



PERFECT News

Volume 1: Issue 1, June 2016

Welcome Note

Welcome to the first issue of the UZCHS PERFECT Newsletter, a semi-annual publication that gives you (UZCHS community and stakeholders) exciting information about the PERFECT Program. Every six months, stakeholders will receive a downloadable PDF via email and/or from UZCHS PERFECT Web portal (www.uzchsperfect.ac.zw).

This newsletter is a medium for the UZCHS PERFECT to share information on successes, challenges, innovations, emerging issues and lessons learnt with key stakeholders. Each edition will include the outcomes of the PERFECT Program, an interview with an individual research fellow(s), research grants application and grants administration tips, among others. Interviews from established researchers detailing the journey they travelled to become competent independent researchers will also be included.

In this Issue, we bring you news on the launch of the PERFECT Program, induction of fellows, testimonies from two research fellows, story of a visiting lecturer, among other exciting stories.

I hope that you will enjoy reading this Issue and subsequent Issues of the UZCHS PERFECT Newsletter

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Dean of UZCHS Professor M. Chidzonga handing over a laptop to

Wayne Manana, a PERFECT trainee.

UZCHS improves ICT page 6

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Word from the Program Director



Welcome to the first edition of the PERFECT Newsletter. I would like to personally thank the UZCHS community, our partners and the PERFECT family for working tirelessly towards getting the PERFECT Grant which was awarded in September 2015. PERFECT is an award to train junior faculty to pursue research careers. Consequently, research capacity development is key to the creation of a critical mass of researchers. The goal of the PERFECT Programme is to train a critical mass of 30 junior academic staff members over 5 years (2015-2020) to become accomplished and competent independent researchers capable of effectively competing for research grants and engaging in collaborative national and international research programmes.

The 7 target scientific areas for the PERFECT programme are:

- 1. HIV/AIDS
- 2. Women's Health
- 3. Mental Health
- 4. Cardiovascular Diseases / Stroke
- 5. Respiratory Diseases
- 6. Hematology
- 7. Dental and Craniofacial Disorders.

The PERFECT program offers tremendous opportunities for junior academic staff to expand and build their research expertise from novices to experts as they transition to become the next generation of researchers. This will be a rigorous two year training programme consisting of mentorship by seasoned researchers, didactic and practical training in research methodology, leadership and governance, research ethics and attachments for practical training at various research

institutions including placement at UZCHS partner institutions.

To me the greatest enabling achievement is the buy in from all key stakeholders: University of Zimbabwe, UZCHS Community, Ministry of Health and Child Care, UZ-Vice Chancellor, Dean, Steering Committee, Training Advisory Committee, Scientific Area Leads, Faculty, staff, AiBST, MRCZ, BRTI, ZiCHIRE, MDPCZ, Parirenyatwa Group of Hospitals, trainees, among others.

Throughout the newsletter, I invite you to reflect on the huge range of stories which amplify our innovations and evolving good practices in medical research training and mentorship.

James Hakim

UZCHS PERFECT Program Director.

UZCHS launches PERFECT



Professor Hakim, Professor Nyagura, Professor Chidzonga, Mr Zigora and Mr Mangwanya during the launch

The University of Zimbabwe's College of Health Sciences (UZCHS) launched the Promoting Excellence in Research and Faculty Enhanced Career Training (PERFECT) program on the 10th of February 2016. Key dignitaries and stakeholders at this inaugural event included the University of Zimbabwe's Vice Chancellor, Professor Levy Nyagura, Dean of UZCHS, Professor Chidzonga, deans of other faculties, the Principal Investigator (PI), Professor James Hakim, departmental Chairpersons and other academic staff of the University of Zimbabwe College of Health Sciences, non-academic staff, leaders of various UZCHS affiliated research entities, Ministry of Health and Child Care representative and the Parirenyatwa Group of Hospitals Chief Executive Officer (CEO), among others.

In his opening remarks, Professor Midion Chidzonga, the Dean of the UZCHS indicated that the main aim of the program is to build a pool of researchers in Zimbabwe who are able to engage in independent or collaborative research in areas such as women's health, HIV/AIDS, cardiovascular diseases, mental health, stroke and respiratory diseases, haematology, dental and craniofacial disorders. "The country, currently has a very thin base of medical researchers in the aforementioned areas because of brain drain and shortage of financial resources to support medical research", said the Dean.

