



**DEPARTMENT OF BIOLOGICAL SCIENCES
UNIVERSITY OF NAMIBIA**

ANNUAL REPORT 2014

Introduction

Mission & Vision

The mission for the Department of Biological Sciences is to train and produce high quality biological scientists, both at undergraduate and postgraduate levels who will play crucial roles in the national development, especially in areas of education, health, agriculture, environment, natural resources and industries. Recognizing that learning is a lifelong endeavor, the Department of Biological Sciences admits both young and mature students. Our Vision is to become a department of high international repute and Centre for excellence in training biological scientists in the region, at both undergraduate and postgraduate levels. Specifically the department aims to:

- provide excellent, high quality education to contribute to the production of graduates that will be competent in the jobs they will perform.
- actively engage students in learning and provide sufficient support for students
- engage actively in quality research and produce quality publications
- serve the UNAM community as well as the Namibian Nation

Activities

During the academic year 2014, activities undertaken in the Department of Biological Sciences included teaching of undergraduate and postgraduate students. The second year of the revised and approved undergraduate curricula was implemented in January 2014, while the old curriculum will gradually be phased out on a year-to-year basis. The new

approved curricula were successfully registered with the National Qualifications Framework (NQF) during 2013.

The approved MSc Microbiology programme was also successfully registered with the National Qualifications Framework (NQF) during 2014.

The MSc Biodiversity Management and Research programme was reviewed and approved, since the programme will be offered by UNAM alone, after the project of a joint MSc Biodiversity Management and Research programme comes to an end at the end of 2014. The revised programme has been approved in 2014 by Senate and is now known as MSc Biodiversity Management. The first year of this revised programme will be implemented in 2015. The revised and approved MSc Biodiversity Management programme has been submitted for registration to the National Qualifications Authority (NQA) and registration is currently pending.

Two meetings of the department with its Advisory Board were held. The board consists of members from outside UNAM who represent the Central Veterinary Laboratory, City of Windhoek – Scientific Services, Directorate of Research Science and Technology in the Ministry of Education, Namibia Botanical Research Institute, GENMED, Gobabeb Research and Education Center, NAMDEB and the Ministry of Environment and Tourism.

Members in the Department have been active in research and the production of publications.

Staff matters

Mr. Asser Katunahange joined the Department as a technologist during 2014. Unfortunately, the vacancy of Professor could not be filled with suitable candidates during 2014 and this position has been converted into two lecturer positions. The vacancies were advertised, applicants were shortlisted and interviews were scheduled for January 2015.

One member of staff, Ms. Cathleen Deelie was on full-time leave for staff development and is expected to return in the beginning of 2015. Other staff members who are currently studying on a part-time basis include:

- Ms. J. Uzabakiriho who is in the final stage of his PhD

- Mr. H. Eiman who started his PhD in the beginning of 2013
- Ms. R. Shifa who started her MSc in the beginning of 2013 and is expected to finish at the end of 2015.
- Mr. A du Plessis who started his MSc in 2012 and is expected to complete it at the end of 2014.

Ms. Clara Nesongano was granted staff development status and leave to start her PhD studies in Germany in 2015. She is expected to return in the beginning of 2018. Dr. Ronnie Bock was granted sabbatical for one year and will be on leave from January 2015 to December 2015. Ms. Mildred Johnson was granted staff development status and leave to do her MSc in Germany from September 2015 to September 2017.

During 2014 the Department had 7 full-time technical staff (3 males and 4 females). There was 18 full time lecturing staff (11 males and 7 females) in the Department during 2013. Assoc. Prof. Mapaire continued his duties as UNAM's Research Coordinator; Dr. Chimwamurombe as deputy director of the School of Post-graduate Studies and Ms. P. Muandingi as Manager of ZERI in addition to their responsibilities in the Department.

Staff names, positions and gender

Full-time academic staff:

	NAME	POSITION	GENDER
1	Dr. E. Julies	Senior Lecturer & Head of Department	Female
2	Dr E. Kwembeya	Senior Lecturer	Male
3	Dr J.K.E. Mfunu	Senior Lecturer	Male
4	Assoc. Prof. I. Mapaire	Associate Professor	Male
5	Assoc. Prof. P.M. Chimwamurombe	Associate Professor	Male
6	Dr. R. Bock	Lecturer	Male
7	Mr B. Kaonjua	Lecturer	Male

8	Dr K.C. Chinsembu	Senior Lecturer	Male
9	Ms W.C. Nesongano	Lecturer	Female
10	Mr. H. Eiman	Lecturer	Male
11	Ms. C. Deelie	Assistant-Lecturer	Female
12	Mr. A. du Plessis	Assistant-Lecturer	Male
13	Ms R. Shifa	Tutor	Female
14	Mr. S. Eiseb	Lecturer	Male
15	Ms. N.P. Muandingi	Lecturer	Female
16	Ms. F. Kangombe	Lecturer	Female
17	Ms. I. Mujoro	Lecturer	Female
18	Mr. J.D. Uzabakahiro	Lecturer	Male

Technical staff:

	NAME	POSITION	GENDER
1	Mrs M. Morkel	Senior Technologist	Female
2	Mr A. Hjarunguru	Technologist	Male
3	Ms. M. Johnson	Technologist	Female
4	Mr A. Mbangu	Technologist	Male
5	Ms. K. Kaitjizemine	Technologist	Female
6	Mr. A. Katunahange	Technologist	Male
7	Mrs R. Shimwooshili	Assistant Laboratory Technician	Female

Detailed staff statistics

- i. Total number of full-time staff at the end of 2012 = 25
- ii. Ratio of female to male staff = 11:14
- iii. Number of Namibians = 19; Number of Non-Namibians = 6; % Namibians = 76%
- iv. Number of Resignations: 0

- v. Number of new Appointments = 1
- vi. Number of Promotions = 0
- vii. Number on study leave = 1

