



UNIVERSITEIT
STELLENBOSCH
UNIVERSITY

SURMEPI

newsletter

2015

SURMEPI

Stellenbosch University Rural Medical
Education Partnership Initiative

From the PI's desk – 2015 – Year 5

In 2015, year five of the project, dissemination of outcomes and lessons learnt in SURMEPI took front stage. We were very proud to publish fifteen scientific, peer-reviewed articles in a Supplement to the African Journal of Health Professions Education in June 2015. The team worked very hard to accomplish this, assisted by a focused writing retreat which is a success formula for getting published. At the end of year 5 SURMEPI has published 36 articles, mostly related to medical education research. The MEPI project has provided huge momentum for health professions education research at the Faculty of Medicine and Health Sciences (FMHS) at Stellenbosch University (SU), and a sense of sustainability going forward in generating evidence for our work. The SURMEPI team has done 93 oral presentations on SURMEPI-funded research at national and international conferences, 55 poster presentations at national and international conferences, published three book chapters, as well as an e-book on Ebola infection prevention and control.

The SU-AHEC (Area Health Education Centres) project widens the pipeline for secondary school children from rural areas to studies in the health professions. The project provides capacity development in Mathematics and Science for learners and teachers in rural schools, additional lessons in Mathematics and Sciences for the children, as well as life skills development. Morehouse University in the USA partners with SURMEPI and the SU Faculty of Education in SU-AHEC. Morehouse University performed an evaluation of the project in September

2015 and we are awaiting the results.

Prof Daniel Blumenthal from Morehouse University visited SU in September 2015 on a Fullbright Fellowship. He presented at the SA Association for Health Educationalists (SAAHE) conference, and conducted a workshop on social accountability at our Faculty. During this time he performed an evaluation of social accountability at the FMHS and compiled a report on how we can further strengthen the training of socially accountable health professions at your school.

The SURMEPI south-to-south collaborations with counterparts in Africa continues to grow. We have been working with the University of Botswana and the BoMEPI project in several areas. In January Prof de Villiers and Dr Moodley visited BoMEPI in Gaborone and Maun to learn about the BoMEPI rural training. In April Profs van Schalkwyk and de Villiers facilitated a scientific writing retreat for the BoMEPI team in Mahalapye in Botswana. (see report later in the newsletter) In September members of the BoMEPI team visited the FMHS to collaborate with colleagues on public health, health systems, medical education and grant management. The SURMEPI-BoMEPI collaborative work was presented at the International AMEE Conference in Glasgow, Scotland in the beginning of September.

During year 5 the evidence based health care team (EBHC) was invited to the University of Namibia to facilitate a workshop on integrating EBHC into the medical curriculum with faculty involved with the training of medical students. We also facilitated a train the trainers'



workshop at the University of Zimbabwe on Teaching EBHC which was attended by participants from Universities of Zimbabwe, Malawi and Rwanda. We have ongoing links to build biostatistics capacity in the region.

The eLearning portfolio that SURMEPI started at our school was further consolidated by talks with management on its sustainability going forward. The content management system (CMS) for students now include more than 7000 lectures and clinical podcasts. The Bring-your-own-device (BYOD) system that was implemented for e-assessment is now widely used and the faculty has drafted policy for students to guide their use of the system.

SURMEPI scientific writing retreat and workshop for BOMEPI



Mahalapye, Botswana
8 – 10 April 2015

Stellenbosch University Rural Medical Education Partnership Initiative (SURMEPI) facilitated a scientific writing retreat and workshop for the Botswana Medical Education Partnership Initiative (BoMEPI), as part of the existing collaboration between the two MEPI projects and the University of Botswana (UB) and Stellenbosch University (SU). The workshop was held from 8 to 10 April 2015 at Mahalapye in Botswana, some 200 kilometers north-east of Gaborone. Twenty-three participants from BoMEPI attended the workshop, 21 academic staff and 2 logistics staff. Profs Susan van Schalkwyk and Marietjie de Villiers from SU facilitated the workshop.

Participants and commitments

Participants were sent a questionnaire beforehand to indicate their background, experience in publication, the research that they planned to write about, and other relevant data. This assisted the facilitators to understand the context of the participants, as well the nature of the manuscripts that would be worked on at the writing retreat. At the start of the workshop participants were asked to state their commitments for the workshop. See below the list of participants and their initial commitments.

Workshop structure and programme

The workshop was semi-structured with some didactic input by Prof van Schalkwyk, especially for the less experienced writers attending, but this was also much appreciated by the whole group. The rest of the time was spent in individual and group consultations between the facilitators and the participants, working on their draft publications.

Feedback

Fourteen of the participants indicated that the workshop was

very useful for them, 5 that it was indispensable, and two felt that the workshop was somewhat useful. The quality of the workshop was highly rated. (See detail of the feedback attached at the end of the report). The participants found several elements of the workshop most useful. These included:

- Identification of suitable journals
- 'Tell your story' and other writers' tips
- Structure of the workshop
- Presentations
- Individual work and interaction with the facilitators
- Feedback from the facilitators
- Hands-on, practical and engaging
- Guidelines on literature review

The participants found all the elements of the workshop of benefit. They expressed the wish for the workshop to have been longer and to have more time for their writing. They also indicated a number of ways how they will now change their behaviour in terms of scientific writing, as a result of the workshop.

