP strategy will not be sustainable if we cannot facilitate a culture change for interprofessional collaborative practice. If students do not see it modelled in the clinical area, it may be regarded as a futile exercise. That is why our biggest focus over the next two years will be to develop preceptors as IPEP role models on our training platforms. The roll out of this initiative will be accelerated with the registration of an IPEP short course in 2015.

**Stefaans Snyman**



***Students practicing the ICF as an interprofessional and collaborative framework at the Avian Park Learning Centre in Worcester.***



***In October 2014 a core group of partners gathered in Barcelona, Spain, to compile the specifications of this application. This project also won 2 of the 5 prizes at the WHO-FIC conference***

## CLINICAL SKILLS CENTRE

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The Clinical Skills Centre (CSC) at the Faculty of Medicine and Health Sciences (FMHS) was developed about 10 years ago and has formed part of the Centre for Health Professions Education since the inception of the CHPE in 2006. This state of the art facility provides opportunities for both undergraduate and postgraduate students to acquire clinical skills in simulation. The personnel of the Centre consists of a manager, 4 part-time registered nurses, an administrative assistant and a laboratory assistant. Most of the staff are externally funded by way of the Clinical Training Grant of the Department of Higher Education and Training (DoHET).

## USE OF SIMULATION IN HEALTH PROFESSIONS EDUCATION

Clinical skills centres are no longer regarded as a luxury; these centres have become essential to all health professions programmes. Reasons contributing to this necessity have been the ad hoc nature of clinical learning opportunities, the increased awareness of patient safety as well as the increased student numbers. The scientific literature suggests that students find learning in simulation enjoyable as well as meaningful since they can practice at their own pace whilst receiving feedback from a lecturer or their peers. However, it is important to remember that the simulated environment cannot replace the real clinical environment; the simulation merely aims to prepare the students optimally for their clinical learning opportunities.

## TEACHING AND LEARNING ACTIVITIES

The CSC strives to promote an environment and culture where all the students at the FMHS can learn together in a dynamic teaching space and therefore all the programs are encouraged to make use of the wide variety of simulation equipment. During the academic year of 2014 approximately 20 000 students have made use of the centre. The centre's staffing-model is developed in such a way that it allows lecturers from various departments to teach their students by making use of the venues and equipment. Most of the teaching is done by the personnel of the CSC.

Core teaching done by the CSC personnel is for the MB,ChB students, with staff assisting with teaching in allied health sciences programmes, e.g. Physiotherapy, Nursing, Dietetics and Dentistry. The medical students come to the CSC for various clinical skills teaching sessions from the end of their first year right until the last module of their sixth year. Apart from these sessions the CSC also has three formal domains for which it is responsible, namely the clinical skills domains for the Early, (3<sup>rd</sup> year) and Middle Clinical Rotations, (4<sup>th</sup> / 5<sup>th</sup> years), as well as the Introduction to Emergency Medicine domain of the Middle Clinical Rotation 511 module. The two clinical skills domains run longitudinally and therefore throughout the year, while the Introduction to Emergency Medicine domain, which is a shared responsibility with the division of Emergency Medicine, involves a week of intense skills learning for the whole 4<sup>th</sup> year class.

Practical assessments in the format of Objective Structured Clinical Examinations (OSCEs) for the MB,ChB domains, as well as for other programmes, occur throughout the year. The CSC personnel assist the various environments with the preparation and planning of these very labour intensive assessment events. OSCEs run by the CSC are designed by the clinical skills personnel and include a structured approach to assessment with examiner training sessions run prior to each examination. Students are encouraged to use the CSC facility to practise in their own time, with CSC staff available to assist them. Peer learning is encouraged. Peer assessment documents have been designed and are available for student use to critique one another when practising clinical skills in the CSC.

Simulation in scenario is a developing model of teaching that is currently mainly used with 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> year MB,ChB students. Smaller groups are taught, with emphasis placed not only on the medical knowledge required to manage the “patient”, but also on teamwork and communication skills. Skills videos have been made and are, together with additional written resources, placed on the SUNLearn website for students to view, throughout their training.

## SHORT COURSES

In addition to formal teaching of skills in university accredited programmes, the CSC presents CPD activities in the form of short courses for non-university affiliated persons when the academic programme allows for open venues and available lecturers. These courses mainly focus on CPR and emergency related topics since these are vital skills which can only be practised in simulation. These courses assist the CSC to maintain a third stream of income that can be used for procuring additional equipment, such as disposable items. In addition, it allows the CSC personnel to foster collegiate relationships with other educational institutions and hospital groups.

## RESEARCH

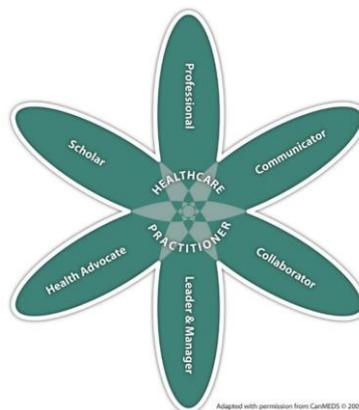
The CSC endeavours to participate in a number of educational research projects (see list under *Current Projects*). A study about the *Use of different teaching methods and how it influences retention of clinical skills* was done in collaboration with Emergency Medicine. First year medical students were taught how to use the manual defibrillator and the study took place over two consecutive years to ensure adequate data collection. A scientific article describing this work has been accepted and will be published in 2015. MB,ChB students wanting to conduct educational research are always encouraged and we are currently supervising two undergraduate students who are doing projects related to clinical skills. According to a research project that was conducted among medical students in 2013 regarding their teaching experiences in the CSC, the students felt that the sessions improved their confidence and empowered them to perform the procedures taught in the clinical environment. They reported that they “could see what is right and how you are supposed to work”. This statement reflects the ethos of the Clinical Skills Centre: We teach the students using the Best Evidence Medicine approach; we warmly welcome all students and continually reflect and improve on our teaching practices.

## Elize Archer

## GRADUATE ATTRIBUTES

The leadership of the Centre for Health Professions Education (CHPE) has been intensively engaged in identifying and refining the attributes we expect our students to demonstrate when they enter the workplace after graduation. The aim of our graduate attributes initiative is to equip students with the competencies to address health inequalities through patient-centred and community-based care.

We spent 18 months adapting the CanMEDS competency framework of the Royal College of Physicians and Surgeons of Canada. According to this adapted framework a health professional graduating from Stellenbosch University should be competent to fulfil seven intertwined roles to assist in meeting the health needs of our country, namely that of Healthcare Practitioner, Communicator, Collaborator, Leader and Manager, Health Advocate, Scholar and Professional (see Figure 3). The final product was accepted for all undergraduate programmes by the Faculty Board in 2013. In 2014 the Medical and Dental Professions Board (MDB) of the Health Professions Council of South Africa accepted an adapted CanMEDS framework for describing the attributes of all doctors, dentists and clinical associates graduating in South Africa ([http://www.hpcsa.co.za/uploads/editor/UserFiles/downloads/medical\\_dental/MDB%20Core%20Competencies%20-%20ENGLISH%20-%20FINAL%202014.pdf](http://www.hpcsa.co.za/uploads/editor/UserFiles/downloads/medical_dental/MDB%20Core%20Competencies%20-%20ENGLISH%20-%20FINAL%202014.pdf)). This process was spearheaded by the Undergraduate Education and Training subcommittee of the MDB, chaired by the Director of the CHPE, Prof Ben van Heerden. During the cyclic accreditation process medical and dental schools will in future also be evaluated on how these attributes are cultivated and assessed.



**Figure 3: The competency framework of the Faculty of Medicine and Health Sciences: Graduating health professionals should be competent in seven roles**

During 2014 the CHPE strengthened our partnership with the Department of Industrial Psychology and a strategic plan was refined during a series of planning workshops. From 23-25 June 2014 twenty faculty members participated in a series of workshops, facilitated by Prof Jason Frank, “father” of the CanMEDS Competency Framework, to refine the strategic plan. The plan includes action steps to imbed and assess these graduate attributes in all undergraduate curricula, to implement a change management strategy to facilitate the process and to develop a comprehensive research framework for this project. The CHPE received strategic funding from the university, a Teaching Development Grant from the Department of Higher Education and support from the Fund for Innovation in Teaching and Learning to integrate the graduate attributes into the various curricula and to investigate the use of a longitudinal portfolio to assess the development of these core competencies.

The integration of these core competencies starts, for example, in the Interprofessional Phase in the first year when Medical, Physiotherapy and Dietetic students together follow a Module called Health in Context. One of the activities during this module is the SURMEPI-funded Amazing Race for Health, where student in groups of ten, adopt t a community. Over a period of 3 months they

research the social determinants of health that have an impact on the health of “their” community and the functioning of the health system, including rehabilitation.



***An excited interprofessional group of first year students exploring Ceres as part of their Amazing Race for Health***

Their learning culminates when the various groups visit their communities to experience and learn first-hand from the community and local health care workers. In the process various graduate attributes in the Faculty’s framework are developed and assessed. We are grateful for the enthusiastic support from facility managers and health professionals at these twenty sites, stretching from Khayalitsha, Elsies River and Macassar to Bredasdorp, Roberston and Ceres.

**Stefanus Snyman**

## SUPPORT FOR UNDERGRADUATE PROGRAMMES

Apart from providing workshops (as described under Faculty Development above), the CHPE continues to be available for consultation to the different departments and divisions in the Faculty to enhance teaching and learning in the different undergraduate programmes. During 2014, for example, the CHPE worked with the Department of Occupational Therapy in the process of integrating the graduate attributes into their programme outcome. The CHPE also played a central role in facilitating a process of engagement and exploration towards the possible implementation of a BMedSci as well as a Graduate Entry Medical Programme. This process is now in place and will be a focus for 2015.

## OTHER TEACHING ACTIVITIES

A key point of departure in our work is that we are able to engage with colleagues in the Faculty from a position of having hands on experience. To this end, many of the staff in the Centre are directly involved in teaching in the Faculty across a number of programmes at both undergraduate and postgraduate level.