Research and Consultancies

Assoc. Prof. Mapaure

- Assessment of foraging behavior of Oryx (*Oryx gazella*) and Springbok (*Antidorcas marsupialis*) populations in Ogongo Game Park, Northern Namibia. (Principal Investigator). 2013-2014. UNAM Research & Publications Office. Assoc. Prof. I. Mapaure, Ms F. Kangombe, Mr. O. Mbango, BSc Students
- Assessing the effect of herding on livestock performance in semi-arid communal rangelands in South Africa and Namibia. 2012-2014. Ministry of Education, Namibia. Assoc. Prof. I. Mapaure, Mrs W.C. Nesongano, Dr F.P. Graz; with South African collaborators from ARC and UWC.
- Groundwater compositional variation in arid to semi-arid regions of Southern Africa, their relationship to regional climate change and influence on biological communities. 2013-2015. NCRST (Namibia) & NRF (South Africa). Prof. B. Mapani (UNAM); Prof. I. Mapaure (UNAM); Dr Jodie Miller (Stellenbosch University); Prof. P. Chimwamurombe (UNAM); 2 BSc students (UNAM). Prof. B. Mapani (UNAM); Prof. I. Mapaure (UNAM); Dr Jodie Miller (Stellenbosch University); Prof. P. Chimwamurombe (UNAM); 2 BSc students (UNAM).
- Options for sustainable geo-biosphere feedback management in savanna systems under regional and global change (OPTIMASS) 2014-2017. **BMBF (Germany)**. Dr H. Wanke (UNAM); Prof. I. Mapaure (UNAM), Prof B. Mapani (UNAM); Prof. Florian Jeltsch, University of Potsdam (UP); Dr. Niels Blaum (UP); Dr Katja Geissler (UP); Prof. Martin Trauth (UP); Prof. Britta Tietjen (Free University of Berlin); Prof. Katja Tielbörger (University of Tübingen); Prof. Ulrike Herzschuh (UP); Prof. Andreas Fangmeier (University of Hohenheim); Dr. Thomas Kluge (Institute for Social-Ecological Research Frankfurt); Dr. Stefan Liehr (ISOE); Prof.

Erwin Zehe (Karlsruhe Institute for Technology); Dr. Dave Joubert (Polytechnic of Namibia); Mr. Morgan Hauptfleisch (PON); Dr. Patrick Graz (PON); Mr. Pieter Hugo (AGRA Co-Operative Ltd., Namibia).

- Rainfall and herbivory: characterizing the transmission route for anthrax in grazing wildlife, Etosha National Park. 2011-2014. National Science Foundation (NSF) USA. Dr W. Turner, Assoc. Prof. I. Mapaure, Prof. Nils Chr. Stenseth, Prof. Anne-Brit Kolstø

Assoc. Prof. Chimwamurombe

- Development of high seed producing marama bean: an arid –adapted nutritious bean. Period 2015-2016. NCRST
- “Analysis of microbial nutrient cycling, GHG production, BNF and plant growth promotion for sustainable land use management” under the project The Future Okavango (TFO) .Funded by the Ministry of Education , Germany in collaboration with Prof Dr Barbara Reinhold-Hurek, University of Bremen, Germany.Period: 2011-2015.
- Improved soil fertility management: SASSCAL project. BMBF, Germany. Period: 2014-2017.

Dr. E. Julies

- Implementation of Biomarker assays to monitor algal toxicity in freshwater systems and evaluation of sludge bulking problems in the Gammams wastewater treatment plant. 2013-2014. UNAM RPC. Dr. E. Julies, Ms. Theopolina Thomas (Department of Chemistry and Biochemistry and undergraduate Students in collaboration with the City of Windhoek.
- Consultancy services without any remuneration for the Omuthiya Town Council on behalf of UNAM – Investigation of water quality of ground water sources in Omuthiya for potential use in Agriculture. – March 2014-September 2014.

Dr. E. Kwembeya

- Flora of Namibia Project. 2006-present. Government of Namibia. Collaboration with NBRI researchers and Associates
- Identification of toxic compounds in indigenous plants responsible for livestock poisoning in southern Africa. 2013-present. Dr. Stefan Louw & Dr. Renate H. Hans Department of Chemistry and Biochemistry

Dr. Chinsembu

- HIV-1 biological activity and toxicity prospecting of ethnobotanicals of Namibia. Funded by South Africa NRF-Namibia Research Collaboration. Period: 2012-2014. Collaboration with Dr. Phiyani Leabea (CSIR, South Africa) , Dr. Renate Hans (Department of Chemistry-UNAM); Mr. M. Hedimbi (School of Medicine-UNAM)

Dr. Mfunne

- Emerging viruses in western and southern Africa: Molecular identification and characterization of rodent- and shrew-borne Hantaviruses and assessment of their public health potential. Period: from 2009. Funded through German Government under German-Africa Cooperation Projects in Infectology. In collaboration with Prof. D. Kruger, Dr L. Koivogui, Dr S. Matthee, Prof. W. Preiseir and Dr J. Meulen
- Eco-physiological responses of ungulates towards heat and drought in Namibian desert. In collaboration with Leibniz Institute for Zoo and Wildlife Research, Berlin, Germany: Dr C. Voigt and David Lehmann. Period: 2010-2013.
- Parasites of rodents in South Africa and Namibia with a focus on emerging infectious diseases. Collaborative research funded under the joint research grant under the Researchers. Period: May 2012- Present. Collaborators Dr J.K. Mfunne (UNAM) and Dr Sonja Matthee (Stellenbosch University). South African – Namibia Research Partnership Programme Bilateral Agreement.

Dr. R. Bock

- Bio-Molecular Section, Malaria Research Group at the University of Namibia. Research interest include: Anti-malarial drug discovery (Evaluate the antimalarial

activity of novel synthetic metal compounds as well as natural products; establish the mode of action). Epidemiology, Diagnostics, Pathogenesis and Vector Biology.

- Malaria prevalence and epidemiology study in the Engela District of Northern Namibia.
- The impact of nutritional status on clinical outcomes of malaria following ACT treatment in children under the age of 5.
- The evaluation of medicinal plants for potential use as herbal supplements for cancer, diabetes and hypertension
- The evaluation of medicinal plants used by traditional healers for potential use as complementary medicine for treatment malaria
- The evaluation of indigenous plant species as potential sources of antimalarial products
- The molecular surveillance for drug resistant *Plasmodium falciparum* malaria in Namibia (collaboration with the Directorate of Special Programmes, MoHSS, Namibia)

Mr. S. Eiseb

- Action: StopRats: Sustainable Technology to Overcome Pest Rodents in Africa through Science. 2014-2016. ACP-EU Co-operation Programme in Science and Technology. Partnership between Namibia, Madagascar, Sierra Leone, South Africa, Swaziland, Tanzania

Ms. F. Kangombe

- Assessing the effect of herding on livestock performance in semi-arid communal rangelands in South Africa and Namibia. Feb 2012 – April 2014. NRF (SA) & Ministry of Education, Research, Science & Technology (Namibia). Assoc. Prof. Isaac Mapaire, Dr. Anthony Palmer, Dr. Patrick. Graz, Mrs. W. C. Nesongano, Mr. M. Kaune, Mr. J. Kaoti.
- Assessment of foraging behavior of Oryx (*Oryx gazella*) and Springbok (*Antidorcas marsupialis*) populations in Ogongo Game Park, Northern Namibia. March 2013 –

February 2014. RPC – UNAM. Assoc. Prof. Isaac Mapaure, Mr Oscar Mbango, Ms Hortensia Shihepo, Ms Taimi Uushona.