Thanks and reflection

It is clear that the workshop and writing retreat was very well received, and addressed a longstanding need in BoMEPI and UB. The semi-structured format in particular was appreciated, especially given the mixed nature of the audience, and their varying needs. The individual sessions with authors or groups of authors were reported to be of great value. It was felt that the workshop not only built capacity for scientific writing, but also provided valuable faculty development in research writing. The workshop is obviously a successful recipe to be used for assisting other MEPI projects in disseminating their success stories and research. We would like to sincerely thank SURMEPI for funding the travel costs for the facilitators, and BoMEPI who funded the venue, accommodation and meals for all the participants and the facilitators.

SURMEPI *impact* ON HIV/AIDS

Stellenbosch University Rural MEPI Program (SURMEPI) has contributed to HIV/AIDS and TB training and research: More than 60% of patients diagnosed with new TB infection in South Africa is HIV positive. SURMEPI facilitated monthly outreach and support sessions by Infectious Diseases physicians to the rurally based Brewelskloof TB Hospital in Worcester.

Problem based, bedside teaching and training of doctors contributed to improved patient care and resulted in an increased knowledge base of resident doctors in the management of complicated HIV/TB co-infected patients. The outreach sessions were always concluded by a 20-30minute guideline update discussion or other problem specific discussions. It also included a lunchtime seminar with junior doctors in the region.

These sessions covered a broad variety of HIV related topics. Improved and sustained knowledge of the management of severe and complicated diseases and easier access to expert advice improves the confidence of junior doctors and their general work experience. This may relate to improved retention in rural areas.

The PACK programme, led by Dr. Lara Fairall, is a comprehensive primary care guideline including HIV/AIDS, (a logarithmic disease management guidelines for primary care) was introduced to 4th year medical students as part of their Infectious Diseases theoretical module. This was previously only done as in-service training. The students were introduced to the guideline through small group training sessions which included clinical cases, which was novel to the curriculum.

The emphasis was mainly on the diagnosis, treatment and continuous care of TB and HIV patients. In addition the PACK guidelines have been implemented in the 5th and 6th year clinical rotations in decentralised facilities, where the service providers and clinical supervisors are now also trained in this programme.

SURMEPI has developed a data base for HIV/AIDS and Tuberculosis patients at Brewelskloof Hospital in Worcester under the leadership of Profs Jean B. Nachega, Rob Warren and Dr. Jantjie Taljaard. The project supported research through Masters and PhD students' bursaries, with a focus on HIV/AIDS and rural related research.

In-service training, short courses and Masters on Infection Prevention and Control in rural areas focusing on HIV/AIDS has been conducted. In addition training in evidence-based practice which includes HIV/AIDS; developing the District Health System (DHS) in Africa by strengthening primary health care through the development of family medicine, as well as the development of decentralized training sites.



Prof J Nachega



Prof M de Villiers



Prof Lara Fairall



Brewelskloof Hospital

Kampala International University eLearning Course Development Workshop – Dr S Walsh

28-30 August 2015

CONTEXT

The workshop was sponsored by CapacityPlus and was held at the School of Health Sciences of Kampala International University at their western campus in the town of Ishaka. This is situated more than 300 km south-west of Kampala.

The University is situated next to its teaching hospital and lectures are conducted seven days per week. The campus does have an internet connection as well as backup generators in case of a power failure (which happened a few times).

There are also on-site IT personnel who were invaluable during the workshop to sort out various issues such as updates to Microsoft windows before certain programs would install correctly.

All of the lecturers who attended had their own laptops, but at this stage because laptops are expensive very few students own either a laptop or desktop computer. Internet access from home for individuals is by no means commonly available either. Although almost everyone has a cell phone, this is not always a smart phone with an internet connection.

Most teaching is still done using the traditional talk and chalk method although screens and data projectors are available, and some lecturers use PowerPoint for their lessons. However, all the attendees were familiar with using PowerPoint.

I also met the hospital superintendent who expressed a pressing need for video facilities in his operating theatres so that students could observe in real-time what was happening at locations outside the operating theatre complex.

This could also be used to communicate with other doctors in distant facilities who could provide advice on certain operating procedures. And of course the operating procedure could be videoed and used for asynchronous eLearning.

CONTENT

During the three-day workshop we had a total of approximately 30 attendees of which roughly half were there for the entire workshop.

Our two delegates from Liberia unfortunately arrived one day late and missed the first day which concentrated on concept mapping. The workshop outline is illustrated in the concept map below.



Steve and two of the IT assistants.



