

NEWSLETTER OF THE ANATOMICAL SOCIETY OF SOUTHERN AFRICA 2018

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MESSAGE FROM THE PRESIDENT OF THE ANATOMICAL SOCIETY OF SOUTHERN AFRICA

Dear colleagues,

We are nearing the end of 2018 for a well-deserved rest, following a successful academic year. It will be the end of an era in some respects, as some of our senior members are retiring and two Anatomy departments will be appointing new heads. At our annual conference Profs Lebona and Bosman received distinguished member awards, and we wish them well and thank them for their loyal support to ASSA. We were also pleased to hear that a new head has been appointed at Stellenbosch University, and we want to welcome Dr Baatjes to ASSA and wish her all the best.

We were truly grateful for the wonderful conference organized by Elaine Swanepoel and her team from UJ at Kloofzicht Lodge. We know that this has come at a difficult time for her. There was a good turnout despite the difficulties with funding, and the quality of the presentations was excellent. Once again the attention to detail was exceptional and we felt very spoilt. We are very much looking forward to the conference at KwaMaritane organized by the University of Pretoria.

On a personal note – this will be my last message as my term as president of ASSA is coming to an end. I am really grateful to have had this opportunity and it has been an absolute privilege. What will stay with me, is that I always felt that I had the loyal support of the anatomy community. I deeply appreciated the turnouts at ASSA AGM's, and the positive manner in which these meetings were held. It is our society and we should treasure and nurture it. I have no doubt that ASSA will continue to grow and flourish in future. I would like to especially thank the members of the ASSA Council for their selfless work and dedication. Their commitment and leadership in our society are invaluable.

I wish you all a joyful festive season, and hope you have an exceptional 2019.



Prof M Steyn

UPCOMING CONFERENCE

47th ANNUAL CONFERENCE OF THE ANATOMICAL SOCIETY OF SOUTHERN AFRICA (ASSA 2019)





47th Annual Conference of the Anatomical Society of Southern Africa

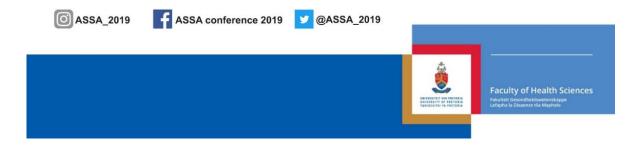
SAVE THE DATE

Join us for an African Safari and a rockin' good time!

Kwa Maritane Bush Lodge "Place of the Rock" Pilanesberg, North West Province

7 - 10 April 2019

On behalf of the organising committee it is with great pleasure that we invite you to join us for the 47th ASSA conference from 7 to 10 April 2019. The conference will be hosted at the serene Kwa Maritane Bush Lodge and Conference Centre in Pilanesberg, North West Province. This year's theme "Rockin' Anatomy" recognises Anatomy as a science with its roots in the past, and increasing application in modern science, teaching and diagnostics. The conference serves as an excellent opportunity for delegates including researchers, scientists and clinicians with an interest in the anatomical sciences to meet and interact in their specific areas of research. We also view this conference as being of particular importance for young academics, providing them with an opportunity to meet and discuss their research with top local and international subject experts. And of course the meeting allows all participants to network and interact socially under the African skies. For more information feel free to visit our website (<u>https://up.ac.za/en/assa2019</u>) or follow us on social media. Abstract submission closes 28 February 2019.



DIVISION OF CLINICAL ANATOMY STELLENBOSCH UNIVERSITY

This has been an eventful year for our division: The name of our Division changed from "Anatomy and Histology" to "Clinical Anatomy", two new staff members were appointed (Dr Karin Baatjes and Ms Janine Correia) and we had one retirement (Prof Ben Page)!

Retirements and new staff

Prof Ben Page retired at the end of 2017 after almost 12 years as Head of Division. He kindly stayed on for 6 months as emeritus professor but in June 2018, finally decided to hang up his hat! We wish Ben all the best for his retirement and hope he enjoys the extra time with his family and in his garden!



Prof Ben Page giving a speech to the division at his retirement function in December 2017

Dr Karin Baatjes, a consultant surgeon, has been appointed as the head of the division of Anatomy at Stellenbosch University in February 2018. She gualified as Fellow of the College of Surgeons of South Africa in 2004 and graduated MMed (Chir) (Stellenbosch) in 2005. She recently completed her PhD in Surgery assessing bone health outcomes in postmenopausal women with breast cancer. Her research interests focus on personalised medicine and clinical education. In June 2018, she graduated from the SAFRI (Sub-Saharan African Faimer Regional Institute) fellowship project and presented her research titled: "Using wearable point-of-view technology as a tool for teaching of surgical techniques" at the SAAHE (South African Association of Health Educationalist) in Durban in June 2018. She was instrumental in changing the

division's name to Clinical Anatomy, underpinning the strong emphasis on teaching anatomy in an applied fashion within the faculty.



Dr Karin Baatjes (middle), pictured with colleagues at the 2018 SAAHE conference in Durban

Ms. Janine Correia joined our division as lecturer in September 2018. She holds a Sciences Masters in а Medical with specialization in Human Anatomy and Cell Morphology from the University of the Free Bloemfontein. Her previous State. work experience includes lecturing Anatomy and Physiology to undergraduate and postgraduate students at the University of the Free State, Nelson Mandela University and the University of the Western Cape. Ms Correia's research interests rest within the anatomical sciences. health science education and the historical aspects of anatomy and medicine. She has a long-standing interest in matters related to the value and risk associated with cadaveric dissection in medical education. She boasts an extensive publication record that focuses on the history of Medicine and Anatomy and this includes three chapters published in a book. Ms Correia received various prestigious awards including the Dean's medal for the best performer as a final-year student in the Health Science Faculty (UFS) and was runner-up for the best laboratory poster at a Faculty Forum in August of 2012 at the University of the Free State. She is also a member of South African Health Educationalist, Anatomical Society of Southern Africa and the Golden Key International Honours Society.