- A botanical field guide of Omusati region, central northern Namibia. Dr. Ezekeil Kwembeya, Mr. Oscar Mbango, Ms. Sofia Indongo, Ms. Ammia Mashimba. June 2014 – June 2016

Mr. H. Eiman

- Isolation of Actinomyces from Namibian Soils and Analysis of Antimicrobial Compounds. 2013 – 2014. UNAM RPC. Mr. H. Eiman, Ass/Prof P. Chimwamurombe, Mr J.D. Uzubakiriho & Dr R. Hans.

Ms. P. Khadila-Muandingi

- Screening of indigenous Namibian mushrooms for their antimalarial activities against sensitive and resistant strains of the malaria parasites. 2013-2014. National Research Foundation. Mamello Patience Sekhoacha, Kazhila C. Chinsebu

Mr. J. Uzubakiriho

- Isolation of Actinomyces from Namibian Soils and Analysis of Antimicrobial Compounds. 2013 – 2014. UNAM RPC. Mr. H. Eiman, Ass/Prof P. Chimwamurombe, Mr J.D. Uzubakiriho & Dr R. Hans.

Papers published, submitted or presented at workshops/conferences

Refereed journal articles

1. **Chinsebu, K.C.**, Negumbo, J., Likando, M., and **Mbango, A.** (2014). An ethnobotanical study of medicinal plants used to treat livestock diseases in Onayena and Katima Mulilo, Namibia. *South African Journal of Botany* 94, 101-107.
2. DUMBACHER, J. P., RATHBUN, G. B., OSBORNE, T. O., GRIFFIN, M. & **EISEB, S. J.** (2014) A new species of round-eared sengi (genus *Macroscelides*) from Namibia. *Journal of Mammalogy*, **95**(3): 443–454

3. Faul A.K., **Julies E.**, Pool E.J. 2014. Steroid hormone concentrations and physiological toxicity of water from selected dams in Namibia. *African Journal of aquatic science* (**ONLINE**): http://www.tandfonline.com/action/showAxaArticles?journalCode=taas20#.U5rfi_mSykE
4. Haiyambo D, Reinhold-Hurek B and **Chimwamurombe PM**. 2014. Effects of Plant Growth Promoting Bacterial Isolates from Kavango on the growth *Sorghum bicolor*. *African Journal of Microbiology Research* (**Accepted**).
5. **Kadhila-Muandingi N.P**, Nametso O., du Preez I. and Mumbengegwi D.R. (2014). Antiplasmodial activity of indigenous *Ganoderma lucidum* and *Terfezia pfeilii* Namibian mushrooms. *Journal of Parasitology*. Photon 104 (2013) 186-193.
6. **Kadhila-Muandingi NP**, A Mbangi and L PM Nepembe (2014). Isolation and identification of microbial contaminants affecting cultivated mushrooms at Main campus of the University of Namibia. 2nd Annual Science Research Conference Book of Abstracts pp.54. Windhoek, Namibia.
7. Kazembe, L.N., Archibong, E.F., **Chimwamurombe, P.M.** & **Chinsemu, K.C.** (2014). Editorial comment- Science: An all-encompassing field. *Int. Sci. Technol. J. Namibia*, 1(1): 1-3.
8. ISE Ueitele, **PM Chimwamurombe**, S Louw and **NP Kadhila-Muandingi** (2014). Ethnomycology of Indigenous *Hexagonia* species in Northern Namibia. 2nd Annual Science Research Conference Book of Abstracts pp.133. Windhoek, Namibia.
9. Kaholongi, I.K. and **Mapaure, I.** (2014). Vegetation composition, diversity, and structure in Uukolonkadhi Community Forest of North Western Namibia. *Journal of Agriculture and Biodiversity Research* 3(1): 41-50
10. LAMB, J., DOWNS, S. & **EISEB, S.** & TAYLOR, P. J. (2014) Increased geographic sampling reveals considerable new genetic diversity in the morphologically conservative African Pygmy Mice (Genus *Mus*; Subgenus *Nannomys*). *Mammalian Biology*, **79**: 24– 35
11. Lehmann D, **Mfune J.K.E**, Gewers E, Cloete J, Brain C, Aschenborn O.H-K, Mbomboro L, Kasaona S, Brain C, & Voigt C.C (**In Press**). Movements of desert gemsbok (*oryx g. gazelle*) in response to spatiotemporal variation in plant productivity. Submitted to *Journal of Arid Environment*. **October, 2014**