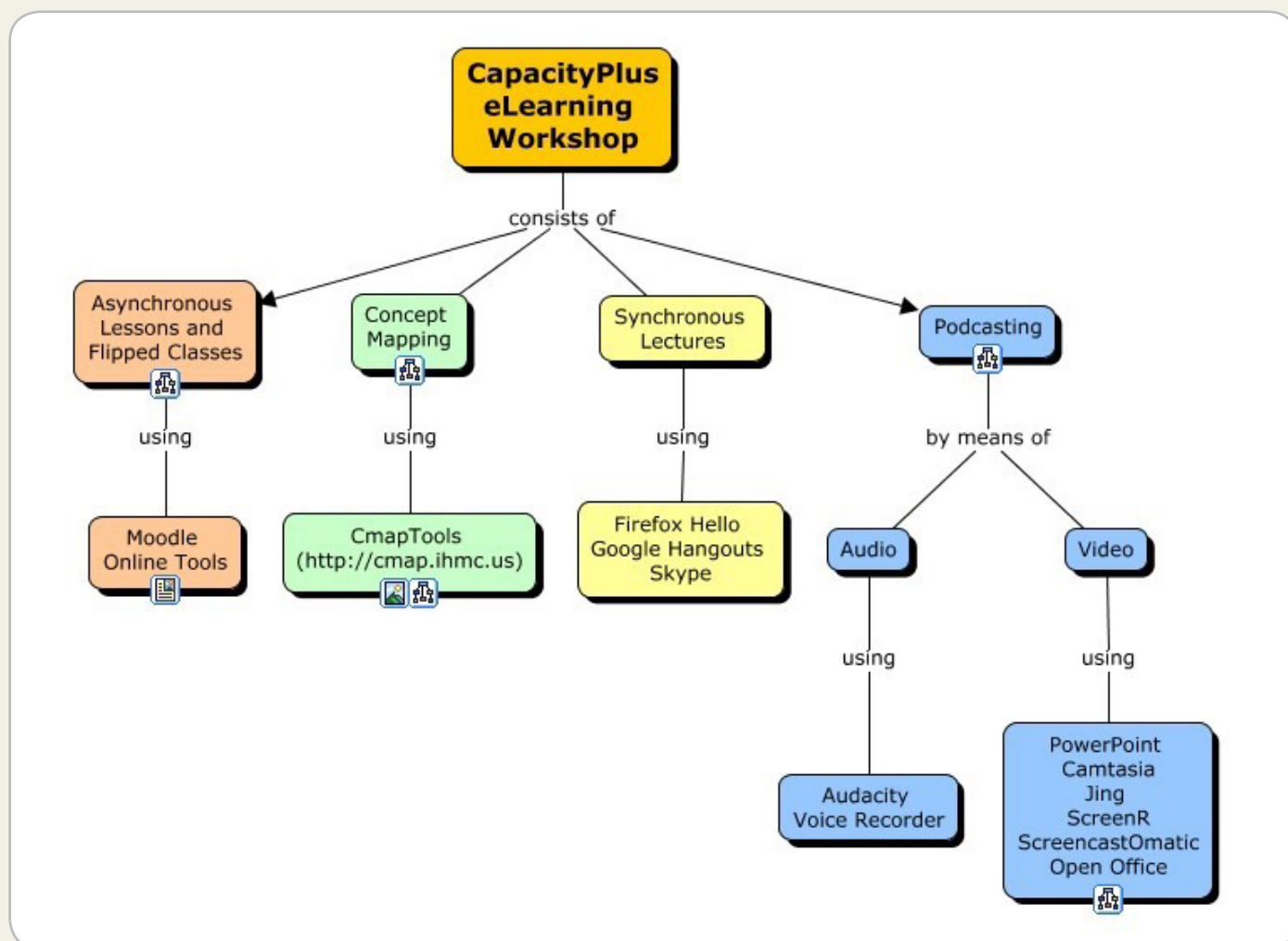
Presenting the workshop material.



Photo of the eLearning workshop attendees.



Attendees busy with the practical aspects of the workshop.



Day 1 (Friday 28th August): we started with the theory of constructivist learning and the essentials of concept mapping before getting into hands-on experience using CmapTools (<http://cmap.ihmc.us/>) to actually construct concept maps and create presentations/lessons using them.

Day 2 (Saturday 29th August): the day focused on the process of podcasting. We started off by installing Audacity (<http://audacityteam.org/>) and creating audio podcasts as MP3 files. We then used PowerPoint by itself to create small video podcasts of a lesson. Finally, the delegates installed Camtasia Studio (<https://www.techsmith.com/>) and we explored the powerful capability of this program to insert video clips, edit video and audio, insert callouts on the images used and finally export the entire project as a finished lesson in MP4 (video) format (which will play on Windows, Apple as well as Android devices).

Day 3 (Sunday 30th August): I introduced the delegates to the concept of flipped classes with which nobody was previously familiar. The morning concluded with an overview of the various tools available through the Google platform for teaching such as Google Drive, Google Scholar, Google Sites, Hangouts YouTube and Google for Education.

CONCLUSIONS

Most of the delegates found the workshop very useful, relevant to their teaching, packed with new knowledge and highly applicable in their current context. However, there was general agreement that a longer workshop with more time to practice

would have been better. There was also widespread support for a follow-up workshop at some later date if possible.

Concept mapping using CmapTools seemed to be of most benefit, followed by Audacity for creating audio podcasts. Camtasia studio was also highly rated. However, this program requires significant input from whoever is to use it to learn the various features and functions. Real-time synchronous communication with students at this stage is really not feasible due to a lack of a stable internet and sufficient bandwidth. I was quite surprised by feedback from one of the lecturers who used concept mapping the very next day in his lesson. He commented on the students' very positive reaction to the use of the new eTeaching tool.