Professor Nyagura, the UZ Vice-Chancellor said the PERFECT programme is a welcome development that is consistent with the research mandate of the University of Zimbabwe. "We are a research intensive institution which values the critical role of research in academic advancement and generating evidence for innovations, policy and action. Consequently research capacity

development is key to the creation of a critical mass of researchers", he said. The Vice Chancellor thanked the United States National Institutes of Health (US NIH) for supporting the PERFECT programme financially. He also thanked international and regional partners which include University of Cape Town, University of Colorado-Denver, Stanford University, University College London and King's College London for continued collaboration in research and medical education efforts.

Through the PERFECT initiative, it is hoped that UZCHS will achieve its dream of contributing to the country's human resources for health. The program has a duration of 5 years ending in July 2020, after supporting at least 30 trainees to become competent researchers.

The colourful launch attended by approximately 106 participants created more awareness about the programme among key UZCHS stakeholders and targeted beneficiaries.

Dean urges students to seize opportunity presented by PERFECT



Professor Chidzonga

The Dean of the College of Health Sciences, Professor Midion Chidzonga echoed these words when he officiated the PERFECT trainees induction ceremony held on the 10th of May 2016 at UZCHS PERFECT offices. He urged the trainees to take advantage of the PERFECT program and acquire sound research skills through mentoring and training. The Dean indicated that in the past there were no programs similar to the PERFECT initiative which offers mentoring and training to junior researchers. He recalled how learning to be a researcher was tough without any mentoring to talk about.

He expressed his gratitude for the PERFECT program for bringing a unique opportunity to the College. Prof Hakim, the Program Director speaking at the same function, encouraged the trainees to take the opportunity seriously and expand their knowledge in research to become the next generation of researchers.

Two trainees, Dr Trust Zaranyika and Mrs Racheal Shamiso Mandishora, shared with others how they saw this program equipping them. Mrs Mandishora said that they were like raw tomatoes, green in colour, being taken through the process of ripening to become red in colour. They were relishing the opportunity of going through the mentoring process being equipped with research skills. The trainees were later handed over some laptops, tablets and diaries by the Program Director and the Dean. These will be used in their day to day program activities.

PERFECT Training Programme commences

The PERFECT training program commenced on the 16th May 2016 with the Research Methodology course which will run until 31 July 2016. This course is comprised of 29 sessions of 2 hours each being implemented over a period of 3 months i.e. May-July 2016. Ten (10) facilitators of diverse expertise have been appointed to lead the implementation of this course. Professsor Rusakaniko, the Chairperson of Community Medicine launched the inugural session with a topic on

'Indentifying and prioritizing areas for research'. Other facilitators include Professors Matenga, Hakim and Nathoo, Drs Mujuru, Bwakura, and Maradzika and Mr Chingono, Dr. Mandozana and Mr. Chikwasha. All the 11 trainees were able to attend this session and the subsequent sessions. As of June, 30 sessions of 2 hours each have already been presented.

In order to guide the trainees, facilitators and administration, a

Gantt chart has been developed scheduling all courses until November 2016. Similarly, facilitators who will lead with implementation of various modules have been identified. Some of the courses to be implemented beyond July: include Research Administration; Leadership, Management and Governance; Research Ethics, Good Clinical Practice (GCP); Grant Writing and Intellectual Property Rights.



Professor Nathoo delivering a session on Cross-sectional study designs

Unpacking the PERFECT logo

Promoting Excellence in Research and Faculty Enhanced Career Training (PERFECT)



UNIVERSITY OF ZIMBABWE COLLEGE OF HEALTH SCIENCES

The sun is a symbol of power, growth, health, passion and the cycle of life in many cultures and religions throughout time. Some believe it is a representation of the higher self. The sun is revered because of its ability to create life, making crops grow to sustain villages. Many see the sun as a representation of the cycle of life because of its cycle throughout the day. It rises at dawn with the beginning of life for the day and eventually must "die" or set. For us, PERFECT has risen and eventually it will set but

leaving indelible footprints for future researchers. Sunlight is necessary for the absorption of vitamin D. It also speeds up recovery from injuries. Without the sun, nothing could grow and this world would be a frozen, barren, lifeless planet. Evidently without research the world would be close to lifeless.