12. Makhado, R.A., **Mapaure, I.**, Potgieter, M.J., Luus-Powell, W.J. and Saidi, A.T. (2014). A review of the drivers of *Colophospermum mopane* distribution in southern Africa's mopane savannas. *Bothalia* 44(1), Article #152; <http://dx.doi.org/10.4102/abc.v44i1.152>.
13. Mileusnic, M., Mapani, B.S., Kamona, A.F., Ruzicic, S., **Mapaure, I.** and **Chimwamurombe, P.M.** (2014). Assessment of agricultural soil contamination by potentially toxic metals dispersed from improperly disposed tailings, Kombat Mine, Namibia. *Journal of Geochemical Exploration* 144: 409–420
- 14.** Sebastian Menke, Wasimuddin, Matthias Meier, Jörg Melzheimer, **John Kazgeba Elijah Mfuné**, Sonja Heinrich, Susanne Thalwitzer, Alexandre Courtiol, Bettina Wachter, Simone Sommer (2014). Oligotyping revealed the impact of host phylogeny on the gut-microbiome of two free-ranging sympatric Namibian carnivores. *Frontiers in Microbiology* doi:10.3389/fmicb.2014.00526
- 15.** Takundwa MM, Ruzvidzo O, **Uzabakiriho JD**, Titus P, **Chimwamurombe PM**, 2014. Molecular identification of fungal species associated with leaf lesions of Marama bean seedlings in Namibia. *African Journal of Microbiology Research* (Accepted)
16. Turner, W.C., Kausrud, K.L., Krishnappa, Y.S., Cromsigt, J.P.G.M., Ganz, H.H., **Mapaure, I.**, Cloete, C.C., Havarua, Z., Küsters, M., Getz, W.M., and Stenseth, N.C. (2014). Fatal attraction: vegetation responses to nutrient inputs attract herbivores to infectious anthrax carcass sites. *Proceedings of the Royal Society B* (PRSB) 281, No. 1785; doi:10.1098/rspb.2014.1785
17. Uitele ISE, **Chimwamurombe P M** and **Kadhila Muandingi P.** 2014. Optimisation of indigenous *Ganoderma lucidum* productivity under cultivation in Namibia. *International Science and Technology Journal of Namibia* **Vol 3** Issue 1:35-41
18. Witkowski,P.T., Kallies, R., Hoveka, J., Auste, B., Ithete, N.L., Drosten, C., , Preiser, W., , Klempa, B., **Mfuné, J.K.E.**, Kruger, D.(In Press) Two Arenavirus Isolates from Namaqua Rock Mouse, Namibia, Southern Africa Submitted to *Emerging Infectious Diseases*. **August 2014**
19. Witkowski, P.T., Klempa, B, Ithete, N.L., Auste, B., **Mfuné, J.K.E.**, Hoveka, J., Matthee, S., Preiser,W., Kruger, D.H. (2014). Hantaviruses in Africa. *Virus Research* dx.doi.org/10.1016/j.virusres.2013.12.039
20. Zepee Havarua, Wendy Turner, and **John K.E. Mfuné** (2014). Seasonal variation the foraging behavior of Zebra may alter contact with the anthrax bacterium (*Bacillus anthracis*) in Etosha National Park, Namibia. *Can. J. Zool.* **92**:331-337 (2014) dx.doi.org/10.1139/cjz-2013-0186

Published books or chapters in books

Chimwamurombe P., 2014. Improvement of Marama bean (*Tylosema esculentum*): A high value plant of the Namibian Kalahari agro-ecological region Chapter 8. In: Indigenous Plants of Namibia. Riéth van Schalkwyk (Ed).pp 113

Published conference proceedings and Conference papers delivered

1. Amputu, V., Joubert, D.F. & **Mapaure, I.** (2014). The effects of different fire history and frost on vegetation structure and diversity on the Waterberg plateau, central Namibia. Poster presented at the 49th Congress of the Grassland Society of Southern Africa (GSSA), Advancing Rangeland Ecology and Pasture Management in Africa. Phillip Sanders Resort & Conference Centre, Bloemfontein, South Africa, 20-25 July, 2014.
2. Zoe Rosal Barandongo, **J.K.E Mfuné** and W.C.T Turner. *Dust bathing behaviours of elephants, zebras and wildebeest and the potential risk of inhalational anthrax.* Paper presented at the 2nd Annual Science Research Conference. **30-31 October, 2014.** Unam Library, Main campus, Windhoek
3. Chantal Akoua-Koffi, Ndapewa Ithete, Leonce Kouadio, Detlev H.Krüger, Fabian Leendertz, N’Faly Magassouba , **John Mfuné**, and Peter Witkoswki. *Emerging viruses in West and South Africa: Molecular identification and characterization of rodent- and shrew-borne hantaviruses and assessment of their public health potential.* Paper presented at the Conference of African-German Partnership projects on Infectious Diseases, Dar es Salaam, **29 January -2 February 2014**
4. **Chimwamurombe Percy**, Breeding of indigenous plants for Southeastern Africa, AFRICAN EUROPEAN RESIDENTIAL SCHOOL: *Global Challenges: Urbanization, Climate Change, Livelihoods and Food Security*, July 28th– Aug 8th2014, University of Botswana, Botswana
5. **Chinsebu K.** Keynote speaker, National Science and Technology Forum, Zambia, 10 December 2014, Golf View hotel, Lusaka, Zambia.
6. Chisenga B., **Kwembeya E. G.**, Maggs-Kolling G.and **Chimwamurombe P.M.** The genetic diversity of *Pennisetum glaucum* (L.) R.Br. (Pearl Millet) Landraces in Namibia.
7. **Du Plessis A.** Attended two workshops: ‘Broadening stakeholder involvement in Transboundary Water Resources Management in the Orange Fish River Basin, Namibia’ 18 – 19 March 2014 in Keetmanshoop and 05 – 08 August 2014 in Keetmanshoop

8. **Du Plessis A. and Julies E. M.** Effects of mining activities on downstream heavy metal concentrations in the Omatako River Basin in Namibia. 2nd Annual Science Research Conference of the Faculty of Science, 30 – 31 October 2014 Windhoek.
9. **Eiseb S.** EVIDENCE FOR RECENT ADAPTATION AND SPECIATION LINKED WITH DRAINAGE EVOLUTION IN A RARE AFRICAN RODENT. The 5th International Conference on Rodent Biology and Management (ICRBM) Zhengzhou, Henan Province, China. 25-29 Aug 2014
10. Jann Lasse Grönemeyer, **Percy Chimwamurombe**, and Barbara Reinhold-Hurek. *Bradyrhizobium subterraneum* sp. nov., a symbiotic nitrogen-fixing bacterium from root nodules of groundnuts in Namibia. *International Journal of Systematic and Evolutionary Microbiology* (**Accepted**)
11. **Julies E.M.**, Lawrence C., Nkusi M. and Siranda S. (2014) RCE Khomas-Erongo Region: Three years of sunshine. 32nd EEASA Conference – University of Namibia (UNAM), Windhoek, 9-12 September 2014. Conference Theme: Reflections on the current and emerging ESD issues and practices informing the post DESD framework programme
12. **Julies E.M. (2014).** International Conference on Higher Education. Education Beyond 2014 to be held on 9 November 2014, Japan.
13. **Julies E.M. (2014).** The 9th Global RCE Conference 4–7 November 2014 Okayama, Japan
14. **Kaonjua B.** Attending a conference on **poverty related diseases** (PRD) focusing on HIV/AIDS and TB in Namibia at the School of Medicine (15 June – 17 June 2014)
15. **Kaonjua B.** Attending a Conference about **The Embryonic Development of Indigenous Chicken** at the Namib Poultry Farm (16 August – 18 August 2014)
16. Lendelvo, S., Kazembe, L. and **Mfune, J.K.E.** *Link the utilization of translocated species to the benefits and perceptions of conservancy members.*, Paper presented at the 4th Insaka Symposium (**14-16 April 2014**), organized by Montana University in Cape Town, RSA
17. S. Lendelvo, L. Kazembe, H. Suich, **J.K.E. Mfune** *Trends in wildlife species boosted with translocation (2001 – 2013): A case of the Nyae Nyae conservancy.* Paper presented at the 2nd Annual Science Research Conference. **30-31 October, 2014.** Unam Library, Main campus, Windhoek
18. **Mapaure, I.** (2014). Global and SADC challenges for research management. Presentation done at a Training Workshop for Research Managers on