## UNDERGRADUATE TEACHING

MB,ChB: Prof Ben van Heerden: Programme Coordinator	
Year 1	<ul style="list-style-type: none"> <li>• Bawoodien, A: Module Chair: Introduction to Clinical Medicine 141</li> <li>• Louw, A: Programme Coordinator for the Extended Degree Programme</li> <li>• Louw, A: Module chair: Introduction to Health Sciences 198.</li> <li>• Louw, A: Module chair: Practical Clinical Exposure 198.</li> <li>• Louw, A: Manage tutor initiative for module: Essentials for Disease Processes (EDP I students)</li> <li>• Louw, A: Interprofessional Phase: Phase chair:</li> <li>• Louw, A: Module chair: Personal and Professional Development 111.</li> <li>• Louw, A: Phase I chair:</li> <li>• Snyman ISDW: Interprofessional Phase: Personal And Professional Development 111 (lecturing)</li> <li>• Snyman, ISDW: Interprofessional Phase: Health in Context 111 (theme chair, lecturing and coordinator for Amazing Race for Health)</li> <li>• Snyman, ISDW : Introduction to Clinical Medicine 141 (lecturing)</li> </ul>
Year 2	<ul style="list-style-type: none"> <li>• Bawoodien, A.: Module Chair: Introduction to Clinical Medicine 271</li> <li>• Bawoodien, A: Introduction to Clinical Medicine 271 (lecturing)</li> <li>• Snyman: Introduction to Clinical Medicine 271 (lecturing)</li> </ul>
Year 3	<ul style="list-style-type: none"> <li>• Snyman ISDW: Early Clinical Rotations - Health, Disease and Disability in the Community 371</li> <li>• Van der Merwe, C: Module Chair: Clinical Skills Domain of the Early Clinical Rotations 371 module</li> <li>• Archer, E: Secundus Chair: Clinical Skills Domain of the Early Clinical Rotations 371 module</li> </ul>
Year 4	<ul style="list-style-type: none"> <li>• Snyman ISDW: Module Chair: Doctor as Change Agent in Communities 511</li> <li>• Snyman, ISDW: Middle Clinical Rotations - Health and Disease in a Rural Community 471/511</li> <li>• Van Heerden, B: Module Chair: Elective 441 module</li> <li>• Bawoodien, A: Secundus Chair: Elective 441 module</li> <li>• Archer, E: Module Chair of the Clinical Skills Domain of the Middle Clinical</li> </ul>

	<p>Rotations 471 module</p> <ul style="list-style-type: none"> <li>• Espen, B: Secundus Chair of the Clinical Skills domain of the Middle Clinical Rotations 471 module</li> </ul>
Year 5	<ul style="list-style-type: none"> <li>• Snyman ISDW: Module co-chair: Doctor as Change Agent in Communities 511</li> <li>• Snyman, ISDW: Middle Clinical Rotations - Health and Disease in a Rural Community 471/511</li> <li>• Snyman, ISDW: Module chair: Health Management 511</li> <li>• Snyman, ISDW: Late Clinical Rotations - Health, Disease and Disability in the Community 541</li> <li>• Van Heerden, B: Module Chair: Elective 541 module</li> <li>• Bawoodien, A: Secundus Chair: Elective 541 module</li> <li>• Archer, E: Module Chair of the Clinical Skills Domain of the Middle Clinical Rotations 511 module</li> <li>• Espen, B: Secundus Chair of the Clinical Skills domain of the Middle Clinical Rotations 511 module</li> <li>• Espen, B: Secundus Chair of the Introduction to Emergency Medicine domain of the Middle Clinical Rotations 511 module</li> </ul>
Year 6	<ul style="list-style-type: none"> <li>• Archer, E. Supervisor: Student Intern Assignment of JCB Kotze (MB,ChB VI)</li> <li>• Snyman ISDW: Late Clinical Rotations - Health, Disease and Disability in the Community 541 (module team member; managing IPECP facilitators)</li> </ul>
BSc Dietetics IV	<ul style="list-style-type: none"> <li>• Snyman ISDW: Community Nutrition</li> </ul>

## POSTGRADUATE TEACHING

M Sc in Clinical Epidemiology	<ul style="list-style-type: none"> <li>• Van Schalkwyk, S. Co-coordinator: Teaching Evidence-Based Health Care</li> <li>• Van Schalkwyk, S. Lecturer: Appraising and writing scientific articles</li> <li>• Blitz, J: Lecturer Teaching Evidence-Based Health Care</li> </ul>
M Med (Fam Med)	<ul style="list-style-type: none"> <li>• Bawoodien, A: Family oriented primary care</li> </ul>
MPhil in Health Professions Education	<ul style="list-style-type: none"> <li>• Archer, E: Skills Development; Facilitating Learning in HPE (module chair)</li> <li>• Bezuidenhout, J: Leadership in HPE; involved in Research Methodology and Facilitating Learning in HPE</li> <li>• Blitz, J: Leadership in HPE; Assessment in HPE; APPD</li> <li>• Louw, A: Learning in HPE; Curriculum analysis in HPE (module chair)</li> <li>• Smuts, E: Skills Development</li> <li>• Snyman, ISDW: Teaching and Learning in Primary Healthcare (module chair)</li> <li>• Van Schalkwyk, SC: Research Methodology (module chair); involved in Learning in HPE</li> <li>• Van Heerden, BB: Programme Coordinator and module chair of the Leadership in HPE module. Involved in facilitating the Curriculum Analysis in HPE module.</li> </ul>

## ADMINISTRATIVE SUPPORT FOR THE MB,ChB PROGRAMME

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Given the fact that the MB,ChB programme is not offered by a specific division (as is the case with the other professional undergraduate programmes offered by the FMHS), certain administrative support functions are provided centrally by the CHPE. These include:

- All study guides for students in the MB,ChB Programme: MB,ChB I-VI theory and clinical modules: formatting, duplication and distribution to different departments.
- Administration of student feedback of all modules of the MB,ChB programme – theory and clinical modules.
- Administration of student feedback of the five undergraduate programmes of the Faculty – final year students in each programme.
- All the administration of the Elective modules of MB,ChB IV & V.
- The compilation of the prescribed booklist of the Faculty: The information is provided by the different programmes. The booklist is distributed to the different book dealers Responsible for administering the “language tests” of all 1st year students in MB,ChB I, BSc Physiotherapy and Dietetics beginning of each year.
- Central administrative support provided to module chairs of the MB,ChB programme.

### BACKGROUND

Student support activities were started in the Centre for Health Professions Education, in 2006. The aim of the activities was to address the complexities associated with an increasing number of medical students who came from diverse schooling and psychosocial backgrounds. An extended degree programme was introduced in 2006 to address some of these complexities. Internationally a consciousness of students requiring intensive support with adjustment to bridging the gap from high school to university and coping with various life skills dawned on academic communities. The faculty also saw this need extending beyond the first year of study through to the final year of study.

### AIM AND PURPOSE

Support, advice and feedback are provided via the programme committee to the general student body and academic staff. The main function of the support staff remains, however, to specifically identify students at high risk. Dr Alwyn Louw is commissioned to support all students in the first year of study, including MB,ChB I, Physiotherapy I, Dietetics I mainstream as well as the Extended Degree programme I and II students in these disciplines. As from 2014 all students entering the Extended Degree Programmes were selected from quintile 1 and 2 schools hence requiring more intensive academic and psychosocial support.

Dr A. Bawoodien provides support to MB,ChB II to VI students. MB,ChB II is a known high risk year in medical curriculums. The volume of work is enormous and many new concepts are introduced. It is also developmentally a transition phase for students. The impact on academic activities is tangible. Focus on this group for the provision of academic and psychosocial support is imperative.

Students entering the final year of study are the next group that needs support. They are on the verge of embarking on a high stakes examinations. For many years they have been handling copious amounts of information which now has to be assimilated and applied in examinations over a short period of time. Their resilience and ability to cope with stress is severely challenged at this time.. To ensure a high throughput of this group of students, optimal academic and psychosocial support needs to be provided.

It is indeed gratifying to note the constant upward trend in die MB,ChB II and VI success rates over the past number of years. In the case of both these year groups we noticed in 2014 the best success rate since implementation of the current curriculum in 2008. Although many factors have an influence on student success, we believe that our student support activities played a major role in this achievement.

### ACTIVITIES

The support services at the CHPE are guided mainly by academic results. All students with test results below 50% in the theory modules and below 60% in the clinical modules are invited to make an appointment with student support staff. This happens via email with the necessary confidentiality of the student being maintained. Students showing persistent underperformance and/or reluctance to accept an invitation may be individually invited via various confidential routes.

Students requiring academic or other support may also be identified by peers, mentors, tutors, lecturers, parents or by self-referral. It is important to maintain an open line of communication between students and the academic staff.

Students need to have their fears of marginalisation allayed. This, together with embarrassment of underperformance, anonymity and self-efficacious behaviour are factors impinging on the degree to which effective use is made of available support services.

These services provided by the CHPE are marketed through direct contact with students, during first year information sessions to students and parents and via the registrar's office. The registrar's office has set up a database of services provided and the route to follow (organogram) which is provided to students and parents.

Upon acceptance of an invitation, students are screened for various factors which may impact on academic performance. They are then referred appropriately depending on whether academic, psychological, social or financial support is required. More than often they are managed by the academic program facilitators i.e. Dr Louw or Dr Bawoodien.

The CHPE student support arm strive towards optimising the use of the services, dispelling negative perceptions of the services provided and encouraging a help-seeking behaviour in the students at the FMHS.

#### EXTENDED DEGREE PROGRAMME

As programme coordinator, Dr Alwyn Louw manages the nine different Extended Degree (EDP) modules with twenty lecturers responsible for presenting classes. This includes managing the budget of the EDP programme. There is ongoing innovation of the programme with the aim to optimise student success.

The success rate of EDP students in the two EDP years remains high. The remaining challenge is to further improve success rates in the later years of the mainstream programme, especially in MB,ChB II.

**Alwyn Louw and Aziza Bawoodien**

## RESEARCH AT CHPE

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Research in health professions education represents a growing field of interest internationally. This interest is reflected in the research activity and output at the CHPE.

### PUBLICATIONS IN PEER-REVIEWED JOURNALS - 2014

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- Archer E, Van Heerden BB, Kidd M, Bezuidenhout J. Making use of an existing questionnaire to measure patient-centred attitudes in undergraduate medical students: A case study. *African Journal of Health Professions Education* 2014;6(2):150-154.
- Bezuidenhout J, Van Schalkwyk SC, Van Heerden BB, De Villiers MR. Building a research agenda in health professions education at a Faculty of Medicine and Health Sciences: Current research profile and future considerations. *African Journal of Health Professions Education* 2014;6(2):169-173.
- Blitz J, Bezuidenhout J, Conradie HH, De Villiers MR, Van Schalkwyk SC. 'I felt colonised': emerging clinical teachers on a new rural teaching platform. *Rural and Remote Health* 2014;14(2511):1-9.
- Blitz J, N Kok, Van Heerden BB, Van Schalkwyk SC. PIQUE-ing an interest in curriculum renewal. *African Journal of Health Professions Education* 2014;6(1):23-27.
- Figueiró-Filho EA, Bezuidenhout J, Amaral E, McKinley D, A Tekian A. "Minimal supervision outpatient clinical teaching". *The Clinical Teacher* 2014;11:365-369.
- Figueiró-Filho EA, Amaral E, McKinley D, Bezuidenhout J, Tekian A. Clinical Teaching with minimal, indirect supervision. *Medical Education* 2014;48:530.
- Leibowitz B, Bozalek V, Van Schalkwyk SC, Winberg C. Institutional context matters: the professional development of academics as teachers in South African higher education. *Higher Education* (early online).
- Van Schalkwyk SC, Bezuidenhout J, Conradie HH, Fish T, Kok N, Van Heerden BB, De Villiers MR. 'Going rural': driving change through a rural medical education innovation. *Rural and Remote Health* 2014;14:1-9.
- Van Schalkwyk SC, Bezuidenhout J, De Villiers, MR. Understanding rural clinical learning spaces: being and becoming a doctor. *Medical Teacher*. (early online).