Because most students lack the financial resources to purchase smart phones, laptops or desktop PCs for the home, the workshop had an emphasis on how to do eTeaching for the trainers, rather than eLearning from the students' perspective.

Although it might seem that all you need is more computer equipment and networking, actually the most important facet of eLearning are the human resources. IT people who can manage servers and networks as well as provide everyone with software updates and do on-site training are essential. But also crucial are some local experts who can visualise what is needed and drive the process of moving the campus to greater eLearning heights. These individuals should probably be "hybrids" – folks who have both medical insight as well as computing expertise. Both the IT team and eLearning team need to function in close cooperation with one another and be able to train staff and students in the use of eTeaching and eLearning.

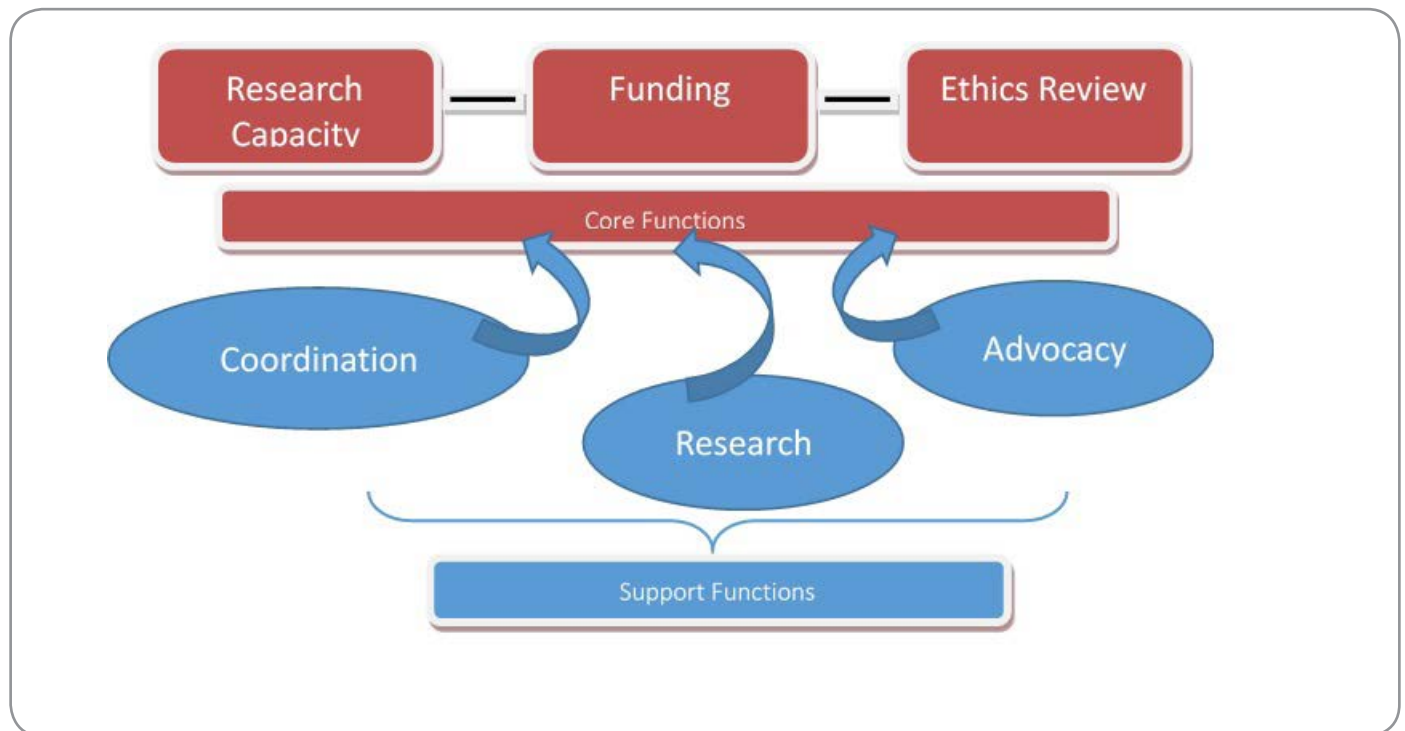
Undergraduate Research Office, Faculty of Medicine & Health Sciences (FMHS)

Research has shown that the research outputs of undergraduates can be increased by facilitating access to support and resources, and providing appropriate training in research methodology. This, together with the concerted efforts of a handful of staff and students within the Faculty of Medicine and Health Sciences (FMHS) at Stellenbosch University, led to the establishment of the Undergraduate Research Office – a development made possible by SURMEPI funding. The support from FMHS management for this initiative, aimed at strengthening undergraduate research in the Faculty, is demonstrated by their commitment to permanently fund the post that was created to establish and manage the Undergraduate Research Office (URO). In January 2015, the URO was officially launched in the

Research Development and Support Division of the FMHS.