- Fundamentals of Research & Innovation Management, College of Medicine, University of Malawi, Blantyre, Malawi. 21-22 October, 2014.
19. **Mapaure, I.** (2014). Establishing a research culture. Presentation done at a Training Workshop for Research Managers on Fundamentals of Research & Innovation Management, College of Medicine, University of Malawi, Blantyre, Malawi. 21-22 October, 2014.
 20. **Mapaure, I.** (2014). Funding for research. Presentation done at a Training Workshop for Research Managers on Fundamentals of Research & Innovation Management, College of Medicine, University of Malawi, Blantyre, Malawi. 21-22 October, 2014.
 21. **Mapaure, I.** (2014). Fostering a research culture and promoting research excellence at the University of Namibia (UNAM). Research Strategic Planning Workshop, Department of Human Sciences, Faculty of Humanities & Social Sciences UNAM, 27-28 May, 2014, Safari Hotel, Windhoek.
 22. Matengu, K. & **Mapaure, I.** (2014). An analysis of the information haves and have-nots in Namibia. SANORD International Symposium, Karlstad University, Sweden, 10-12 June 2014. Theme: A sustainable future, information technology and welfare development.
 23. **Mfune, J.K.E.** *Managing your Supervisor*. Paper presented at the 2014 New Graduate Students Orientation Workshop held under the theme: Building and Enhancing New Postgraduate Student's Research Capacity. **15 August 2014**, GIZ Conference Centre, Windhoek.
 24. **Mfune, J.K.E.** and Angula, M. *Climate Education in Namibia at Tertiary Education*. Paper presented at Conference on Challenges and Opportunities on Climate Change for Law, Policy and development organised by Konrad Adenauer Stiftung Rule of Law for Sub-Saharan Africa Programme (Nairobi) in Cooperation with the Development and Rule of Law Programme (DROP) of the University of Stellenbosch (South Africa) held at Kalahari Sands Hotel, Windhoek, **9-10 September 2014**.
 25. **Mfune, J.K.E.** *Conference paper preparation & presentation*. Paper presented at the CPD: Capacity Building Workshop "Academic writing, and Conference paper presentation and Publication" HP Campus, Ongwediva. **4th – 5th August 2014**
 26. Moses R., **Kwembeya E.G.**, Kolberg H., Kritzinger Q. Seed physiological aspects of selected species of the Kavango woodland, Namibia.
 27. Munyebvu F. **Mapaure I. and Kwembeya E.G.** Abundance, structure and uses of baobab (*Adansonia digitata* L.) populations in Omustai Region. Paper

presented at the 2nd Annual Science Research Conference. **30-31 October, 2014.**
Unam Library, Main campus, Windhoek

28. Nauyoma, L., **Mfune, J.K.E.**, Kwmbeya, E., and Wassenaar, T. *Environmental factors associated with Juttadinteria albata, its population structure and assessment of its performance on different slopes and aspects in Sendelingsdrif.* Paper presented at the 2nd Annual Science Research Conference. **30-31 October, 2014.** Unam Library, Main campus, Windhoek.

A. Shekinyenge, **Mfune, J.K.E.** and Wassenaar, T. *Natural Soil properties and potential of waste materials as plant medium during rehabilitation at Sendelingsdrift mine.* Paper presented at the 2nd Annual Science Research Conference. **30-31 October, 2014.** Unam Library, Main campus, Windhoek

29. Zepee Havarua, Wendy C. Turner, and **John K.E. Mfune.** *Seasonal variation in foraging behaviour of plains zebra (Equus quagga) may alter contact with the anthrax bacterium (Bacillus anthracis).* Paper presented at the 2nd Annual Science Research Conference. **30-31 October, 2014.** UNAM library, Main campus, Windhoek.

Undergraduate teaching, student statistics and pass rates

YEAR	MODULE	TOTAL NUMBER OF STUDENTS ENROLLED	PASS RATE (%) FROM NUMBER ENROLLED
I	BLG3411 Introduction to Biology	440	83.9
	BLG3512 Diversity of Life	456	81.1
	<i>Mean pass rate 1st Year</i>		82.5
II	BLG3611 Animal Form & Function	200	60
	EBL3631 Introduction to Ecology	39	97
	MBL3631 Cell Molecular Biology & Genetics	120	89.2
	BLG3612 Plant Form & Function	131	89

	EBL3632 Ecological Field Techniques	33	90
	MBL3632 Introduction to Microbiology	126	90
	BLG3621 Biometrics I	89	76
	BLG3622 Biometrics II	80	72
	MBL3611 Microbial Systematics	82	94
	<i>Mean pass rate 2nd Year</i>		84
III	EBL3731 Population Ecology	27	100
	EBL3700 Field Ecology I	24	100
	EBL3711 Fresh water & Marine Ecology	22	95
	MBL3711 Microbiology	56	95
	MBL3731 Recombinant DNA Technology	67	82
	MBL3751 Plant Physiology	55	95
	MBE3771 Cell Molecular Biology, Microbiology and Genetics for Educators	63	79
	EBL3732 Conservation Biology & Biodiversity		
	EBL3712 Ecosystem Ecology	21	100
	EBE3772 Environmental Biology for Educators		
	MBL3752 Comparative Animal Physiology	74	70
	BLG3702 Research Methodology		
	MBL3712 Biotechnology	45	80
	MBL3732 Genetics	52	91
	<i>Mean pass rate 3rd Year</i>		89.7
IV	EBL3800 Field Ecology II	23	100
	BLG3810 Research Project	71	100
	EBL3811 Environmental Management	20	95