### OTHER PUBLICATIONS - 2014

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- Snyman S, Sykes C, Gilbert J. International Classification of Functioning, Disability and Health (ICF) framework to facilitate Interprofessional education and collaborative practice. World Health Organisation Health Workforce website:  
[http://www.who.int/hrh/news/2014/hrh\\_icf\\_framework/en/](http://www.who.int/hrh/news/2014/hrh_icf_framework/en/)

### CHAPTERS IN BOOKS - 2014

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- De Villiers M, Van Schalkwyk S. How to facilitate small-group learning. In: Mash BJ, Blitz. (eds). *South Africa Family Practice Manual* (3rd. ed.). Pretoria: Van Schaik;2014.
- De Villiers M, Conradie H, Snyman S, Van Heerden B, Van Schalkwyk S. Experiences in developing and implementing a Community-Based Education strategy - a case study from South Africa. In Talaat W, Ladhani Z (eds). *Community Based Education in Health Professions: Global Perspectives*. WHO EMRO; 2014. pp. 179-206.
- Snyman S contributed to Chapter 3: Using the ICF in clinical practice and the education of health professionals. World Health Organization. *How to use the ICF: A practical manual for using the International Classification of Functioning, Disability and Health (ICF)*. Geneva: World Health Organization; 2014. pp. 29-45.

Van Schalkwyk S. Evolving doctoral identities: understanding 'complex investments'. In Bitzer EM, Frick BL, Albertyn R, Grant B, Kelly F. (eds). Pushing boundaries in postgraduate supervision. Stellenbosch: SunMedia; 2014. pp.215–227.

#### INTERNATIONAL ORAL PRESENTATIONS – 2014

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- Blitz J, Van Schalkwyk S. Accessing professional development activities: a survey of health sciences clinicians in their teaching role. Ottawa Conference. Ottawa. 26-29 April 2014.
- Blitz J, Van Schalkwyk S. Assessment for and of learning: a framework for implementing student patient portfolios. Workshop. Ottawa Conference, Ottawa. 26-29 April 2014.
- Blitz J, De Villiers M. Residency education at Stellenbosch University, South Africa: Successes and challenges in a unique setting. International Conference on Residency Education. Toronto, Canada. 23-25 October 2014.
- Blitz J, Archer E, Rhode H, Van Schalkwyk S. Clinical teaching of undergraduate medical students: how do clinicians do it? AMEE. Milan, Italy. 30 August-3 September 2014 (Accepted, but not presented)
- Muller J, Conradie H, Snyman S. Rural undergraduate interprofessional education at a student run service-learning centre in South Africa. Seventh All Together Better Conference. Pittsburgh, USA. 6-8 June 2014.
- Snyman S, Von Presentin K, Clarke M. International Classification of Functioning, Disability and Health (ICF): A framework for transformative interprofessional education. Seventh All Together Better Conference. Pittsburgh, USA. 6-8 June 2014.
- Snyman S, Kraus de Camargo O, Sykes C, Saleeby P. FDRG mICF Collaborative. WHO-FIC Network Annual Meeting and Conference. Barcelona, Spain. 11-17 October 2014.
- Van Schalkwyk S, Bezuidenhout J, Blitz J, Conradie H, Fish T, Kok N, Van Heerden BB, De Villiers M. Evaluating Community-based education (CBE) – The Ukwanda Rural Clinical School: a longitudinal evaluative study. The Global Forum on Innovation in Health Professions Education. Institute of Medicine, Washington DC, USA. 1-2 May 2014.
- Van Schalkwyk S, Bezuidenhout J, Conradie H, Kok N, Van Heerden BB, De Villiers M. Crossing boundaries: The potential for innovative medical education models to challenge traditional assessment practices. Ottawa Conference, Ottawa. 26-29 April 2014.

#### NATIONAL ORAL PRESENTATIONS – 2014

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- Archer E, Tan C, Wolvaardt L. The novice's guide to contemplating a PhD. Workshop. SAAHE Conference. Cape Town. 26-28 June 2014
- Archer E. In search of an effective teaching approach for skill acquisition and retention: Teaching manual defibrillation to junior medical students. SAAHE. Cape Town. 26-28 June 2014.
- Archer E, De Villiers A, Van Hoving N. Making use of different teaching methods: how does it influence the retention of clinical skills? SAAHE. Cape Town. 26-28 June 2014.
- Blitz J, Archer E, Rhode H, Van Schalkwyk S. Clinical teaching of undergraduate medical students: how do clinicians do it? SAAHE. Cape Town. 26-28 June 2014.
- Blitz J, Van Schalkwyk S. Assessment for and of learning: a framework for implementing student patient portfolios. Workshop. SAAHE. Cape Town. 26-28 June 2014.
- Couper I, Reid S, Cooke R, Blitz J, Zingela Z. Convergence and divergence in blueprinting a new medical school - a draft proposal for the Faculty of Health Sciences, Nelson Mandela Metropolitan University. Workshop. SAAHE. Cape Town. 26-28 June 2014.
- De Villiers MR, Van Heerden BB. The intern landscape in South Africa – transition from student to doctor. SA Association of Health Educationalists (SAAHE). Cape Town. 26-28 June 2014.
- Kok N, Van Schalkwyk S, Conradie, H. Patient perspectives: community-based education on a rural platform. Ukwanda Rural Research Day. Worcester, Western Cape. 29-30 May 2014.

- Kok N, Van Schalkwyk S, Conradie H, De Villiers M. Reflections on their year-long rural clinical training: junior doctors look back. SAAHE. Cape Town. 26-28 June 2014.
- Louw A, Murdoch-Eaton D, Bezuidenhout J. Developing learners – evaluating the impact of curricular changes designed to enhance generic skills experience. Academic Year Day. FMHS, Stellenbosch University. 14 August 2014.
- Van Schalkwyk S, Blitz J. Supporting academics in their teaching role: faculty development in context. SAAHE. Cape Town. 26-28 June 2014.
- Van Schalkwyk S, Blitz J, De Villiers M, Walsh S. A novel way of learning: staff and student perspectives on the use of lecture podcasts. HELTASA. Bloemfontein. 18-21 November 2014.
- Van Schalkwyk S, Herman N. Portfolios as integral part of a curriculum: a framework for implementation. Pre-conference workshop. HELTASA. Bloemfontein. 18-21 November 2014.
- Von Pressentin K, Blitz J, Smit E, Archer E. “I’m surrounded by students, what should I do next?” – Educational strategies for teaching in the clinical setting. Workshop, Rural Health Conference. Worcester. 21-24 September 2014.

#### INTERNATIONAL POSTER PRESENTATIONS - 2014

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- Archer E, Patient-centred attitudes of undergraduate medical students: Using the Patient Practitioner Orientation Scale in a South African context. AMEE. Milan, Italy. 30 Aug-3 Sept 2014.
- Archer E, Van Heerden BB, Kidd M, Bezuidenhout J Making use of an existing tool to measure patient-centeredness in undergraduate medical students. AMEE. Milan, Italy. 30 Aug-3 Sept 2014.
- Archer E, Bezuidenhout J, Kidd M, Van Heerden BB. Patient-centered attitudes of undergraduate medical students: Using the Patient Practitioner Orientation Scale in a South African context. AMEE. Milan, Italy. 30 Aug-3 Sept 2014.
- Bezuidenhout J, Van Schalkwyk S, De Villiers M. Students' Development of a Professional Identity in Rural Learning Spaces. The Network: TUFH XXXI Educational Meeting: 2014 Annual Conference. Fortaleza, Brazil. 19-23 November 2014.
- Frattura L, Anttila H, Nurmi-Koikkalainen P, Snyman S, Bassi G, Simoncello A, Terreni S, Soranzio A, Green S. How to automatically expand ICF-EF in order to better describe care and living environment factors at country level: steps toward a multicenter project on the biopsychosocial determinants of outcomes. WHO-FIC Network Annual Meeting and Conference. Barcelona, Spain. 11-17 October 2014.
- Kok N, Van Schalkwyk S, Conradie H, De Villiers M. Reflections on a year-long rural clinical exposure: what do junior doctors have to say? AMEE. Milan, Italy. 30 Aug-3 Sept 2014.
- Louw A, Murdoch-Eaton D, Bezuidenhout J. Developing learners – evaluating the impact of curricular changes designed to enhance generic skills experience. AMEE, Milan, Italy. 30 Aug-3 Sept 2014.
- Saleeby P, Sykes C, Martinuzzi A, Hough J, Lee H, Leonardi M, LePlege A, Maribo T, Ten Napel H, Paltamaa J, Snyman S, Tomes G. Development of Criteria to Review ICF Literature. WHO-FIC Network Annual Meeting and Conference. Barcelona, Spain. 11-17 October 2014. [Poster winner]
- Saleeby P, Sykes C, Martinuzzi A, Snyman S, Kraus de Camargo O, Della Mea V, Paltamaa J, Van Gool C, Mostert W. Developing a mobile application for ICF - Literature review component. WHO-FIC Network Annual Meeting and Conference. Barcelona, Spain. 11-17 October 2014. [Poster winner]

- Snyman S, Kraus de Camargo O; Gong J. The mICF Collaborators Group – A Worldwide Initiative. WHO-FIC Network Annual Meeting and Conference, Barcelona, Spain. 11-17 October 2014.
- Snyman S; Kraus de Camargo O, Gong J. User requirements for a mobile ICF application. WHO-FIC Network Annual Meeting and Conference. Barcelona, Spain. 11-17 October 2014. [Poster winner]
- Snyman S, Sykes C, Kraus de Camargo O, Bhattal N, Della Mea V, Van Gool C, Madden R, Paltama J, Mostert W, Frattura L, et al Developing a mobile application to improve continuity of care and strengthen health systems: A call for international collaboration. Seventh All Together Better Conference. Pittsburgh, USA. 6-8 June 2014.
- Tan C, Van Schalkwyk S, Bezuidenhout J, Cilliers F. Pictorial representation of assessments used at exit level of a medical training programme: What does this tell us? Ottawa Conference. Ottawa. 26-29 April 2014.
- Van Heerden BB, Van Schalkwyk S, Conradie HH, Kok NJ, De Villiers MR. Assessment performance of students completing a year-long rural clinical clerkship at the Ukwanda Rural Clinical School of Stellenbosch University, South Africa. AMEE. Milan, Italy. 30 Aug-3 Sept 2014.
- Van Schalkwyk S, Bezuidenhout J, Blitz J, Conradie H, Fish T, Kok N, Van Heerden BB, De Villiers M. Evaluating Community-based education (CBE) – The Ukwanda Rural Clinical School: a longitudinal evaluative study. The Global Forum on Innovation in Health Professions Education, Institute of Medicine. Washington DC, USA. 1-2 May 2014.

