

RESEARCH AND INNOVATION Newsletter

June/July 2014 Issue 17





Prof Bok Marias - Professor Graduate School of Technology , University of Pretoria



Researchers engaging during the workshop.



2015 Thuthuka Proposal Writing Workshop for CUT Applicants

The Research and Development Unit held a workshop for CUT staff members who were in the process of applying for the 2015 NRF Thuthuka programme. The workshop was held on Wednesday, 04 June 2014 in Room 10 of the CUT Hotel School. Dr Bok Marais from the Graduate School of Technology Management at the University of Pretoria was the facilitator for this workshop and presented: "Towards the Promotion of Quality of NRF Grant Applications." A Question and answer session as well as a one-on-one discussion session followed the presentation.

Ten existing applicants together with three of the four Faculty Research Managers attended the workshop. Prof Laetus OK Lategan and other support staff from the Research and Development Unit were also present at the event.

The workshop started off with the facilitator providing an overview of what the session aimed to cover. These aims were as follows:

- Interpretation of CUT's research position;
- Responsibility of researcher;
- Own background ;
- NRF system of peer review;
- Research: Necessary & sufficient conditions and
- Common shortcomings.

Continues...

Dr Marais provided the audience with advice and information on what to consider when writing a proposal for funding. The following points were some of the most important factors which researchers tend to overlook and sometimes struggle to perfect:

The NRF Peer Review Process

In this part of the presentation the peer review process was explained as well as the general success rate statistics of Funding applciations.

Common Thuthuka Pitfalls:

- Applicants in general, are not fully informed about the framework of the Thuthuka programme;
- Applications are not methodologically accurate and sometimes vague or might make use of the incorrect research methodology;
- The Research proposal often does not form a logical unit;
- Another shortcoming is the justification of the methodological choices (e.g. sample);
- Lack of linkages between components of proposal (e.g. literature x problem statement);
- Budget planning and justification and
- Project life cycle over time tends to be vague.

The Scientific Research and its components, epistemic criteria and purpose were also discussed.

A discussion session followed after the presentation.

Compiled by Zenobia Louw

Vision 2020 Innovation and Incubation Programme Competition

CUT's Technology and Innovation office has rolled out a comprehensive and multi-disciplinary competition aimed at potential innovators and entrepreneurs at CUT. The competition also aims to support successful participants financially with the development of new and innovative products, processes or services.

Students who are interested may submit their business plans within their faculties. A series of events will also be rolled-out to promote and inform students of the core factors of technology and innovation as well as matters surrounding intellectual property.

Students may contact the Technology and Innovation office at tel: 051 507 3575 or email: mjordaan@cut.ac.za, for more

information regarding the different timelines, categories and prize monies for this competition.



CUT's Centre for Rapid Prototyping and Manufacturing makes waves with 3D Printing technology

Mr Gerrie Booysen, Director of the Centre for Rapid Prototyping and Manufacturing (CRPM) can be seen here presenting some of the work done by the CRPM, at the recent TEDxUFS Conference.

The lives of two patients were changed on 23 July 2014. The patients' mandible implants were molded with the use of 3D printing at CUT's CRPM. This is phenomenal innovation in 3D printing. After losing significant portions of their jaw-lines due to disease, the patients were assisted with titanium implants.

The medical team members who were involved in this process are as follows:

Dr Cules van den Heever, an Extraordinary Professor at CUT from the University of Pretoria, and CUT's <u>Centre for</u> <u>Rapid Prototyping and Manufacturing (CRPM)</u>, Dr Walleed Ikram, Head of Kimberley Hospital Dental Unit, Dr Kobus Hoek, a maxillofacial surgeon, and doctors Philip Johnsson and Riaan Liebenberg, both dentists at the Hospital. This is groundbreaking work in 3D printing in the medical field. The two patients received titanium implants after losing significant portions of their jaw-lines due to cancer and other related diseases, which left them with severe facial disfigurements.

The CRPM has obtained state of the art 3D printers with the aid of, amongst others, NRF equipment funding which has aided their work at the centre in a remarkable way. *Compiled by Zenobia Louw*



forward from 2013

R 8 089 791.00. This repre-

sents awards to 123 CUT re-

searchers and students, in 19

Grant and Scholarship Applica-

tions for 2015 are flooding in

and researchers and students

are encouraged to visit the NRF

Submission website <u>https://</u> nrfsubmission.nrf.ac.za/ in order

to make use of the available

These achievements for 2014

Compiled by Zenobia Louw

Well done

funding opportunities.

are outstanding!

everyone!

R 1 719 185.00.

NRF grant categories.

of

A total of

Sunmedia: Excellent platform for research publications

The Research and Development Unit recently invited SunMedia's CEO, Ms Justa Niemand, to visit CUT to present their publication services for academic books, review-services, and cost models. This was done to enhance and encourage the CUT's research outputs.

SunMedia provides services such as printing on demand, electronic books, copyright administration, language editing, design and page layout, photoediting, graphics indexing, cover design, PDF proofing, E-book-conversions, listing on Nielsen Book Data and Google Books.

Part of the Research and Development Plan 2014-2020 is to grow our research publications. The presentation provided valuable information that serves as an excellent platform for academics to have access to all of the above services right at our doorstep. Ms Niemand explained how SunMedia would provide services on professionalization of conference proceedings, chapters in books and books in alignment with DHET requirements.

There was an ample opportunity to engage with the entire SunMedia team in person. A special word of appreciation goes to Prof Laetus Lategan and his team for taking initiative in creating this opportunity.

The presentation was hosted in the Prosperitas Auditorium, on 9 June 2014 at 16h00. All academics were invited via Faculty Research Managers. *Compiled by Somari van Heerden*



Recent and Upcoming Events

July:

25 NRF Online Training for Post-graduate students.

August:

- 04 Research and Innovation Breakaway.
- 22 Publication Writing/ Scientific Writing Workshop.

Word from the Dean

The Research and Development Unit is committed to support our researchers to achieve their own stated aims and objectives.

Reviewing the last semester we can report two institutional R & D workshops, three training events, a public lecture on research ethics, engagements with national and international experts, the launch of our new drive to revitalize Research Centres, Units and Groups, etc. At the same time did we support the researchers and students via a R 13 m budget available in support of research. These few events are limited examples of all the opportunities available. The sole purpose is to create an enabling environment and assist our researchers to make an impact into the national research and innovation agenda.

I would like to thank the Executive Management for their ongoing support of our research agenda *Prof Laetus OK Lategan*



RESEARCH AND INNOVATION

1 Park Road, Park West, BLOEMFONTEIN, 9301 T +2751 507 3445 F +2751 507 3275 www.cut.ac.za