EBL3831 Biosystematics	22	95
EBL3851 Biogeography	22	100
MBL3811 Immunology	41	100
MBL3831 Applied Molecular Biology	52	92
MIC3811 Mycology	41	100
MOL3811 Bioinformatics		
MIC3802 Parasitology	67	97
EBL3802 Disturbance and Restoration Ecology	24	100
EBL3832 Management of Natural Resources	26	96.2
EBL3812 Behavioural Ecology	23	100
MIC3822 Medical Microbiology		
MIC3812 Environmental and Industrial Microbiology	43	90
MIC3832 Virology	45	100
MOL3812 Applied Genetics	4	100
MOL3832 Plant Growth and Development	66	89
MOL3852 Animal Growth and Development	4	100
<i>Mean pass rate 4th Year</i>		
<i>OVERALL MEAN FOR DEPARTMENT</i>		

Postgraduate Supervision

PhD Students

1. **Catherine Amoo:** A study of the apparent immunity to malaria of the San people in the Oshikoto Region of Namibia. Assoc. Prof. Chimwamurombe : Main supervisor, Dr. Bock: Co-supervisor
2. **Devota Kavishe:** An ecological study of selected *Porphyra capensis* populations from the Namibian coast. Assoc. Prof. Mapaure: Main supervisor, Dr. P. Chimwamurombe: Co-supervisor

3. **Mutsa Takundwa:** Breeding for reduction of reproductive life cycle in *Tylosema esculentum*. Dr. Chimwamurombe: Main-supervisor
4. **Jean-Damascene Uzabakiriho:** Analysis of microbial community structures and their nifh gene expression in *Tylosema esculentum* (marama bean) endophytic diazotroph bacteria. Dr. Chimwamurombe: Main-supervisor.
5. **Hedimbi M.** Evaluation of selected Namibian plants for anti-HIV properties. Dr. K. Chinsembu: Main Supervisor
6. **Mrs Selma Lendelvo:** Assessment of factors that influence the establishment of selected ungulates translocated into communal conservancies: the case of the Nyae nyae and Uukwaluudhi conservancies, Namibia. Dr. Mfuno: Main supervisor
7. **Ms. C. Garus-Oas:** Abundance, diversity and productivity of microalgae in freshwater eutrophic systems in Namibia. Dr. E. Julies: Main Supervisor
8. **Pauline Kadhila-Muandingi:** Evaluation indigenous Namibian mushrooms for antimalarial activity. Dr. K. Chinsembu: Main Supervisor
9. **Henrique Eiman:** Isolation of Actinomycetes from Namibian Soils and Analysis of Antimycobacterial Compounds. Assoc. Prof. P. Chimwamurombe: Main Supervisor
10. **Sunette Walter:** Dr. R. Bock: Co- Supervisor
11. **Iwanette du Preez:** Dr. R. Bock: Co- Supervisor
12. **Florence Dushememaria:** Dr. R. Bock: Co-Supervisor

MSc Students

1. **Julia Hoveka:** Molecular identification and characterization of rodent- and shrew-borne hantaviruses and other viruses and the prevalence of ecto- and endo-parasites on small mammals in selected areas in Namibia. Dr. Mfuno: Main supervisor and Dr. Chimwamurombe: co-supervisor.
2. **Alfeus V. Shekunyenge:** Understanding of natural soil properties and potential of mining waste materials as a habitat for plants, during rehabilitation at Sendelingsdrif mine. Dr. Mfuno: Main supervisor
3. **Lineekela Nauyoma:** Habitat requirements, population structure and dynamics of *Juttadinteria albata* and assessment of its performance in post mining substrates at

- Namdeb's Sendelingsdrif diamond mine. Dr. Mfuno: Main supervisor and Dr. E. Kwembeya: Co-supervisor
4. **Josefina N. Nelongo:** Evaluation of the usefulness of the quantiferon TB gold in-tube test in the diagnosis of tuberculosis disease and as a tool for evaluating the response to tuberculosis chemotherapy in Namibian patients. Dr. Bock: Co-supervisor
 5. **Rauna Hamukwaya:** Investigations on type of humoral immunity against anthrax in predators and scavengers in Namibia. Dr. Chimwamurombe: Main supervisor.
 6. **Kaatri Nambadi:** Assessment of body condition of African elephants (*Loxodonta Africana*) in Etosha National park, Namibia: How it relates to strongyle parasite counts and nutrition value. Dr. E. Julies: Main supervisor
 7. **Adrian du Plessis:** Effect of mining on heavy metal concentrations and potential endocrine disruption in fish and crabs in Omatako and Von Bach dams. Dr. E. Julies: Main supervisor
 8. **Cathleen Deelie:** Population structure and recruitment patterns of the indigenous mussel *Perna perna* and the alien mussel *Mytilus galloprovincialis* on the central and southern coast of Namibia. Dr. E. Julies: Main supervisor
 9. **Victoria Erasmus:** Assessment of trophic relationships of prey species *Etrumeus whitheadii*, *Mycotophidae* and *Sepia* off Namibia. Dr. E. Julies: Main supervisor
 10. **Maria Malakia:** Age determination and growth rate of the northern Benguela sardine (*Sardinops sagax*). Dr. E. Julies: Main supervisor
 11. **Martha Hausiku:** Study of the taxonomic identification and molecular diversity of indigenous edible mushrooms of the Kavango region, Namibia. Dr. K. Chinsembu: Main Supervisor
 12. **Ruben Ulbrich:** Utilization and distribution of selected invasive alien species in German and Namibia in comparison to the areas of origin. Dr. E. Kwembeya: Main Supervisor
 13. **Faith Munyebvu:** Abundance, structure and uses of *Adansonia digitata* L. populations in Omusati region. Assoc. Prof. I. Mapaure: Main Supervisor and Prof E. Kwembeya: Co-supervisor

- 14. Rufina I. Shifa:** Assessment of carbon stock in bush encroached thornbush savanna at farm Erichsfelde. Dr. E. Kwembeya: Co-supervisor
- 15. Daniel Haiyambo:** Effects Of Plant Growth-Promoting Rhizobacteria (PGPR) And Biocontrol Bacteria From Kavango On Selected Cereals *Pennisetum glaucum* and *Sorghum bicolor*. Assoc. Prof. P. Chimwamurombe: Main Supervisor
- 16. Isabella Uitele:** Ethnomycology and Mycochemical studies of the Hexagonia species in Northern and Eastern Namibia. Prof P. Chimwamurombe: Main Supervisor
- 17. Zoe Barandongo:** Dust bathing behaviors of elephants, zebras and wildebeest and the potential risk of inhalational anthrax in Etosha National Park. Dr. J. Mfunne: Main supervisor
- 18. Munyaradzi Tambo:** Dr. R. Bock: Co-supervisor
- 19. Joyce Auala:** Dr. R. Bock: Co-supervisor

COMMUNITY SERVICE

Assoc. Prof. I. Mapaure

Internal

- Research Coordinator for the University of Namibia.
- Active member of the PVC Academic Forum.
- Active member of Academic Planning Committee.
- Active member of the Research & Publications Committee.
- Active member of the UNAM Senate.
- Active member of Faculty of Science Board.
- Active member of Biological Sciences Board.
- Member of a UNAM Audit Task Force mandated to audit Centres and Units at the university.
- A member of the Committee of Admission & Examinations for the MSc Biodiversity Management & Research.
- Research Coordinator for the University of Namibia.
- Member of the UNAM Book Store Task Group.
- Member of the Teaching & Learning Improvement Unit Advisory Committee.
- Chairperson of the UNAM Task Force on Research Ethics.
- Member of the UNAM Press Editorial Board
- Review Board (IRB).