#### NATIONAL POSTER PRESENTATIONS – 2014

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- Louw A, Murdoch-Eaton D, Bezuidenhout J. Developing learners – evaluating the impact of curricular changes designed to enhance generic skills experience. SAAHE, Cape Town. 26-28 June 2014.
- Snyman S, Sykes C, Bhattal N, Madden R, Goliath C, Della Mea V, Van Gool C, Kraus de Camargo O, Paltama J, Frattura L, et al Mobile health application utilising functioning and environmental factors for patient-centred care: A call for international collaboration. SAAHE. Cape Town. 26-28 June 2014.
- Snyman S, Sykes C, Bhattal N, Madden R, Goliath C, Della Mea V, Van Gool C, Kraus de Camargo O, Paltama J, Frattura L, et al Mobile health application utilising functioning and environmental factors for patient-centred care: A call for international collaboration. Rural Health Conference. Worcester. 21-24 September 2014.

#### PROJECTS - CURRENT<sup>1</sup>

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- Archer E, Van Heerden BB, Bezuidenhout J, Kidd M. Attitude towards patient-centeredness during medical school training. Longitudinal study 2012-2015.
- Blitz J, Archer E, Rhode H. An investigation into the teaching strategies used during clinical supervision of undergraduate medical students in Tygerberg Hospital.
- Daniels K; Forinder U; Clarke M; Snyman S; Ringsberg C. Health and healthy lifestyle: Perceptions of pre-school children's parents and crèche staff in the Western Cape, South Africa.
- Keiller L, Archer E. The use of technology in the teaching and learning of procedural skills in Health Professions Education.
- Smuts E, Archer E. A peak at Procedural skills competence of final year MB,ChB students
- Snyman S, Geldenhuys M. Did exposing an interprofessional class of first years to an underserved community contributed to the students' contextualisation of the determinants of health?
- Snyman S, Smith-Tolken A. Destigmatising medical students' perceptions towards psychiatric patients: The influence of a service-learning approach.

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<sup>1</sup> Details of these projects are available at the end of this report – Addendum A

Snyman S. An analysis of teaching and learning of Graduate Attributes in the MB,ChB programme.  
Snyman S, Goliath C, Boshoff H. Die impak van 'n gemeenskapsgebaseerde interprofessionele leer- en -onderrigdiensleerprojek op 'n vroeë kinderontwikkelingsprogram in Hermanus en die gemeenskap se belewenis van studentebetrokkenheid.  
Snyman S, Goliath C, Boshoff H. Die rol van gemeenskapsgebaseerde interprofessionele leer en onderrig in studente se holistiese benadering tot die hantering van pasiënte.  
Snyman S, Von Pressentin KB, Clarke M. International Classification of Functioning, Disability and Health: Catalyst for Interprofessional Education and Collaborative Practice.  
Snyman S, Kraus de Camargo O, Gong J. Requirements for the development of a mobile application based on the International Classification of Functioning, Disability and Health.  
Van der Merwe C, Bitzer E, Archer E. Students' perception of feedback.

## TEACHING DEVELOPMENT GRANT PROJECTS

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In addition to the projects listed above, the CHPE is responsible for the following Teaching Development Grants:

### 2013/2014 CYCLE:

- Capacity development for transformative learning. Project leader: J Bezuidenhout
- Student focussed interventions to facilitate transformative learning: J Bezuidenhout
- Educational capacity of development of teachers of undergraduate students to become facilitators of transformative learning: J Bezuidenhout
- Student focused interventions to facilitate junior undergraduate students participation in transformative learning: J Bezuidenhout

### 2014/2015 CYCLE:

- Promoting the scholarship of teaching and learning: BB van Heerden
- Implementation of a longitudinal portfolio in the MB,ChB programme: BB van Heerden
- Faculty development for clinicians in their educational role: J Blitz
- The development and implementation plan for a research strategy for health professions education research: S van Schalkwyk

## OTHER ACTIVITIES IN THE CHPE

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### SUBICC

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During 2014, the CHPE joined forces with the Centre for Evidence-Based Health Care and was successful in being appointed to represent the Faculty of Medicine and Health Sciences as a BEME International Collaborating Centre (BICC) for the Best Evidence Medical Education (BEME) Collaboration.

BEME is an international group of individuals, universities and professional organisations committed to the development of evidence informed education in the health professions through: the dissemination of information which allows teachers and stakeholders in the health professions to make decisions on the basis of the best evidence available; the production of systematic reviews which present the best available evidence and meet the needs of the user; and the creation of a culture of best evidence education amongst individuals, institutions and national bodies.

The work of the BICC fits into the scope of the Faculty's and the Centre's strategic vision, and draws on its experience and expertise in health professions education, editorial functions, and promotion of the use and conduct of systematic reviews.

The contribution of the FMHS to the BEME Collaboration includes:

- Contributing to the identification and conceptualisation of relevant topics for new systematic reviews
- Promoting the use of systematic reviews to inform medical and health professions education
- Contributing to the editorial role and function of BEME review groups
- Providing mentorship and support for conducting new BEME reviews
- Seeking funds to support the functions of the BICC and for conducting new systematic reviews.



[With thanks to Prof Taryn Young for this text]

## SURMEPI

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The Stellenbosch University Medical Education Partnership Initiative (SURMEPI) was established in 2010 as a result of a PEPFAR-funded grant via the Medical Education Partnership Initiative (MEPI). Through this grant, SU became one of only eleven institutions across sub-Saharan African to be drawn into MEPI. Given SURMEPI's focus on Medical Education, it was inevitable that the CHPE became a key collaborator with SURMEPI from the start. A number of the CHPE staff are either directly or indirectly involved in SURMEPI's various projects and activities. SURMEPI has also served as a catalyst to the work of the CHPE and, in particular, helped to strengthen its outputs (4 publications in 2014).

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## CONTRIBUTION TO THE FIELD OF HEALTH PROFESSIONS EDUCATION

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### ELIZE ARCHER

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- SAAHE 2014 conference organizing committee
- Reviewed for one national and one international Journal in 2014
- Internal examiner: Master's x3
- Convenor: Academic Year Day

### JUANITA BEZUIDENHOUT

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- Member of Postgraduate Education and Training Subcommittee (Medical) of the Medical and Dental Professions Board
- Member of the postgraduate accreditation panel of the HPCSA to the University of KwaZulu-Natal
- Chairperson of the postgraduate accreditation panel of the HPCSA to the University of Pretoria
- Panel member of the Academy of Science, South Africa (ASSAf) Consensus Study: 'Reconceptualising education and training of an appropriate health workforce for the improved health of the nation'
- Senior deputy editor: African Journal of Health Professions Education
- Chairperson of the Board of Directors and Faculty member of the Sub-Saharan Regional FAIMER Institute (SAFRI)
- Internal examiner: PhD x1, Masters x3
- External examiner: PhD x1, Masters x2
- Project owner of two FMHS' Teaching Development Grants (TDG).
- Reviewed for four International Journals in 2014
- Reviewer for AMEE, Network Conference and SAAHE
- Invited workshops
  - Stellenbosch University: Project management for the research team, short course: Leadership in Science
  - Stellenbosch University: Project management for the research team, short course: Turning the science group into a team
  - University of the Free State: Clinical reasoning
  - Sefako Makgatho Health Sciences University (previously Medunsa): Understanding yourself and others (MBTI)
  - Sefako Makgatho Health Sciences University (previously Medunsa): Change management
  - University of Pretoria: Converging Teaching and Research: From Identification to Publication
  - Undergraduate Education and Training Committee of the Medical and Dental Board: Redesigning the self-evaluation report for undergraduate medical degree accreditation
- Invited speaker
  - Panel discussion: Health Professions Education in Africa – where do we stand? The Network: TUFH XXXI Educational Meeting: 2014 Annual Conference. 19-23 November, 2014, Fortaleza, Brazil
  - Panel discussion: The Place for Health Professions Education in the Current Strategic Thinking about Health Systems Configuration. The Network: TUFH XXXI Educational Meeting: 2014 Annual Conference. 19-23 November, 2014, Fortaleza, Brazil
  - University of Campinas, Faculty of Medicine, Campinas, Brazil. Clinical reasoning - why, when and how?
  - University of Campinas, Faculty of Medicine, Campinas, Brazil. Reflections on being a Pathology Teacher

- Co-presenter: MEPI Medical Education Research Technical Working Group webcast: Getting published: the rules of the game.

#### AZIZA BAWOODIEN

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- External examiner: Assessment of Module to MB,ChB II students at UCT: Becoming a Doctor
- Internal moderator: Clinical Skills module MB,ChB III.

#### JULIA BLITZ

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- SAAHE 2014 conference organisation committee
- Associate Editor: African Journal of Health Professions Education
- Reviewed for three International Journals in 2014 (Medical Education; BMC Medical Education; Rural and Remote Health)
- Internal examiner: three MPhil in HPE graduates
- Building Family Medicine Programmes in Africa. SURMEPI workshop. Primafamed Conference, 24 June 2014. Pretoria.
- Teaching and learning in Family Medicine workshops: Makerere University, July 2014; University of KwaZulu-Natal, November 2014.

#### ALWYN LOUW

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- Reviewed for National Journal in 2014
- External examiner for Master's degree
- PhD evaluation committee: Reviewer of PhD proposal
- SAFRI fellow and faculty
- Faculty representation: First-year Academy initiative
- Serve on Committee for Undergraduate Teaching, FMHS
- Serve on MB,ChB and M Phil programme committees
- Represent faculty on Student Support committee at main campus.

#### STEFANUS SNYMAN

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- Member: CanMEDS 2015 International Advisory Board
- Secretariat: WHO Functioning and Disability Reference Group (FDRG)
- Member: In-2-Theory Network, an international network with a remit to develop social science theory, and explore its practical application to interprofessional collaborative practice and interprofessional education.
- Reviewed for -three International journals in 2014
- Organised series of workshops by Prof Jason Frank on the CanMEDS competency framework. June 2014
- Internal examiner: 2 Master's
- Member of the Committee for undergraduate Education (FMHS)
- Community Interaction Committee of Senate, Stellenbosch University
- Keynote at the Health Professionals Unite for Interprofessional Education and Collaborative Practice Symposium. University of KwaZulu-Natal, Durban
- Facilitator: Developing an Interprofessional Education and Collaborative Practice Strategy for the Northwest University

- User requirements for a mobile ICF application. mICF workshop, Hamilton, Canada. 11-13 April 2014
- Developing theory for interprofessional education. In-2-Theory workshop, Toronto, Canada. 14-17 April 2014
- Project plan for a mobile ICF application to facilitate interprofessional education and collaborative practice. Functioning and Disability Reference Group of the WHO-FIC Network, London, UK. 3-5 May 2014
- Specifications for the mICF. mICF partnership workshop. Barcelona, Spain. 9-10 October 2014
- The rigorous use of theory to promote the effective development, implementation, and evaluation of Interprofessional Education. Seventh All Together Better Conference, Pittsburgh, USA. 6-8 June 2014
- Developing an Interprofessional Education and Collaborative Practice Strategy for the Northwest University. IPECP strategy workshop, Potchefstroom, South Africa. 26-27 January 2014
- Interprofessional Education: A means to develop collaborative practice and enhanced care. SAAHE, Cape Town, South Africa. 26-28 June 2014
- International Classification of Functioning Disability and Health: A catalyst for Interprofessional Education and Practice. Allied Health Professional Forum: Overberg, Caledon, South Africa. 8 June 2014.