The hummingbird symbolizes many different concepts. Because of its speed, the hummingbird is known as a messenger and stopper of time. It is also a symbol of love, joy and beauty. It is able to fly backwards, teaching us that we can look back on our past but this bird also teaches us that we must not dwell on our past, we need to move forward. This alone inspires us (UZCHS PERFECT team) to keep supporting research that generates new evidence and solutions for the country's health needs. Thus the research evidence helps us to move forward as a country.

It teaches us the medicinal properties of plants and how to work with the energy of flowers to heal ourselves and others. It teaches us fierce independence and to fight in a way where no one gets hurt. It also teaches us courage to refrain from creating new trauma by communicating non-violently towards ourselves and others as an important part of healing. Recovering lost parts of ourselves enables us to become healthily independent.

By observing the Hummingbird, we see it is seemingly tireless. Always actively seeking sweetest nectar, it reminds us to forever seek out the good in life and the beauty in each day. This quality reminds us to be persistent in the pursuit of our research dreams and adopt the tenacity of the Hummingbird in our research work.

PERFECT develops a web portal for use by trainees, mentors and the secretariat

The PERFECT program took advantage of Information, Communication Technologies (ICTs) whose use has expanded globally, to design a web portal which will be a key interaction platform for the trainees (research fellows), research mentors, Scientific Area Leads (SALs), facilitators, Training Advisory Committee (TAC) and the PERFECT administration. Through this platform, research fellows will be able to access learning materials uploaded by training facilitators, submit reports, upload their publications, and upload information on workshop presentations and grants applications, information on conferences to be attended or attended. There is a diary for uploading plans and recording activities of



both the mentors and trainees. Similarly, the training facilitators use the platform to share training materials and also getting and communicating updates. The PERFECT administration uses the platform for monitoring and tracking progress of trainees and their interaction with mentors and facilitators. In the same platform SALs can also track the same variables. The web portal has a public page that provides general updates and information on the program such as publications, career information, upcoming events and resources.

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UZCHS steps up efforts to improve ICT excellence



Tzu Phang showing participants how the R programming works

The Promoting Research through ICT Excellence (PRICE) initiative which is being implemented by UZCHS under PERFECT has already trained 39 clinical researchers, who include postgraduate students and faculty, with the much needed ICT skills. A five day workshop on ICTs for Research was organised by UZCHS PERFECT Programme from the 9th to the 13th of May 2016. The training was aimed at introducing clinical and translational research tools to the 39 UZCHS postgraduate students and faculty. Feedback from the workshop participants show that they were satisfied with the scope and content of the workshop, especially on the use of REDCAP, Open Office, GWAS, EPI INFO, PLINK and R programming software for data capture and manipulation.

The workshop was facilitated by David Kao, Sara Deakyne and Tzu Phang, all from the University of Colorado Denver (UCD). David Kao trained participants on the use of the Research Electronic Data Capture (REDCap) and the Open Office, an alternative for Microsoft Excel. Sara Deakyne trained participants on the use of Epi Info as well as highlighting its key features. Tzu Phang introduced the R, a statistical analysis tool to the participants. He also made a presentation how the Genome-Wide Association

Study (GWAS) is applied in research and how the data are analysed. There was also a hands-on session on GWAS and PLINK, another data analysis tool. The last two days of the five day training were reserved for hands-on sessions and this was very helpful to the participants as they learnt practically how to use the various ICT tools in research.



Miriro Muvoti assisting participants during one of the session

The table below shows the departments and the number of attendees.

Department	No. of participants
Nursing Science	9
Health Professions Education	5
AIBST	5
Anaesthetics	1
Community Medicine	2
Psychiatry	7
Chemical Pathology	1
Dentistry	1
Medical Laboratory Sciences	1
Radiology	1
Medical Microbiology	1
IPERI	1
ICHE	1
Rehabilitation	1
Clinical Pharmacology	1
Paediatrics	1

PERFECT contributing to strengthening research and administration

The PERFECT program is working closely with the Research Support Center (RSC) to enhance research administration and support of junior faculty through access to resources at the Center. The program will also build capacity of departmental administrative staff through training in research administration. This will increase the quantity and quality of research administration support at the College. Since the beginning of this year, the RSC has managed to support faculty with 12 grants/fellowship applications, 4 were not successful and 8 are still pending.