The objective of the Undergraduate Research Office (URO) is to create a one-stop service point to support research undertaken by all undergraduate students in the FMHS, through three core activities: strengthening research capacity, providing funding, and facilitating ethics review of undergraduate research applications. Three support functions underpin these core activities: i) coordinating undergraduate research and support for research across the FMHS, ii) advocating for undergraduate research in the FMHS and beyond, and iii) conducting research on the nature of undergraduate research-related needs and outputs.

Goals of the Undergraduate Research Office, established January 2015



- **Research capacity**

Research in the FMHS varies from a structured, compulsory component integrated into a degree programme, to an optional, voluntary undertaking outside of degree requirements. The URO will provide resources and services at varying levels of support to accommodate the needs of students across the Faculty, through developing generic research-related resources alongside more tailor-made resources that address the specific requirements of different departments and students conducting research within these departments.

- **Funding**

To encourage and incentivise undergraduate research, the URO will identify sources of funding that are either directly or indirectly aimed at supporting undergraduate research in medical and health sciences. All funding provided through this office will be linked to increasing research outputs, specifically in the form of publications and presentations.

- **Ethics review**

All research in the FMHS has to go through the Health Research Ethics Committee (HREC) for ethical approval. Due to time constraints on the completion of undergraduate research, this places particular demands on the HREC office. A third core component of the URO's functions will thus be to facilitate ethics review of undergraduate research, both through fast tracking the review of such applications by contributing additional review capacity to HREC, and by making the ethics application process an educational experience for undergraduate students through providing one-on-one consultations and informational materials.

CONTACT

Debbie Marais, Head: Undergraduate Research Office
Tel: 021 938 9181; Email: debbiem@sun.ac.za
<http://www.sun.ac.za/rds>

New Health Management Course



Prof's Usuf Chikte, Lilian Dudley, Manie De Klerk (Metropolitan Health: co-sponsor), Prof Irwin Schwella (SPL) and Dr Kerrin Begg (course convenor) with course participants.

The new Post-graduate Diploma in Health Care Management was launched by the Division of Community Health in the Faculty of Medicine and Health Sciences in collaboration with the Faculty of Economic and Management Sciences in February 2015. The purpose of the programme is to prepare graduates for advanced and specialized professional employment within the health system, and to contribute to the development of knowledge and skills in health care management at an advanced level in an applied work setting. The target group for this programme is senior managers in health care organisations/ departments/ units including hospitals in the public and private health sectors; clinicians and health professionals who manage health care practices; consultants and programme managers. Our current participants are from diverse environments across public and private sectors, and thus have invaluable opportunities to learn from each other too.

The first 4 of 11 modules have been successfully completed, across three 5-day on-site blocks. These are Health Systems, Policy and Financing, Leadership and Innovation in Healthcare, Strategy, Marketing and Communications, and Managing Self and Others for Optimal Service Delivery. The 5th module to be covered in November will be Evidence and Information in Healthcare. The remaining modules to be covered in Year 2 include: Financial leadership and Governance for effective health care delivery, Managing Operations, Managing Health Technology and Infrastructure, Quality improvement, Clinical Governance and Patient Care, Project management, and Health Management Report.

The participant feedback from each of the Modules presented in the first 3 contact blocks has been excellent, averaging 90%. Some feedback from participants:

- Challenging, out of my comfort zone but very interesting.
- Very glad I am doing this course!!
- I sometimes learn more during the group exercises and discussions
- Love the morning reflections and evaluations
- We had amazing lecturers, where we did not just learn but get inspired as well.
- This was a very empowering module for me personally. I dreaded having difficult situations because I did not have the right framework or tools for this. I feel more confident to do this now. Case studies and examples were excellent!

In the words of a current participant:

My colleagues at work have noticed the change in me. I have asked all of them for development feedback. What are their expectations of me as a manager? How can I grow, and how can we, as a team, grow together with me leading the way. I am now always aware of my environment and it is important to me to connect with my team to ensure that the results expected from them are delivered. I am learning to work independently and to work towards my long term goals and not just focus on the 'now'; and by doing so I know I will stretch my self-determination in succeeding and achieving greatness.

This course has allowed me to be open to new ideas, be more creative, to think more critically and to seek out more challenges. I have become more aware of my choices and making more successful decisions. I have decided to focus more on doing and thinking, rather than only feeling. This learning will contribute to me developing a greater self-confidence, enhanced self-esteem, better self-control, determination and to gain a sense of direction and purpose.

As a future healthcare manager, I would encourage my fellow health care workers to enroll in this course. I believe in it, and I believe it will be part of the change in South Africa's Health Care System.

The course is co-funded by SURMEPI and Metropolitan Health.



Professor Daniel Blumenthal, Founding Chair of the Department of Community Health and Preventive Medicine of Morehouse School of Medicine and current President of the American College of Preventive Medicine visited the Faculty on a Fulbright Fellowship to support AHEC and SURMEPI activities between September and October 2015. In addition to running seminars on Community engagement in medical education, and Community participatory research at the Faculty, Professor Blumenthal also contributed to a combined workshop on Community Oriented Primary Care (COPC) for Community Health and Family Medicine. He is seen here with Dr Strini Govender and Professor Lilian Dudley.