#### BEN VAN HEERDEN

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- Chairperson of Undergraduate Education and Training Subcommittee of the Medical and Dental Professions Board
- Member of the Education and Registration Committee of the Medical and Dental Professions Board
- Chairperson of a panel of the HPCSA that evaluated the proposed new MB,ChB programme of the University of Limpopo (Turfloop campus) for accreditation
- Member of a panel of the HPCSA that evaluated the MB,ChB programme of Walter Sisulu University for accreditation
- Section editor: African Journal of Health Professions Education
- Member of the Board of Directors and Faculty member of the Sub-Saharan Regional FAIMER Institute (SAFRI)
- Deputy Chair of the Stellenbosch University BEME International Collaborating Centre
- Member of the Senate Committee for Learning and Teaching
- Member of the Committee for Undergraduate Education (FMHS)
- Member of the Committee for Postgraduate Education (FMHS)
- Chairperson of the MB,ChB Programme Committee and MB,ChB Programme Coordinator
- Programme Coordinator of the MPhil and PhD in Health Professions Education (HPE)
- Module Chair of the MB,ChB Elective Modules 441 and 541
- Module Chair of the Leadership in Health Professions Education module of the MPhil in HPE
- Internal examiner for one MPhil in HPE student
- Co-supervisor for PhD in HPE student, Sr Elize Archer
- Rector's Award for General Performance
- Manager of the Teaching Development Grants (TDG) of the FMHS.

- Member of Stellenbosch University BEME International Coordinating Centre (SUBICC)
- Medical Education Partnership Initiative (MEPI) Medical Education Research Technical Working Group Lead
- Member of a NRF funded national collaborative project investigating the professional learning of academics in the teaching role
- SUBICC representative on the international BEME Review Committee
- Member of the postgraduate accreditation panel of the HPCSA to University of the Witwatersrand
- CHEC: Short Course (Research in Teaching and Learning (co-facilitator)
- Keynote presentation: Rural Health Conference, September, 2014. Worcester
- SAAHE 2014 conference organisation committee
- SU representative on the *Strengthening postgraduate supervision* project funded by NUFFIC
- Associate Editor: BMC Medical Education
- Co-presenter: MEPI Medical Education Research Technical Working Group webcast: Getting published: the rules of the game
- Reviewed for four International Journals in 2014
- Reviewed for NRF rating applications
- Reviewed conference abstracts for SAAHE, SOTL and Postgraduate Supervision Conference
- Serve on M Phil Programme Committee
- Serve on the Postgraduate programmes committee
- Serve on the programme committee for the PG Dip in HE(T&L)
- Chair: Undergraduate Research Special Interest Group
- External examiner: 3 PhDs; 2 Master's
- Internal examiner: 1 Master's

## THE TEAM

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**Sr Elize Archer** is a Critical Care Nurse by training. She graduated from the University of the Free State (BSocSc Nursing) and Stellenbosch University (BSocSc Hons in Critical Care Nursing) and previously worked in private and government hospitals where she was largely responsible for bedside teaching of Critical Care or critical care nursing students. Elize completed her Masters in Higher Education in 2008 and is currently busy with her PHD in Health Professions Education. The focus of this research is patient-centeredness in undergraduate medical students. Since Elize joined the University of Stellenbosch in 2005 she is the manager of the Clinical Skills Centre; and from January 2015 she holds a senior lecturer post. She heads a team of four registered nurses who mainly presents a formalized clinical skills curriculum to the undergraduate MB,ChB practical curriculum. She is responsible for the teaching and assessment of several clinical skills modules in the Clinical Skills Centre.

**Professor Juanita Bezuidenhout** (MBChB, FCPATHSA, MMed, PhD) is a practicing pathologist and Deputy Director: Research in the Centre for Health Professions Education of the Stellenbosch University (SU) Faculty of Medicine and Health Sciences. She is a clinician-educator pursuing scholarship in anatomical pathology and teaching and learning, as demonstrated by a PhD in Anatomical Pathology (2005); the Rector's Award for teaching excellence (2002); and a FAIMER fellowship (2004). She also has received a Teaching Fellowship, published in the fields of pathology and education, presented at national and international conferences and received international awards for conference presentations in education. Most recently she was awarded the regional award for excellence as a pathologist by the National Health Laboratory Service (NHLS). She has served as national and international examiner in anatomical pathology, and on committees of the Faculty, the University and nationally, specifically the Medical and Dental Board and its Postgraduate Education and Training Subcommittee.



**Dr Aziza Bawoodien** (MB,ChB, MFamMed, BScHonsMedSci (Epidemiology)) is the Clinical Progress Facilitator. Her background is Family Medicine and her main interest is student well-being. Her responsibilities focus on identifying and remediating underperforming medical students from MB,ChB II to MB,ChB VI. She assists in managing students with impairments. She is also involved in undergraduate teaching and serves on the MB,ChB programme committee

**Associate Professor Julia Blitz** is a Family Physician employed in the Division of Family Medicine and Primary Care at Stellenbosch University. In 2008 she completed a Post-graduate Certificate in Higher Education which gave her the theoretical foundation for her interest in health professions education. She works part-time in the CHPE tasked with facilitating faculty development activities provided for academic staff to strengthen their teaching competence. In 2014 she became a registered PhD student researching "Clinical teaching on an expanding training platform: designing a fit-for-purpose model of faculty development for emerging clinical teachers in a resource-constrained environment".





**Anna-Mare de Wet** is currently working in the Clinical Skills Centre. She is a registered nurse with a Postgraduate qualification in ICU, Primary Health Care and Occupational Health Nursing. She enjoys working with the undergraduate students.

**Ms Jenny du Plooy** has an Office Administrator Certificate from CPUT. She is the Secretary for the CHPE and provides administrative support to the Director and other senior personnel of the CHPE. She is responsible for the day-to-day running of the Centre as well as organising various workshops and seminars.



**Sr Bronwen Espen**, a registered Critical Care nurse, joined the clinical skills centre in 2009. She is responsible for late clinical rotation teaching in the MB,ChB programme and the Introduction to Emergency Medicine in 4th year. Her main interests are using simulation scenarios for teaching communication skills and teamwork. She is currently registered as an MPhil in HPE student at SU.

**Ms Carmen Gabriels**, obtained a BA degree from Stellenbosch University and will be graduating shortly with a BPhil degree in Document Design and Analysis. She is an administrative officer who is responsible for all the educational capacity development activities offered by the centre.



**Mr Adinaan Lakay** has an Introduction to Information Technology certificate obtained from PC Training and Business College. He provides administrative support to Dr Stefanus Snyman at CHPE and is also responsible for running day-to-day activities of the CHPE, including student workshops.

**Dr Alwyn Louw** (PhD) is the Coordinator of the Extended Degree Programme, and is the Inter-disciplinary and Phase I chair. His responsibilities focus mainly on first year matters which include management and student support. He teaches and supervises in the MPhil in HPE-programme, and is also a fellow and faculty member of SAFRI. His background is education, and his research focus is on student success and curriculum innovation.



**Ms Lorraine Louw** has a Medical Secretarial Certificate from Tygerberg Technical College and is the Administrative co-ordinator of the MPhil in HPE. She provides administrative and secretarial support to the MPhil and PhD students in HPE.

**Ms Tracey Pietersen** is the Office Administrator at the Clinical Skills Centre. She provides administrative support to the staff and students at the Centre. She is also responsible for the day-to-day running of the Centre.



**Ms A'isha Salaam** has an Executive Secretary Diploma obtained from Boston Business College. She is an Administrative Officer for the CHPE, and provides administrative support for module and phase chairs of the MB,ChB programme.

**Dr Stefanus Snyman** (MB,ChB; MPhil (HealthScEd); Diploma in Occupational Medicine) is Manager: Interprofessional Education as well as Practice and Service-learning. Stefanus serves on the executive of the WHO's Functioning and Disability Reference Group (FDRG). He is also member of the CanMEDS 2015 International Advisory Board and the In-2-Theory Network - an international network with a remit to develop social science theory, and explore its practical application to interprofessional collaborative practice and interprofessional education.



**Ms Anna Skotz** is a Laboratory assistant in the Clinical Skills Centre.

**Sr Estelle Smuts** a part-time Clinical Facilitator in the Clinical Skills Centre, started her affiliation with SU as a Diploma in Nursing Education student in 2004. In 2006 she joined the Nursing Division as a part-time Clinical Facilitator for the Diploma in Critical Care students. In 2007 she also joined the Centre for Health Professions Education, as a part-time Clinical Tutor in the Clinical Skills Centre. She completed a MPhil in Health Sciences Education (US) in 2010, a Post Graduate Diploma in Monitoring and Evaluation (US) in 2012 and a Post Graduate Diploma in Primary Health Care (US) in 2013. She is currently studying towards a BTech degree in Occupational Health Nursing (CPUT).



**Ms Charmaine van der Merwe** joined the Clinical Skills Centre in April 2014, where she is responsible for various teaching and learning activities. She graduated from Stellenbosch University (BCur) and University of Johannesburg (Post graduate diploma Critical Care Nursing), and is currently busy with an MPhil in Higher Education at SU. She previously worked as a registered critical care nurse in various private hospitals, and also as an educator at a private nursing institution.

**Professor Pieter-Luttig (Budgie) van der Merwe** was associated with the Department of Paediatrics and Child Health until his retirement in 2009, serving as Departmental Chair for a number of years. After he retired he joined the CHPE on a part-time basis to support the academic management of the MB,ChB programme and is the overarching Chair of the theory modules in the Clinical Phase of the programme.



**Professor Ben van Heerden** specialised in Internal Medicine and Nuclear Medicine. He was appointed as Professor, Chief Specialist and Head of Nuclear Medicine at Tygerberg Hospital and Stellenbosch University (SU) in 2000 and subsequently served as Head of the School of Medicine of the Faculty of Medicine and Health Sciences (FMHS) of SU from 2001 – 2005. In 2006 he became the founding Director of the Centre for Health Professions Education of the FMHS. He is also the coordinator of the University's MB,ChB programme as well as the chair of the MB,ChB programme committee and the MB,ChB selection committee. He was the programme coordinator for the MPhil and PhD in Health Professions Education until the end of 2014. Prof Van Heerden is a Board member of the South African Medical and Dental Professions Board and chairperson of its Undergraduate Education and Training Subcommittee. He is a FAIMER fellow since 2006 and member of the Board and faculty member of the Sub-Saharan Africa FAIMER Regional Institute (SAFRI). He is also a section editor of the African Journal of Health Professions Education (AJHPE). Prof Van Heerden is currently the deputy chair of the SU BEME International Collaborating Centre. He received the National Award for Excellence in Teaching and Learning of the Higher Education Learning and Teaching Association of SA (HELTASA) and Council on Higher Education in 2010. He is the author or co-author of 38 publications in peer-reviewed scientific journals.