The RSC is encouraging junior faculty to respond to funding opportunities announcements (FOA). Grant writing is a skill which refines with experience. Many young researchers may feel that responding to a grant call is a daunting task. However, with exposure, enough training and mentorship, it can be a rewarding experience. There are basic fundamentals necessary for upcoming researchers to note, which can help demystify the process;

- In order to look for funding, it is important to identify an area of research interest;
- Look for funding agencies that support the research area of interest:

- Make sure you are in the RSC list serve so that you receive the monthly fellowship and funding opportunities digest;
- Start small and look for opportunities that target young/early researchers and climb slowly through the ladder as your research portfolio increases;
- Read and understand the mission of the funding agency as this will provide the key priority areas;
- Interpret and understand the funding call and make sure that you meet the eligibility criteria; as a researcher and as an institution. Look out for the proposal application outline/package;
- If you have any queries contact the program person listed on the call to assist in clarifying the issues;
- Contact the RSC early so that they can provide you with support. Some funders require institutional and individual registration as they use electronic systems for submission. The process can take long, thus it is critical to contact the RSC early so that they can assist with the registration and submission;
- Identify and engage colleagues that might be interested in teaming up to respond to the call
 - (writing team). Link up with seasoned researchers who can be good grant writing mentors. Assign each other tasks and have regular meetings to check on progress;
 - Be meticulous Do a thorough edit check of your proposal before submission. A proposal with lots of errors can frustrate reviewers resulting in low scoring;
 - Start writing early and put 100% effort to ensure that you meet the deadline.

Remember there is no magic way of building your research career, it takes dedication and hard work.



Vice Chancellor flanked by UZCHS management at the RSC official opening ceremony

International exchange program at UZCHS

International exchange programs expose medical students and postgraduate trainees to learning experiences in different health care systems. These exchange programs are considered to be an effective practice that strengthens students' clinical skills and introduces them to new paradigms in addition to augmenting their self-confidence. Universities are increasingly organizing international exchange programs to meet the requirements of growing globalization in the field of health care.

COZIE (Colorado-Zimbabwe International Exchange) program is a bilateral exchange program between the Department of Medicine, University of Zimbabwe and Department of Medicine of University of Colorado, Denver. This program is designed to provide diverse experiences in internal medicine practice for faculty and postgraduate trainees and will introduce postgraduate trainees at both institutions to modern methods of clinical teaching and clinical research. The objectives of program are:

- 1. To provide meaningful exposure to healthcare provision in resource diverse academic settings. Faculty and postgraduate trainees from Denver will experience academic practice in Zimbabwe as a low-resource country, while faculty and trainees from Zimbabwe will experience academic medical practice in the United States, a high income country. This experience will include exposure to different systems of healthcare delivery and different approaches to disease diagnosis and management.
- 2. To model modern methods of clinical teaching. The post graduate trainees from both institutions will receive training in approaches to improve teaching of physical diagnosis, disease pathophysiology and evidence based medicine and will be expected to participate in clinical teaching activities during their visits to the host institutions.
- 3. To develop one or more collaborative clinical research projects relevant to health priorities in Zimbabwe. Postgraduate trainees from both institutions will be expected to engage in collaborative research under the mentorship of UCD and UZCHS faculty.

Two scholars, Linda Kamuzangaza and Tafadzwa Chipfuva have been selected through a competitive process to kick-start the exchange programme at UCD. They will be leaving for UCD on the 31st July for two weeks.