SURMEPI Grantee: My journey

My PhD thesis evaluated the process of constructing, validating, practically implementing and testing the reliability of a national portfolio of learning within the discipline of family medicine. I used mixed-methods involving a collaborative process of interviews and workshops with all eight postgraduate family medicine training programmes in the country. The results were presented in four original research articles that were published in peer reviewed international scientific journals. The training of competent family physicians as expert generalists to improve the quality of health care in district hospitals and community health centres, particularly in the rural areas, is aligned with national priorities. Formalised training of family physicians in South Africa started in 2008 and is mostly conducted within the district health services. The need to establish a culture of learning and of effective supervision in health facilities that have not previously embraced postgraduate training, together with the national expectation of a more authentic assessment of performance, led to this work. The research addressed the construct and content validity of the portfolio; its acceptability, educational impact and usefulness for assessment in practice; as well as the reliability of the portfolio assessment tool.

SURMEPI funding made it possible for me to conduct field work, pay for admin costs, and take a brief sabbatical to write up and publish the results. Furthermore, I presented the findings at the 3rd WONCA African Regional Conference in Zimbabwe (2012), the AMEE (Association of Medical Education in Europe) conference on Assessment of Clinical Competence in Malaysia (2012), the National Conference of the SA Academy of Family Physicians in Cape Town (2013), and the AMEE conference in Italy (2014). Visits to several universities and colleagues in family medicine and health education in the Netherlands (Maastricht)



Prof Louis Jenkins

and Belgium (Ghent, Leuven and Antwerp), meeting with their supervisors and registrars around implementing and assessing the portfolio of learning gave valuable feedback towards implementing high quality medical education within the rural health districts of our own country.

By: Prof Louis Jenkins

Supervisors: Prof Bob Mash and Prof Anselme Derese

Title: Development of a portfolio-based assessment for postgraduate family medicine training in South Africa

SURMEPI - 2015 publications

1. Daniels-Felix, DK., Conradie, H & Voss, M. (2015). Choosing final-year placement: Why students decide not to go rural. *African Journal of Health Professions Education*. 7(1) Suppl 1.
2. De Villiers, M & Walsh, S. (2015). How podcasts influence medical students' learning – a descriptive qualitative study. *African Journal of Health Professions Education*. 7(1) Suppl 1.
3. De Villiers, M. & Moodley, K. (2015). Innovative strategies to improve human resources for health in Africa: The SURMEPI story. *African Journal of Health Professions Education*. 7(1) Suppl1.
4. Dramowski, A, Cotton, MF & Whitelaw, A. (2015). Utilization of paediatric isolation facilities in a TB-endemic setting. *Antimicrobial Resistance and Infection Control*. 4:36. DOI: 10.1186/s13756-015-0078-z
5. Dramowski, A., Cotton, F., Rabie, H & Whitelaw, Al. (2015). Trends in paediatric bloodstream infections at a South African referral hospital. *BMC Paediatrics*.15:33. DOI:10.1186/s12887-015-0354-3.

6. Dramowski, A., Marais, F., Goliath, C & Methar, S. (2015). Impact of a quality improvement project to strengthen infection prevention and control training at rural healthcare facilities. *African Journal of Health Professions Education*. 7(1) Suppl 1.

7. Dramowski, A., Marais, F., Willems, B., Mehtar, S., Adeniyi, S., Cameron, N., Dudley, L., Goliath, C., Mukinda, F., Rohwer, A., Young, T. (2015). Does undergraduate teaching of infection prevention and control adequately equip medical graduates for practice?. *African Journal of Health Professions Education*. 7(1):105-110.

8. Dramowski, A., Whitelaw, A & Cotton, MF. (2015). Healthcare-associated infections in children: knowledge, attitudes and practice of paediatric healthcare providers at Tygerberg Hospital, Cape Town. *Pediatrics and International Child Health*. <http://dx.doi.org/10.1179/2046905515Y.0000000032>

9. Dudley, L., Young, T., Rohwer, A., Willems, B., Dramowski, A., Goliath, C., Mukinda, F., Marais, F., Methar, S & Cameron, NA. (2015). Fit for purpose? A review of a medical curriculum and its contribution to strengthening health systems in South Africa. *African Journal of Health Professions Education*. 7(1) Suppl 1.

10. Fish, T., Lourens, G., Meyer, L., Muller, J & Conradie, H. (2015). When the clinic is not yet built ... the Avian Park Service Learning Centre story. *African Journal of Health Professions Education*. 7(1) Suppl 1.

11. Goliath, C., Mukinda, FK & Dudley, L. (2015). Capacity-building needs assessment of rural health managers: The and the how ... *African Journal of Health Professions Education*. 7(1) Suppl 1.

12. Kiguli-Malwadde, E., Talib, Z., Wohltjen, H., Connors, SC., Gandari, J., Banda, SS., Maggio, LA. & van Schalkwyk, SC. (2015). Medical education departments: a Study of four medical schools in Sub-Saharan Africa. *BMC Medical Education Journal*. 15:109. DOI:10.1186/s12909-015-0398-y.