**Associate Professor Susan van Schalkwyk (PhD)** is Deputy Director: Teaching at the Centre. A key component of her work is as educational advisor for the Stellenbosch University Rural Medical Education Partnership Initiative (SURMEPI). She is currently conducting a five year study investigating the clinical training of health care workers in rural contexts. Prof Van Schalkwyk has an established background in facilitating the professional education of academics in their teaching role. Other research interests include academic writing and postgraduate studies.



**Ms Myrna van Zyl** has a Teaching Diploma from Denneoord Teachers' College, Stellenbosch She provides administrative support to the MB,ChB programme and also handles all the administration of the elective modules of MB,ChB IV & V programme. She is also responsible for the evaluation of all modules of the MB,ChB programme.

### ATTITUDES TOWARDS PATIENT-CENTEREDNESS DURING MEDICAL SCHOOL TRAINING

**Principal Investigator:** Archer E

**Co-Investigators:** Van Heerden BB, Kidd M

**Ethics Reference #:** (S11/10/011)

If we, as health educators, are aware of the changes in our students' attitudes, we can attempt to design and structure our teaching and learning to foster positive attitudes at various stages in the medical curriculum. The aim of this longitudinal study is to assess possible attitude changes of medical students towards patient-centeredness as they progress through the curriculum. The objectives are twofold: (1) to examine changes in the attitudes of medical students towards patient-centeredness as they progress through medical school and (2) to investigate the possible impact of socio-demographic factors on students' attitudes. The study is conducted as a longitudinal case study design and quantitative data is collected. The MB,ChB students of 2012 are the target group and they are requested to complete the PPOS (Patient Practitioner Orientation Scale) once a year in order to determine whether there is a change in attitude towards patient-centeredness. Data has been collected during 2012, 2013, 2014 and will still be done in 2015. For objective 2 the socio-demographic data will be correlated with the PPOS scores of students to determine whether any trends exist. The socio-demographic data such as gender, ethnicity and language is relevant. This study will end during 2015.

### PATIENT-CENTEREDNESS IN THE UNDERGRADUATE MEDICAL CURRICULUM AT STELLENBOSCH UNIVERSITY: A CASE STUDY OF THE FINAL YEAR

**Principal Investigator:** Archer E (PhD study Registered in 2014)

**Supervisor:** Bitzer EM

**Co-supervisor:** Van Heerden BB

**Ethics Reference #:** S13/09/167

The aim of this study is largely to understand what enhances or inhibits student learning of patient-centeredness in an undergraduate medical curriculum and to generate guidelines to enhance patient-centeredness in such a curriculum. The objectives that are set out to achieve during this study are:

- To clarify the concept 'patient-centeredness' in the context of medicine, using a review of relevant literature.
- To identify learning opportunities related to patient-centeredness using an analysis of relevant curriculum documents in the MB,ChB programme of the FMHS, SU.
- To explore possible factors that enhances or inhibits the development of patient-centeredness from year 1 to year 6, as experienced by final year medical students.
- To determine how lecturers/clinical teachers create learning opportunities to promote patient-centeredness in undergraduate medical students.
- To develop guidelines that can inform the teaching and learning of patient-centeredness in undergraduate medical students.

The methodology is an exploratory case study and qualitative data will be generated. Triangulation of data will be achieved by making use of various data sources and multiple perspectives for interpretation, therefore students, lecturers/clinical tutors as well as curriculum documents will be included in the study. The study population is the final year medical students at the University of Stellenbosch as well as the clinical teachers involved in the teaching of these students. Various methods for data collection will be utilised: namely focus-group interviews, individual interviews, document analysis and observation.

## THE USE OF TECHNOLOGY IN THE TEACHING AND LEARNING OF PROCEDURAL SKILLS IN HEALTH PROFESSIONS EDUCATION

**Principal Investigator:** Archer, E

**Co-Investigators:** Keiller L

**Ethics Reference #:** N14/02/009

This project aims to train staff to provide individualised, verbal feedback on student-generated videos of a procedural skill and explore the perceptions of staff and students of a blended learning approach as well as their motives and strategies for learning a procedural skill. Specific objectives of this study are to identify digital literacy training needs, determine students' preference for specific technology for self-assessment and to explore student and staff perceptions on video self-assessment of procedural skills and on individualised verbal feedback. Finally, an objective of this study is to identify the enablers and constraints for the blended learning approach to teaching a procedural skill and to determine the suitability of the Revised Two Factor Study Process questionnaire for determining student motivations and strategies in their approach to learning in this setting. This descriptive case study will utilise mixed methods of data collection and reporting. Students will be given a six-week period in which to produce and submit their video of urinary catheterisation as a procedural skill on the learning management system after which they will receive expert verbal feedback on SunLearn. This feedback will be available to students for viewing and downloading in preparation for their final summative assessment which could potentially include this particular procedural skill and/or aspects thereof, such as maintaining a sterile environment during procedures. All 3rd year MB,ChB students will be invited to complete two questionnaires. 4th year MB,ChB students will complete the R-SPQ-2F questionnaire for comparison. Data sources will include:

- Revised Study Process Questionnaire (R-SPQ-2F)
- Specifically designed perception questionnaire (staff and students)
- Focus group discussions will be held as a third data source in this study

Data collection took place over a period of one year, (2014) and will be analysed and presented in 2015.

## CLINICAL TEACHING ON AN EXPANDING TRAINING PLATFORM: DESIGNING A FIT-FOR-PURPOSE MODEL OF FACULTY DEVELOPMENT FOR EMERGING CLINICAL TEACHERS IN A RESOURCE-CONSTRAINED ENVIRONMENT

**Principal Investigator:** Blitz J (PhD study Registered in 2014)

**Supervisor:** Van Schalkwyk S

**Co-supervisor:** De Villiers M

**Ethics Reference #:** N14-08-097

Currently, there are imperatives in South Africa in terms of the clinical training of medical graduates. These are not only the international discourse on transformative learning and preparation for 21st century practice, but also the South African ministerial demand to graduate more medical students per year. This demand has been accompanied by the allocation of substantial financial support in the form of the Clinical Training Grant by the Department of Higher Education and Training. While faculty infrastructure can be adapted to cope with these increasing numbers, a bigger concern is the ability of the clinical training platform to sustain even its current training capacity. One response to this has been to expand the clinical training platform into new clinical facilities that did not previously carry large responsibility for training of students. This has required (and will continue to require more and more) the clinicians at these sites to accept and embrace taking on a substantial teaching role.

Internationally, and locally, it is recognised that most clinicians do not undergo any pedagogical training and that their appointment as teachers (particularly outside the tertiary hospital) is based largely on their clinical acumen. As the clinical training of medical graduates cannot afford to be compromised, it seems timeous to develop an appropriate model of faculty development to prepare clinicians to become clinical teachers that would fit our resource-constrained environment.

The Research Question: What should a fit-for-purpose model of faculty development for emerging clinical teachers comprise in a resource-constrained environment?

This will be investigated by addressing the following objectives:

- establish what is happening during clinical teaching episodes outside the tertiary teaching hospital in a resource-constrained environment
- understand clinicians' journey from clinician to clinician teacher
- determine what undergraduate medical students understand clinical teaching to be
- establish what strategies are in place for faculty development for clinical teaching outside the tertiary hospitals at all eight South African medical schools
- develop a model for fit-for-purpose faculty development for emerging clinical teachers in a resource constrained environment

#### AN INVESTIGATION INTO THE TEACHING STRATEGIES USED DURING CLINICAL SUPERVISION OF UNDERGRADUATE MEDICAL STUDENTS IN TYGERBERG HOSPITAL

**Principal Investigator:** Blitz J

**Co-Investigators:** Archer E, Rhode H, Van Schalkwyk S

**Ethics Reference #:** N13/03/040

Much clinical teaching is conducted by clinicians primarily employed for patient care. Many of these clinicians have not been formally prepared for their teaching role. A situational analysis of clinical teaching could serve as a starting point for designing faculty development activities to support clinicians in strengthening their role as teachers in the clinical context.

The aim of this study is to understand current pedagogical strategies used by clinical teachers in the clinical teaching environment in order to increase the effectiveness of the students' clinical learning experience.

Ethics approval was obtained for audio recording of bedside clinical teaching encounters of undergraduate medical students at an academic teaching hospital. Clinicians gave consent to be recorded over a period of time, but were not informed of exactly when the recording might occur. The recordings were transcribed and the data then plotted against Nilsson's framework of pedagogical strategies.

Data is still being collected and analysed, but the preliminary results suggest that the predominant strategies employed are "question and reply", "prompting" and "lecturing". Occasionally "demonstration" was used as a teaching strategy. Other information that was revealed about the nature of clinical teaching are: teaching opportunities unrecognized by the teachers; limited involvement and recognition of the student role; and infrequent deconstruction of clinical reasoning. This study will be completed and presented during 2015.

## WHO IS THE STUDENT? DEFINING THE SOCIO-CULTURAL IDENTITY AND LEARNING PREFERENCES OF UNDERGRADUATE STUDENTS IN THE FIRST YEAR OF HEALTH SCIENCES STUDIES

**Principal Investigator:** Christodoulou M

**Co-Investigators:** Van Schalkwyk S, Bezuidenhout J, Blitz J

**Ethics Reference #:** S12/08/219

Leadership and change agency are cited as critical attributes for the generation of health professionals who will face the increasingly complex needs of the 21st century. The literature suggests that transformative learning, interdependence in education and research on socio-cultural and academic identity (both individual and group) is imperative to cultivating and developing these attributes amongst graduates. Evidence also increasingly shows that the academic offering, situated in a specific context and within established systems, processes and structures, is not necessarily meeting the needs of this generation of students. Dramatic shifts in the diversity profile of the SU Faculty of Medicine and Health Sciences, the number of students requiring specialised subject tutoring support, and poor academic achievement are typically attributed to disparity in scholastic backgrounds and the historical legacy of the South African socio-political environment. However, these shifts also raise important questions about the emotional and socio-cultural challenges that students face, and the impact this has on their academic performance, leadership ability and the formation of their individual and group identity as health care professionals. It also provides complex challenges to the established culture of the Faculty, with issues of equity, diversity and outdated educational methodology becoming increasingly important to address. Understanding who our students are when they enter the system, not only in terms of demographics or scholastic background, but also in terms of mental and social constructs pertaining to professional identity and learning needs, is essential to designing effective strategies towards transformative learning that will enable leadership and change agency.

An exploratory, cross-sectional case study to investigate aspects of the first year undergraduate health sciences student experience was therefore conducted during 2013. The preliminary phase involved a series of in-depth, semi-structured interviews with a purposive sample of students from the first year class of 2013. Particular attention was paid to aspects of individual and group identity that might be impacting on students' ability to learn, as well as their learning experiences and perceived needs to date. A number of serious concerns, needs and risk factors pertaining to issues of diversity, identity construction, and the academic and learning environment were identified. A preliminary report on these findings was submitted to the MB,ChB Programme Committee during November 2013. A second round of interviews was conducted with these same students during 2014 to determine to what extent the findings that emerged were still relevant in their second year of undergraduate studies. These findings and relevant recommendations are currently being documented for purposes of reporting and publication. The study will contribute to an ongoing process of considered reflection to identify strategic interventions, and provide both students and faculty with opportunities for sustainable transformation and change.