- Board Member of the Multidisciplinary Research Centre (MRC).
- Active member of the Advisory Committee of the Scholarly Communication in Africa Programme (SCAP).
- Member of the Review Committee on Publications at the University of Namibia appointed by the PVC (AA&R)
- Active member the Editorial Board of the Journal for Studies in Humanities & Social Studies (UNAM).
- Active member of the UNAM Senate
- Member of the UNAM Climate Change Working Group.

External Service

- Representing the University on the Southern African Research & Innovation Management Association (SARIMA). Co-opted into the Africa Engagement Portfolio - essentially, assisting with developing and implementing the Africa Engagement strategy and working with funders and other stakeholders to strengthen research and innovation management in the SADC region primarily
- Representing the University on the Southern African Nordic Centre (SANORD) Conference and Council Meeting. Also Chair of SANORD Working Group on Research
- Chairperson of the Research & Publications Sub-Committee of the Vice Chancellors and Rectors Forum (VCRF) of Namibia.
- Representing the University on the Technical Advisory Committee of the RESSESA of the Organisation for Social Science Research in Eastern and Southern Africa (OSSREA).
- External examiner for the Department of Nature Conservation, Polytechnic of Namibia
- External examiner for the Department of Environmental Science, Bindura University of Science Education, Zimbabwe.
- Member of a number of Professional bodies including the Degradation Network, AFRIFIRENET (African Fire Research Network), Southern African Mopane Research Association (SAMRA), Biodiversity Foundation for Africa (BFA), Association for the Taxonomic Study of the Flora of Tropical Africa (AETFAT), Grassland Society of Southern Africa, Namibia Environment & Wildlife Society (NEWS) and the Botanical Society of Namibia (BOTSOC); Society for Conservation Biology; International Association of Wildland Fire; Environmental Research Web; Southern African Research & Innovation Management Association (SARIMA); Leadership for Environment and Development (LEAD); Ecological Society of America.
- Reviewer of articles submitted for publication in *African Journal of Ecology*, *Environmental Conservation*, *African Journal of Range & Forage Science*, *Dinteria*, *Koedoe*, *Journal for Studies in Humanities & Social Sciences*, *Journal of Mountain Science*, *African Journal of Plant Science*, *Journal of Mountain Science*, *International Journal of Biodiversity & Conservation*, *Landscape Ecology*, *Transactions of the Zimbabwe Scientific Association*, *International Science & Technology Journal of Namibia (ISTJN)*, RAEIN Africa, IUCN, SARDC (Harare). Also reviewed few book chapters and Research Proposals submitted to various organizations (e.g. International Foundation for Science, Sweden).
- **Representing UNAM on the Southern African Universities Association (SARUA).**

- Representing UNAM on the National Research, Science, Technology And Innovation (NCRST) Valley Steering Committee

Kadhila-Muandingi N.P.

Internal

- Active member of Faculty committee
- Active member of Department of Biological Sciences Board
- Conducted training on mushroom cultivation and mushroom post-harvest skills at main campus for 11 people from the Northern region of Namibia.
- Active member of Senate
- Active member of Academic Planning Committee
- Active member of Admissions and Examinations Committee
- Active member of Deans' Committee

External

- 14th to 19 June 2014, - conducted training on mushroom cultivation and mushroom post-harvest skills for 16 people at Okaku in Oshana Region.

Julies E. M.

Internal

- Course Coordinator: Discovery camp – 2014 of the Regional Graduate Network in Oceanography on Scientific Knowledge applied to the Sustainable Use of Coastal Upwelling Ecosystems with Lectures and Discussions. SANUMARC, Hentiesbay, March 2014.
- Consultancy services without any remuneration for the Omuthiya Town Council on behalf of UNAM – Investigation of water quality of ground water sources in Omuthiya for potential use in Agriculture. – March 2014-September 2014.
- Secretary: Regional Centre of Expertise in Education for Sustainable Development Khomas-Erongo
- Chair: Board of Department of Biological Sciences
- Active member of Faculty Post graduate Committee
- Active member of Faculty of Science Management Committee
- Active member of Faculty of Science Board
- Active member of Senate
- Faculty representative and active member: Research and Publication Committee UNAM
- **Member** of the MSc Biodiversity management and Research Admissions and Examinations Committee
- Internal Examiner of MSc thesis: **Title:** Occurrence and distribution of fish parasites of potential threat to the aquaculture sector along the Kavango River, Namibia.

Degree: MSc Agriculture (Fisheries and Aquatic Sciences). **Candidate:** Victoria Mumba, **Student number:** 200305158

- Internal examiner of PhD thesis: **Title:** An Autecological and nutritional study of selected *Porphyra capensis* populations from the Namibian coast. **Candidate:** Devota Kavishe, Student number: 200946480

External

- Deputy Chair: Local organizing committee for the 32nd Environmental Education Association of Southern Africa Conference. Conference took place from 9-12 September 2014
- Member of the Upper Swakop river Basin Forum
- Member of the Scientific Advisory Committee on Integrated Coastal Zone Management to NACOMA.
- Reviewer of articles in Physics and Chemistry of the Earth and in the Journal of Agriculture and Biodiversity Research
- Secretary: Regional Centre of Expertise in Education for Sustainable Development, Khomas-Erongo
- Member of Namibian Environmental Education Network

Chinsembu K.C.