13. Machekano, R., Young, T., Conradie, W., Rusakaniko, S & Thabane L. (2015). Workshop report: building biostatistics capacity in Sub-saharan Africa-taking action. *Pan African Medical Journal*. 21:167. DOI: 10.11604/pamj.2015.21.167.5827.

14. Machekano, R., Young, T., Rusakaniko, S., Musonda, P., Sartorius, B., Tod, J., Fegan, G., Thabane, L & Chikte, U. (2015). The Africa Center for Biostatistical Excellence: a proposal for enhancing biostatistics capacity for sub-Saharan Africa. *Statistics in Medicine*. 30;34(27):3481-9. DOI: 10.1002/sim.6572.

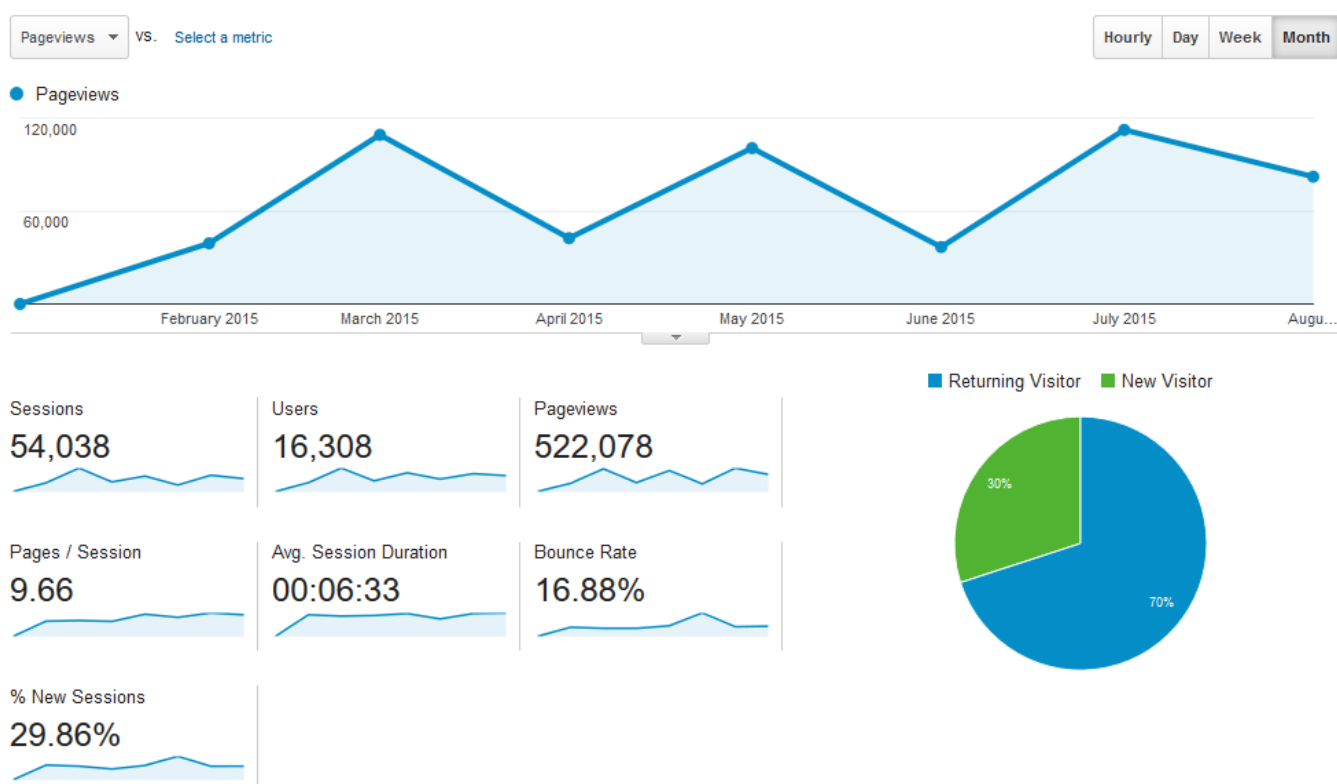
15. Moodley, K., Fish, T & Naidoo S. (2015). The role of socially accountable universities in improving the selection of medical students from rural and underserved areas. *African Journal of Health Professions Education*. 7(1) Suppl 1.

16. Mukinda, F., Goliath, CG., Willems, B & Zunza, M. (2015). Equipping medical graduates to address health systems challenges in South Africa: An expressed need for curriculum change. *African Journal of Health Professions Education*. 7(1) Suppl 1.

17. Rohwer, A., Willems, B. & Young, T. (2015). Taking stock of evidence-based health care in the undergraduate medical curriculum at Stellenbosch University: Combining a review of curriculum documents and input from recent graduates. *African Journal of Health Professions Education*. 7(1):98-104.