## DETERMINING STUDENT EXPERIENCE OF CLINICAL TEACHING IN A SOUTH AFRICAN ACADEMIC HOSPITAL: VALIDATING AND ADAPTED QUESTIONNAIRE

**Principal investigator ;** Kotze JCB (MB,ChB 6th year student)

**Supervisor:** Archer E

**Ethics reference #:** S 14/09/185

Clinical teaching in health sciences forms an important and substantial part of curricula at the Stellenbosch University (SU) Faculty of Medicine and Health Sciences. As part of the MB,ChB

curriculum, a significant proportion of time is spent in various clinical settings, where students engage in a variety of different learning activities. At SU student feedback systems are in place for both theoretical and practical training. This is a generic, paper-based feedback form which has been developed for use across all university faculties. Although various tools have been developed for the evaluation of clinical teaching in the field of medicine, reviews have not found any to be specifically better than others. Recognizing the need for specific feedback systems which assess clinical environments specifically and reviewing available literature, the authors of a well-conducted study in Sweden based on an abbreviated version of what was developed for the SFDP, created a modified questionnaire.

To determine the content validity, an adapted form of the proposed questionnaire will be sent to five identified experts in medical education and clinical teaching. Responses will be collated and an updated version of the questionnaire will be finalised. To determine construct validity participants will be allowed to complete the proposed questionnaire anonymously, via Google Forms. Responses will be analysed and the Cronbach's alpha will be calculated. Furthermore, open responses with regards to the questionnaire will be gathered from participants and be used to make additional changes to the format and content where appropriate. Participants will be Stellenbosch University students in the late rotation of MB,ChB, who will be invited to participate in the study via email, social media and class visits, where possible. Students will be asked to complete the questionnaire after completion of every late rotation block. Responses will be collected during 2014-2015, with the aim of gathering as many responses as possible.

#### A PEAK AT PROCEDURAL SKILLS COMPETENCE OF FINAL YEAR MB,CHB STUDENTS

**Principal Investigator:** Smuts E

**Co-Investigators:** Archer E

**Ethics Reference #:** N14/08/104

In this small scale study we want to determine what the competency level of the 2014 medical student interns (SIs) are in terms of procedures taught in simulation in the Early and Middle clinical rotation. This will be an indirect measurement of the effectivity of the Clinical Skills modules implemented within the MB,ChB curriculum. The students' competency levels in terms of a set of eight (8) procedures were measured by means of an Objective Structured Clinical Examination (OSCE). The procedures chosen represented the various clinical rotations attended in the early and middle clinical phase of the students' training. Where possible the OSCE results of the respective students will be compared to their OSCE results obtained in the early and middle clinical rotation. Students were asked how prepared they felt to perform diagnostic or therapeutic procedures on patients. The results will be used to identify strong and weak areas in the current teaching of clinical skills in simulation. All 191 6th year students were invited to take part in the study; and about 60 took part in the OSCE. Participation was voluntary and took place in October 2014. Data is currently being analysed and will be presented during 2015.

#### DID EXPOSING AN INTERPROFESSIONAL CLASS OF FIRST YEARS TO AN UNDERSERVED COMMUNITY CONTRIBUTED TO THE STUDENTS' CONTEXTUALISATION OF THE DETERMINANTS OF HEALTH?

**Principal Investigator:** Snyman S

**Co-Investigators:** Geldenhuys M

**Ethics Reference #:** N14/07/080

There is a growing recognition of the need for health professions education to be more relevant. At Stellenbosch and other South African universities reviews of the public health and health systems

curricula were done to determine the commitment to prepare health professionals for working in rural and underserved areas. One of the findings was that most of the teaching related to the bio-psycho-social-spiritual approach to individuals and communities in the first few years of study is theoretical. It is recommended that students need earlier and deeper exposure to adequately motivate and prepare them to one day serve as healthcare professionals in rural and other underserved areas.

As future healthcare professionals, students need the competencies to help address the health needs of our population, to find creative solutions to reach health equity in a multicultural society, to strengthen our health system and to collaborate in rendering efficient person-centred care through rehabilitation and other services.

Among the factors associated with increased likelihood that a healthcare professional will choose rural/underserved practice is (a) training at a medical school with a mission to train rural healthcare professionals, and (b) training that includes rural components such as rural rotations and other rural curricular elements. This was the reason for initiating the *Amazing Race for Health* in 2013 at the University of Stellenbosch.

The aim of the *Amazing Race for Health* was to provide first year students with the opportunity to integrate and consolidate theoretical knowledge gained during the first semester by exposing them to the realities of the determinants of health, as well as health services, in underserved communities. This exposure forms part of 'Health in Context', an interprofessional module for first year medical, physiotherapy and dietetic students.

The researchers want to determine if the exposure of an interprofessional class of first years to an underserved community, contributed to the students' contextualisation of the determinants of health.

The following aims are directing the research:

1. To determine students' perceptions of their understanding of the determinants of health, functioning of the health system and person-centred care, following a series of related lectures and literature searches prior to a one day exposure to an underserved community.
2. To determine the change in students' perceptions of their understanding and contextualisation of the determinants of health, functioning of the health system and person-centred care following a one day exposure to an underserved community.
3. To make recommendations on how the 'Health in Context' module can be adapted to improve students' ability to contextualise their understanding of the determinants of health, functioning of the health system and person-centred care.

## DESTIGMATISING MEDICAL STUDENTS' PERCEPTIONS TOWARDS PSYCHIATRIC PATIENTS: THE INFLUENCE OF A SERVICE-LEARNING APPROACH

**Principal Investigator:** Snyman S

**Co-Investigators:** Smith-Tolken A

**Ethics Reference #:** N09-11-320

Worldwide the stigma attached to psychiatric patients, psychiatric disorders, psychiatrists and the field of Psychiatry is of great concern. The stigmatising perceptions of medical practitioners and medical students towards psychiatric patients have a negative impact on effective treatment, considering the increasing burden psychiatric disorders are placing on communities and health systems.

Numerous efforts were attempted and recommendations made for de-stigmatising medical students' perceptions towards psychiatric patients. It was found that perception usually improved after a clinical rotation in Psychiatry, but the stigmatising perceptions mostly returned a year later.

The first clinical exposure to Psychiatry for medical students at the Faculty of Medicine and Health Sciences, Stellenbosch University, is during the fourth or fifth year of study. This rotation was revised in 2010 and a service-learning component added. The research question which consequently developed is: What is the influence of a service-learning approach on de-stigmatising students' perceptions towards psychiatric patients?

It was found that students had stigmatising perceptions towards psychiatric patients before their first clinical rotation in Psychiatry. Directly after that student' perceptions were de-stigmatising to a greater extent. A year later non-stigmatising perceptions of understanding, acceptance, comfortableness, compassion, respect and responsibility were still present, although a few students experienced the limited return of stigmatising perceptions. Students attributed the positive changes to their service-learning experience in combination with the clinical placement at a psychiatric hospital with a friendly atmosphere and where they were exposed to patients not suffering from complex and extreme psychiatric disorders.

The non-stigmatising perceptions a year after a clinical rotation in Psychiatry demonstrates the transformative value of service-learning. Service-learning is where meaningful and relevant service is rendered with and in a community, social responsiveness is purposefully emphasised and structured reflections are done to enhance academic learning. As a result of this study, medical schools worldwide can take cognisance that a service-learning approach made a significant contribution to the sustained de-stigmatisation of medical students' perceptions towards psychiatric patients. These findings are being prepared for publication in a peer-reviewed journal in 2015.

#### A SITUATIONAL ANALYSIS OF TEACHING AND LEARNING OF GRADUATE ATTRIBUTES IN THE MB,CHB PROGRAMME

**Principal Investigator:** Snyman S

**Co-Investigators:** Visser M

**Ethics Reference #:** N13/02/017

Current global health literature emphasises the central importance of health equity and the need to address health inequities. In response, most medical schools across the world have undergone a paradigm shift from content and process-based education to outcomes or competency-based models of education. One of the most successful and widely used taxonomies of outcomes is the CanMEDS framework developed by The Royal College of Physicians and Surgeons of Canada. The CanMEDS framework requires a competent healthcare professional to be proficient in the seven distinct and yet intertwined roles of healthcare practitioner, communicator, collaborator, leader and manager, health advocate, scholar and professional. The aim is to educate students about professional attributes as well as about clinical knowledge and skills and the values, attitudes and beliefs that are fundamental to the profession.

The Centre for Health Professions Education (CHPE) has over the past few years been intensively engaged in refining the Faculty of Medicine and Health Sciences graduate attributes. Various committees have been successful in adapting the CanMEDS competencies to suit faculty's own identified needs. The adapted CanMEDS competencies have been accepted by the relevant faculty and SU committees and the next step is the embedding of these attributes into the MB,ChB and Allied Health Sciences curricula. The Centre for Health Professions Education (CHPE) has adopted the following principles for the implementation of the set of agreed graduate attributes:

- These attributes should be integrated longitudinally throughout curricula

- For each attribute the expected outcomes, teaching and learning strategies, and assessment criteria should be clear in the curriculum
- Module chairpersons and lecturers should take ownership and responsibility to integrate these attributes with their respective curricula/modules

This project serves to facilitate the embedding of graduate attributes into the MB,ChB and Allied Health Sciences curricula in accordance with the above principles. The aim of this research is to determine the current status, gaps, opportunities and future needs with respect to embedding graduate attributes in curricula. It will be guided by the following research objectives:

- To examine the existing undergraduate curricula with a focus on graduate attributes
- To determine whether current teaching and learning strategies facilitate the development of these core competencies
- To determine the extent to which current outcomes can be adapted to include graduate attributes
- To determine the perspectives of lecturers, registrars, consultants, alumni and students about graduate attributes
- To develop proposals regarding the embedding of graduate attributes into curricula
- To develop proposals regarding the assessment of graduate attributes in curricula.

#### THE IMPACT OF A COMMUNITY-BASED INTERPROFESSIONAL SERVICE-LEARNING PROJECT ON AN EARLY CHILDHOOD DEVELOPMENT PROGRAM IN HERMANUS: (A) THE PERCEPTIONS OF THE COMMUNITY REGARDING THE STUDENTS' INVOLVEMENT AND (B) THE ROLE OF INTERPROFESSIONAL EDUCATION IN STUDENTS' HOLISTIC MANAGEMENT OF PATIENTS

**Principal Investigator:** Snyman S

**Co-Investigators:** Goliath C, Boshoff H

**Ethics Reference #:** N11/08/250 & N11/02/043

The World Health Organisation identified interprofessional education and collaborative practice as one of the key focus areas to transform and upgrade health professionals' education and training. Health professionals should be able to work effectively in interprofessional teams to address the health needs in communities. Since 2010 the Faculty of Medicine and Health Sciences has an agreement with the Hermanus Rainbow Trust to collaborate on an early childhood development programme in the Zwelisho township of Hermanus. The aim of this project is to guide parents of vulnerable children under the age of five, on how to stimulate their children's development.