Internal examination of University of Namibia MSc thesis and PhD dissertations:

- Isolation and characterization of starch, starch biosynthetic genes and protein inhibitors from Marama bean [*Tylosema esculenta* (Burchell) Schreiber]. PhD Dissertation, Emmauel Nepolo, January 2014.
- A study of the apparent immunity to malaria among the San people in the Tsumeb area of Oshikoto and Kavango regions of Namibia. PhD Dissertation, Chipso Catherine Amoo, January 2014.
- Phytochemical and biochemical analysis of indigenous chewing sticks, *Diospyros lycioides* and *Euclea divinorum*. MSc thesis, Moola M. Nyambe, December 2013.

J. Mfunne

Internal

- Coordinator, MSC Biodiversity Management and Research Program
- Coordinator, Faculty of Science Mentorship Program
- Member, Faculty of Science Postgraduate Committee
- Member, University of Namibia Library and Information Technology Committee
- Member of Faculty of Science NHC Accreditation Committee. (Nominated in August 2014).
- Internal Examiner for thesis of:

(a) Kaatri Nambadi. Thesis title: Assessment of body condition of African Elephants (*Loxodonta africana*) in Etosha National Park, Namibia: How it relates to strongyle parasite counts and nutrition value. MSc by research candidate. Department of Biological Sciences, University of Namibia.

(b) Emilia Haimbili. Thesis title: Establishment of woody savannah species on various mined substrates: towards restoring self-sustaining plant communities at Navachab Gold Mine. MSc by research candidate of Biological Sciences, University of Namibia.

External

• External Examiner for theses

- (a) Mr Quinex Wintalamu Chiluwe. Title of thesis:- “Assessing the role of property rights in managing water demands: the case of Umgeni river catchment”. MPhil Candidate from Monash University, South Africa
- (b) External Examiner, for Master of Integrated Land Management Program. The Polytechnic of Namibia.
- Reviewer of the book titled “Aspects of Cheetah Biology, Ecology and Conservation Strategies on Namibia’s Farmlands”
- Facilitator. CPD: Capacity Building Workshop “Academic writing, and Conference paper presentation and publication ” HP Campus, Ongwediva. 4th – 5th August 2014

B. Kaonjua

Internal

- Served as a committee member for drafting the curriculum of **BSc in Sports**
- Served as a committee member for organizing **The International Conference on Light and Applications** to be hosted by UNAM in 2015
- Acted as a judge at **The Faculty of Science 2nd Annual Research Conference** (November, 2014)

S. Eiseb

Internal

- Committee member to design and implement departmental staff awards

External

- Research Associate of the National Museum of Namibia.
- Member of Council for the Zoological Society of Southern Africa (ZSSA)

Assoc. Prof. Chimwamurombe

Internal

- Deputy Director: School of Postgraduate Studies
- Active member of Faculty of Science Board.
- Active member of Biological Sciences Board.

External Service

- Member of the Interim Bioprospecting Council of Namibia.

External Examination

- MSc Thesis, Tondani Kone, University of Pretoria
- PhD Thesis viva voce panellist: Celia Martins, University of Pretoria
- MSc thesis, Grace Madabahanye, North West University, South Africa
- MSc thesis, Njabulo Maphosa, University of Pretoria
- Msc thesis, Bridget Dikobe, North West University, South Africa
- External Moderation of Examination Microbiology and Biotechnology Questions: Undergraduate exams for Bindura University of Science Education, June 2014
- Executive secretary: African Society for Edible and Medicinal Mushrooms.

Dr. E. Kwembeya

Internal Service

- Secretary - Faculty of Science Mentorship Committee
- Active member of Faculty of Science Board.
- Active member of Biological Sciences Board.
- Faculty of Science Representative to the Faculty of Economics and Management Science
- Member of the MSc. Biodiversity Management and Research Examination Committee.
- Biosafety Policy of the Faculty of Science –Member of Biosafety Policy Task Force

External Service

- Active member of Botanical Society of Namibia

Ms. Nesongano

Internal

- Active member of Faculty of Science Board.
- Active member of Biological Sciences Board.
- Member of the MSc. Biodiversity Management and Research Examination Committee.
- Active member of the Faculty of Science award and career fair committee
- Active member of the Faculty of Science MSc Restoration Ecology committee

Mr. A. du Plessis

Internal Service

- Active member of Faculty of Science Board.
- Active member of Biological Sciences Board

External Service

- Member of Orange River Basin Committee

Ms. F. Kangombe

Internal Service

- Representative of Department on the Department of Geography, History and Environmental Studies Advisory Committee
- Active member of Faculty committee on Renewable Energy & Environment
- Active member of Faculty committee
- Active member of Department of Biological Sciences Board
- Active Member Faculty of Science Award and Career Fair Committee
- Active member of Faculty committee - MSC: Restoration Ecology Committee
- Represented the department at CES workshop in an effort to contribute to implementation of the Audit and self-improvement plan, during 3-4 April 2014.
- Provided training (theory & practice) to employees of the Ministry of Lands & Resettlement on VEGETATION TYPES, 02-03 Nov 2014; arranged through UCCB

External Service

- Active member of Botanical Society of Namibia
- Provided logistical support & participated in the workshop on “Modern approaches to the study of biological diversity” during 24 – 28 March 2014.

Mr. H. Eiman

Internal Service

- Active member of Faculty committee
- Active member of Department of Biological Sciences Board
- Member of student selection committee for Faculty of Science

Mr. J. Uzabikariho

Internal Service

- Active member of Faculty committee
- Active member of Department of Biological Sciences Board

Ms. I. Mujoro-Kaukeutu

Internal Service

- Active member of Faculty committee
- Active member of Department of Biological Sciences Board
- Active member of the Faculty of Health Sciences Board
- Chairperson of the Department Awards Committee

External Service

- Attended three meetings of the National Council on Indigenous Knowledge Systems (IKSC) of NCRST
- Appointed as a Deputy Chairperson of the IKSC

- Attended two meeting as part of the local organizing committee of the inaugural conference of the African Association for the Study of Indigenous Knowledge Systems (AASIKS).
- Attended a meeting on the validation visits to Potential SADC REDD+ Training Institutes.

Conclusions

We experienced an increase in student numbers in most of our modules, which is a result of our increase in student numbers in first year on an annual basis. Furthermore, the number of post-graduate students also increased in the Department. Despite the challenges of resources and equipment, physical space, a very high workload on staff members and ever increasing numbers of students, the Department continued to deliver a high quality service to both our students and the community at large as well as improved on research and publications output. There was an increase in the number of publications produced by the department during 2014. Greater student support and initiatives to improve the quality of teaching in the department will be undertaken and the enforcement and strengthening of the student mentorship programme will receive priority during 2014. The Department also plans to formalize agreements with stakeholders for internship of students.