18. van der Westhuizen, HM., Kotze, JCB., Norotam, H., von Delft, A., Willems, B & Dramowski, A. (2015). Knowledge, attitudes and practices regarding tb infection control among health science students in a TB-endemic setting. *International Journal of Infection Control*. 57(11):476-8.
-
19. van Schalkwyk, SC., Kok, N., Conradie, H. & van Heerden, B. (2015). Academic achievement of final-year medical students on a rural clinical platform: Can we dispel the myths? *African Journal of Health Professions Education*. 7(1) Suppl 1.
-
20. Walsh, S & de Villiers, M. (2015). Enhanced podcasting for medical students: progression from pilot to e-learning resource. *African Journal of Health Professions Education*. 7(1) Suppl 1.
-
21. Young, T., Rohwer, A., van Schalkwyk, S., Volmink, J & Clarke, M. (2015). Patience, Persistence and Pragmatism: Experiences and Lessons learnt from the Implementation of Clinically Integrated Teaching and Learning of Evidence-Based Health Care - A qualitative Study. *PLoS ONE*. 10(6). DOI: 10.1371/journal.pone.0131121
-

PODCASTS - 82 075 page views in August 2015 (Google analytics)



SURMEPI grantee: My research summary



Bronwynè Coetzee

My research was conducted in the Umkhanyakude district of Northern Kwa-Zulu Natal, a rural area with a high HIV prevalence. In the context of the limited availability of antiretroviral drugs for young children and the emergence of drug resistance, excellent adherence to ART is required to achieve an undetectable viral load and an elevated CD4 count.

However, complex factors affect clinic attendance and medication-taking, both of which constitute adherent behaviour. SURMEPI funding allowed for me to travel to the Africa Centre for Population Health where I was based for the duration of my field work – which lasted 19 months.

SURMEPI funding also covered my research costs, and allowed for me to conduct and collect in-depth qualitative data via interviews, focus groups, video-recording and field notes on the barriers to and facilitators of ART adherence amongst children younger than five years.

The research was conducted in two phases. Phase I included interviews and focus groups with key stakeholders in the treatment and care of children on ART.

I concluded Phase I of the thesis by recommending increased supervision and regular training amongst lay adherence counsellors, as well as regular monitoring of the persons attending the clinic on the child's behalf.

In Phase 2, I observed caregiver-child dyads at their monthly adherence counselling visit to document information they received from adherence counsellors. I then visited caregiver-child dyads at their households to document, by means of video-recording, how treatment was administered to the child.

Although the majority of children in this sample took their medicine successfully, the way in which medications were prepared and administered by their caregivers was problematic.

I concluded Phase 2 of the thesis by recommending that with emerging drug resistance, efforts are needed to carefully monitor caregiver knowledge of treatment administration during monthly clinic visits.

By: Bronwynè Coetzee

Supervisors: Prof Ashraf Kagee & Dr Ruth Bland

Title: Barriers to and facilitators of paediatric adherence to antiretroviral therapy (ART) amongst children younger than five years in rural South Africa



AMEE conference attendance (2015). From left to right: Dr Christina Tan, Prof Julia Blitz, Dr Kalay Moodley, Prof Marietjie de Villiers, Prof Susan van Schalkwyk and Prof Taryn Young

AIDS Journal Highly Cited Award in 2014

Prof Jean Nachega, SURMEPI PI and Director of the Centre for Infectious Diseases of the Faculty of Medicine and Health Sciences, and his co-authors recently received the journal AIDS's highly cited award for their article, entitled "Adherence to antiretroviral therapy during and after pregnancy in low-income, middle-income, and high-income countries: a systematic review and meta-analysis", which was published in volume 26, issue 16 in October 2012. AIDS which has the highest impact (5.55) of all AIDS-related journals.

The article was identified as the most highly cited article in 2014 in the category of Clinical Science and to date, has been cited by 55 PubMed Central articles. The reception of the award took place at the 8th International AIDS Society (IAS) Conference on HIV Pathogenesis, Treatment and Prevention which was held in Vancouver Canada in July 2015. Part of the prize was a monetary award of US\$ 500 which the team donated to their young colleague co-author, Uthman, who is a lecturer with the Faculty's Centre for Evidence-based Health Care.

The results of their study which involved just over 21 000 patients indicated that only seven out of 10 pregnant women at risk for disease progression and transmission of HIV to their infant, achieved optimal antiretroviral therapy adherence rates.

Reaching adequate adherence levels was not only a challenge during pregnancy but in the postpartum period as well, declining further to only 50% of women with optimal adherence.

In this article the researchers, who included Stellenbosch University Paediatrics AIDS expert Prof Mark Cotton amongst several eminent international AIDS researchers, also highlighted the urgent need to evaluate and implement interventions to address this issue globally.

"As a researcher, you don't always know what the impact of your work is going to be. Receiving this award encouraged us to tirelessly continue to explore solutions to global health problems, specifically for this vulnerable HIV positive pregnant population in Africa.

A substantial proportion of these women experience barriers to therapy adherence during pregnancy and beyond, including side effects related to pregnancy and/or HIV treatment (nausea and vomiting), post-partum depression, forgetfulness due to competing needs and biological changes, substance use, fear of HIV status disclosure, lack of social support and additional problems due to their HIV status," Nachega said.

The international collaborative team, led by Nachega, is now planning a factorial design randomized controlled trial to evaluate the effectiveness of two novel interventions combining weekly mobile phone text messages and community-based social support (friends and/or family) to improve adherence to HIV treatment in pregnant women and post-partum patients. Nachega explained that as researchers and clinicians, the relevance of the work of utmost importance.



Prof Jean Nachega