A transprofessional team of experts at Stellenbosch University developed the so-called SmartParenting training programme as part of the University's Whole Child Development Initiative. This programme was piloted by undergraduate occupational therapy, human nutrition and medical students under supervision of an interprofessional education facilitator and community workers of the Hermanus Rainbow Trust. The purpose of this research project was to determine (a) the perceptions of the community regarding the students' involvement and (b) the role of interprofessional education in students' holistic management of patients. The findings will be submitted in 2015 for publishing in a peer-reviewed journal.

#### INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH: CATALYST FOR INTERPROFESSIONAL EDUCATION AND COLLABORATIVE PRACTICE

**Principal Investigator:** Snyman S

**Co-Investigators:** Von Pressentin KB, Clarke M

**Ethics Reference #:** N12/08/048

Patient-centred and community-based care is required for promotion of health equity. To enhance patient-centred interprofessional care, the WHO recommends using the framework of the

International Classification of Functioning, Disability and Health (ICF). Stellenbosch University's Interprofessional Education and Collaborative Practice (IPECP) strategy has promoted the use of ICF since 2010. Undergraduate medical students on rural clinical placements are expected to use ICF in approaching and managing patients. Students' ability to develop interprofessional care plans using ICF, is assessed by a team of preceptors representing various health professions. This study explored the experiences of medical students and their preceptors using ICF in IPECP, and how patients perceived care received.

Students found ICF enabled a patient-centred approach. Patients felt listened to and cared for. Preceptors, obliged to use ICF, started to appreciate the advantages of interprofessional care, promoting mutually beneficial teamwork and job satisfaction. The value of integrating IPECP as an authentic learning experience was demonstrated, as was ICF as a catalyst in pushing boundaries for change. A peer-reviewed article reporting on the results was accepted and will be published in the Journal for Interprofessional Care in 2015.

#### REQUIREMENTS FOR THE DEVELOPMENT OF A MOBILE APPLICATION BASED ON THE INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH

**Principal Investigator:** Snyman S

**Co-Investigators:** Kraus de Camargo O, Gong J

**Ethics Reference #:** In process

Increasingly mobile phone applications are used to collect and provide health information and to assist in facilitating decision making. Currently, no mobile applications incorporate the ICF. The ICF is a framework developed by the WHO, documenting information on functioning as dynamic interaction between a person's health condition, environmental factors and personal factors, facilitating interprofessional decision-making and continuity of care. ICF highlights the need for a diverse team of service providers, but also represents a paradigm shift in how to approach health and healthcare. At a meeting of the Functioning and Disability Reference Group (FDRG) of the WHO in 2013, it was agreed to investigate the development of a mobile application for ICF. 215 collaborators from 38 countries registered to collaborate on the project.

During the **first year** of this three-year project, the requirements for the application (dubbed the mICF) will be determined by conducting a global survey and doing a literature review. The aims of this survey, being conducted in collaboration with McMaster University in Canada and the FDRG, are to help in determining

1. The level of expertise of potential mICF users with using mobile application software
2. The level of expertise of potential users with ICF
3. How frequently potential users intend to use the application
4. For what purpose potential users intend to use the application
5. Who are interested in the development of the mICF

#### EXPERIENCES OF FEEDBACK ON MEDICAL STUDENTS' CLINICAL SKILLS PERFORMANCE IN A CLINICAL SKILLS CENTRE

**Principal Investigator:** Van der Merwe C

**Co-Investigators:** Bitzer E, Archer E

**Ethics Reference #:** S14/08/165

It is widely accepted that feedback forms an integral part of learning (Hattie & Timperley, 2007), especially in the learning of clinical skills (Ende, 1983; Hesketh, et al., 2001; Irby & Bowen, 2004; Leinster, 2009). This also includes the learning of clinical skills in simulation (Issenberg & Scalese, 2007; Ker, 2009; Herrmann-Werner, et al., 2013; Hatala, et al., 2014). Clinical skills centres offer excellent opportunities for students to practise clinical procedures without potential harm to patients. Here students can be observed by lecturers, or even their peers and formative feedback

can be provided. Lecturers generally recognise the importance of providing feedback (Ernstzen, et al, 2009), but there are some barriers (Irby and Bowen, 2004; Cantillon & Sargeant, 2008). There are also reports in the literature as well as at this clinical skills centre that students do not always receive feedback, may not be satisfied with feedback (Boehler, et al., 2006; Murdoch-Eaton & Sargeant, 2012), or even aware of feedback provided (Bevan, et al., 2008), especially verbal feedback (Murdoch-Eaton & Sargeant, 2012), and do not necessarily respond to feedback (Prins, et al., 2006; Boud, 2007:18; Beets, 2009:196; Voelkel & Mello, 2014).

The aim of this study is to determine how 4<sup>th</sup> year medical students and their lecturers experience the feedback they receive and provide about the performance of clinical skills as practised at a clinical skills centre. A framework for successful feedback practices for medical students in a clinical skills centre will be explored. An extensive literature review is currently in progress. Data collection is planned for March 2015 and will be done using multiple methods of focus group interviews with students, observation (during learning sessions) and individual interviews (with lecturers). The goal is to complete the study by September 2015.

### A LONGITUDINAL EVALUATIVE RESEARCH PROJECT TO INVESTIGATE THE IMPACT OF THE IMPLEMENTATION OF THE RURAL CLINICAL SCHOOL 2011-2015

**Principal Investigator:** Van Schalkwyk, S

**Co-Investigators:** Bezuidenhout J, Blitz J, Conradie H, De Villiers M, Fish T, Kok N, Van Heerden BB

**Ethics Reference #:** N12/03/014

In January 2011, when the Ukwanda Rural Clinical School (RCS) accepted its first cohort of eight pioneering (and brave) students to complete the final year of their MB,ChB programme on the rural platform, a conscious decision was made to document the process of implementation and to capture the experiences of those involved (students, clinician educators, administrators, community members and patients) as part of a five-year evaluative study. With funding from the Stellenbosch University Rural Medical Education Partnership (SURMEPI) and the Fund for Research in Rural Health (FIRRH), a dedicated team of researchers under the auspices of the Centre for Health Professions Education (CHPE), was able to take this investigation forward. Now at the end of the fourth year of the study, we can reflect on how the findings that have emerged from our data - generated through interviews, focus group discussions and surveys with participation of more than 400 stakeholders - have shaped and guided ongoing work on the rural platform.

The greater context within which the RCS functions, and which informs our research, relates to the health workforce challenges currently being faced in South Africa. The Human Resources for Health Strategy 2012/3-2016/17 reports a 31% annual attrition rate of medical doctors with only 37.6% of the 11 700 graduates from 2002-2010 working in the public sector. Whilst 43.6% of the population resides in rural areas, they are served by only 12% of the country's doctors and 19% of nurses. Shifting these imbalances, while at the same time responding to national imperatives to increase the number of graduates in the health professions, has become a responsibility that faculties of medicine and health sciences are taking on board. The potential of longer term rural immersion experiences to encourage rural practice has been well-documented. A key focus of the RCS is, therefore, to offer undergraduate students in the Faculty of Medicine and Health Sciences exposure to clinical practice outside the confines of the academic hospital, with a view to ensuring their preparedness for internships and/or community service after graduation, and to ultimately increase rural retention.

Over the past four years of the study, our work has grown from offering baseline and descriptive data, to developing theory that might better explain what is happening at the RCS in terms of the learning of our students, and the mechanisms that underpin this learning. Importantly the data shows that students who attend the RCS are not disadvantaged in terms of their academic

achievement. In addition, the study highlights that despite challenges with regard to logistics, and the need for ongoing refinement of the academic offering including the assessment, the RCS experience is proving to be transformative in the lives of our graduates and in many of those who tutor and work with the students on the platform. Here, the 'place' where clinical training happens (the smaller hospital or community clinic), and the legitimate 'participation' as one of the team, come together to create an enabling context for learning. Ultimately the students' 'being and becoming' a doctor is an outcome of how they exercise their agency within this space.

## AN AUDIT OF CURRENT ACTIVITIES AIMED AT FACILITATING UNDERGRADUATE RESEARCH AMONG STUDENTS AT THE FACULTY OF MEDICINE AND HEALTH SCIENCES

**Principal Investigator:** Van Schalkwyk, S

**Co-Investigators:** Barsdorf N, Bovijn J, Dudley L, Kok N, Moodley K, Willems B, Young T

**Ethics Reference #:** N14/03/026

Health research is essential to improving health care (Global Forum for Health Research 2004, Aslam et al 2005). Learning to conduct research and engage in scholarly activities are valuable skills for undergraduate medical students to acquire as part of their medical training. Encouraging undergraduate students to conduct research has been shown to enhance their learning (Hunter et al 2006, Remes et al 2000, Green et al 2010). Studies have also shown that students who have been exposed to research at an early stage in their academic careers are more likely to consider postgraduate study opportunities and further involvement in research later in their careers (Russell et al 2007, Segal et al 1990, Kassebaum et al 1995, Reinders et al 2005, Boninger 2010). Aslam et al (2005) argue that the future of clinical research in developing countries is in fact dependent on nurturing an interest in research amongst undergraduate medical students. The research outputs of undergraduates can be increased by facilitating access to support and resources, and providing appropriate training in research methodology (Fang & Meyer 2003, Mark & Kelch 2001, Zier & Stagnaro-Green 2001, Bierer & Chen 2010). Documented barriers to successful scholarship include lack of opportunities to perform research or encouragement by seniors to get involved in research or audit projects (Griffin & Hindocha 2011), lack of faculty mentors and research office or coordinator, as well as being unaware of what research occurs locally (Chakraborti et al 2012), time constraints and a perceived lack of interest from potential supervisors (Nikkar-Esfahani et al 2012).

At the Faculty of Medicine and Health Sciences at Stellenbosch University, undergraduate students have a range of opportunities to become involved in research. In the allied health professional programmes, final year students are required to complete a research project (eg. a systematic review by BSc Physiotherapy students), sometimes in groups (e.g. B Occupational Therapy). In the MB,ChB programme, students have the opportunity to complete a research assignment during their Health and Disease in Communities rotation in their late clinical rotation phase. Other opportunities for conducting research at undergraduate level in the MB,ChB programme are voluntary in nature with students encouraged to complete a research project during their fourth and/or fifth year electives. In their final (sixth) year, a completed research project (the Student Intern Assignment) can earn the students additional marks towards their final year aggregate. Nevertheless, the numbers of students availing themselves of these opportunities are small. Reasons for this poor participation have not been explored in any study to date. In addition very few students take up the opportunity to conduct formal research with ethics approval that could lead to publication. This study seeks to determine what activities currently enable or constrain undergraduate research at the Faculty of Medicine and Health Science. Data collection commenced in 2014 and is currently ongoing.