Testimony from Aaron Strobel, visiting lecture from University of Coloradoo Denver

Given that I have never been to Africa before, I was not sure what to expect. I read about global health experiences and infectious diseases that I might encounter; however this did not fully prepare for me what I saw in Zimbabwe. My trip to Zimbabwe was one of the best experiences of both my personal and professional life. This trip not only opened up my eyes to global health, but also what it is like to practice in an environment with limited resources. I met some of the smartest and most skilled doctors that I have ever encountered, who took care of very sick patients using their physical exam skills and gestalt instead of relying on expensive lab tests or imaging studies. The bedside teaching was all encompassing, including basic sciences, disease presentations, physical exam skills, and



management of the illness in Zimbabwe vs. America. The number of patients that each team saw was very overwhelming but the MMeds remained calm and composed, doing their job efficiently and effectively. One of my favorite parts of my trip was that I enjoyed teaching and learning from the medical students and MMeds. In the future I would love to return and continue to help with education. On a personal note, I had the chance to meet wonderful people who share similar interests and a passion to help others. Despite the language barriers at times, I learned different aspects of the Zimbabwe culture and lifestyle. I had the chance to see the beautiful country of Zimbabwe at Victoria Falls, Eastern Highlands, Great Zimbabwe and even got to go on a safari at Chobe National Park. This was definitely a trip that I will never forget and I hope I have the chance to visit again.

Aaron Strobel

Reseach fellows in focus



MY EXPECTATIONS AS A PERFECT TRAINEE

It is indeed a great opportunity to be mentored by outstanding individuals in clinical research. I hope that at the end of this program I will be more confident, creative and well linked in my field of interest. I can safely say after this mentorship program I will be a 'guru' in research.

My expectations as a trainee are to:

- Gain more skills on molding research ideas and imaginations into functional projects.
- · Competently apply for research grants.
- · Be well networked and build lasting collaborations.
 - Publish research findings and reviews in high impact journals.
 - Be an inclusive leader; spearheading research, mentoring others and teaching in my field of expertise.
 "I liken the mentees to green tomatoes, after the intense mentorship program we will be ripe!"





Racheal S. Dube Mandishora
UZCHS
Department of Medical Microbiology (PhD candidate)



I have recently returned to Zimbabwe after leaving the country in November 2004. A number of my colleagues wondered why I considered a return home. I had been to Namibia and then Cape Town, South Africa for the last 5 years where I specialised in internal medicine and developed a keen interest in endocrinology. I had expectations of growing as a clinician and researcher in my own country Zimbabwe. The PERFECT programme could not have come at a better time as I would like to pursue a PhD in endocrinology, PERFECT becomes the ideal vehicle to learn in to achieve this. In terms of mentors I appreciated that we would be learning from very experienced senior mentors, most of whom did not get such an opportunity in their time. They were passing the baton stick to us in a way. I was also lucky that Professor McGregor, a Professor of endocrinology had joined

our department from UK, at a time when I intended to start my PhD studies in endocrinology.

I also expressed my appreciation for the opportunity, something I never dreamt of as a young man going to mission school at St Ignatius College in Chishawasha, Zimbabwe.

Trust Zaranyika

Meet the PERFECT Team

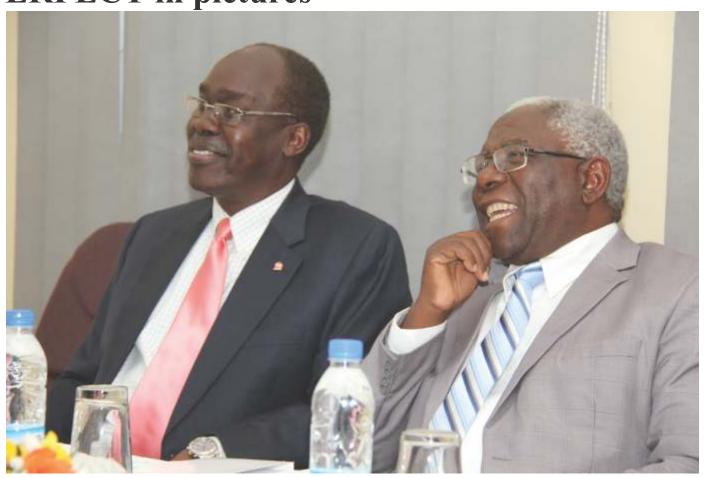


From left, Blessing Marangdzva, Tendayi Chisvo, Spiwe Mangwiro, Caroline Tazvivinga and Thokozile Mashaah



From left, Nhauro Mupanguri, Eddymore Mugonda, Jackson Mwepetha, Emmanuel Sawopa, Antony Matsika and Felix Madya

PERFECT in pictures





PERFECT in pictures