Ms Janine Correia

Thanksgiving ceremony

This year we had our first formal thanksgiving ceremony for cadavers used in student education and research during 2018. Families of donors attended as well as students and staff. Various members of staff contributed as well as representatives of undergraduate and post graduate students. In addition, members of the South African Gospel Choir performed several moving musical items. The family members especially were very appreciative of the gesture. We plan to expand this ceremony in the future to include more contributions from undergraduate medical students.



Dr Karin Baatjes delivering her speech during the cadaver thanksgiving ceremony, which was attended by students, staff and family members of donors

International conference

Prof Sanet Kotzé XXVI attended the Symposium of Morphological International Sciences (ISMS 2018) held in Prague, Czech Republic in June 2018. She presented a talk on the comparative gastrointestinal tract morphometry of several rodent species and chaired a session on Histology.



Pictured on the right is Prof Beverly Kramer (the first South African to serve as President of the IFAA), Prof Sanet Kotzé (middle) and Dr Erin Hutchinson from Wits University on the left



It was exciting to reconnect with colleagues form Korea, pictured with Prof Beverly Kramer and Prof Kotzé

Prof S Kotzé

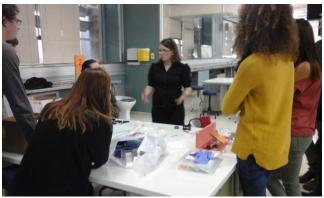
DEPARTMENT BASIC MEDICAL SCIENCES UNIVERSITY OF THE FREE STATE

Workshops presented for forensic science students

Department Basic Medical Sciences The hosted two workshops during April and May 2018, introducing students from the UFS forensic science program to the role of forensic anthropologists both at the crime scene and in the laboratory. The first session, run by Ms. Tshegofatso Ramphaleng, gave students an overview of the bones of the human body, how to differentiate these from animal remains at a scene, and a glimpse of what information the anthropologist may be able to derive from these skeletal remains. The second session, run by Dr. Petra Maass, demonstrated the role of forensic archaeology and the legal procedures associated with it. The practical session of the day was initially intended to include the excavation of a pig carcass in the field. However, the Free State rainstorms did not play along, and so the practical was converted to an improvised series of indoor activities. Students were taken through the process of "walking the grid," documenting the scene, and interpreting unusual burial conditions such as "the two bodies in a grave" and "the head that rolled downhill."



Students analysing different burial conditions encountered in the South African context



Dr Maass explaining the different components of the excavation kit



Ms Ramphaleng preparing students to "walk the grid"



Anatomy honours student, Ms Amandan Smal, preparing the "scene of the crime"

UFS undergraduate open day

The following staff members represented the Department Basic Medical Sciences at the 2018 UFS Open day: Gerhard van Zyl; Roné Vorster-De Wet; Arishka Kalicharan; Sadhna Singh; Martin Muller; Tshegofatso Ramphaleng; Petra Maass and Ntsidi Moopela.



Gerhard van Zyl (left), Roné Vorster-De Wet (middle) and Arishka Kalicharan (right) at the UFS Open day 2018



Ntsidi Moopela (left), Mr Gerhard van Zyl and Me Sadhna Singh interact with students during the UFS Open day

Clinical workshops

The dissection hall facilities were again used for various clinical workshops (Neurosurgery workshop, Spinal workshops, and Orthopaedic Surgery workshops), postgraduate teaching seminars and undergraduate workshops during the year.



Temporal bone course presented in November 2017

Dr S Van Zyl

SCHOOL OF LABORATORY MEDICINE AND MEDICAL SCIENCES DISCIPLINE OF CLINICAL ANATOMY, UNIVERSITY OF KWAZULU-NATAL

It is with great sadness that we inform the ASSA community of the sudden passing of two anatomy colleagues, Mr Salem Kharwa (Clinical Anatomy technician) and Dr Jesse Naidu (Senior lecturer and Former Head of Discipline). Both colleagues were based at the Nelson R Mandela School of Medicine, and served the discipline for a number of years. Mr Salem Kharwa passed away tragically Saturday morning in a motor vehicle accident on the 8th September. Dr Jesse Naidu's untimely passing occurred earlier in the year, March 2018. The Discipline of Clinical Anatomy will miss both individuals' expertise, willingness to always assist and passion for anatomy teaching and research. May their souls rest in Peace.



Standing next to each other, from left Mr S Kharwa and Dr J Naidu (white lab coat) - image taken in the Discipline of Clinical Anatomy, Nelson R Mandela School of Medicine

Amidst the tragedy, the department has continued with its research endeavours, with manv postgraduate students and staff presenting this vears' 46th Annual at Conference of the Anatomical Society of Southern Africa (ASSA). Congratulations to Dr P Pillay for receiving the University capacity development programme (UCDP) funding for Mobility to the Mayo Clinic, Rochester, USA, as a visiting scholar in October 2018. The Discipline of Clinical Anatomy continues collaborations with Prof O Azu from the University of Namibia, forming the Morphology and Andrology group together with Dr ECS Naidu from the University of KwaZulu-Natal, Discipline of Clinical Anatomy. The research group started in 2016, continues to succeed. presenting at various National and International conferences. including the Prevention Research (SPR) 26th Annual Meeting, 16th Annual International Nanomedicine & Drug Delivery Symposium and 46th ASSA. The head of their team, Prof O Azu, elected Councillor of the International Society for Plastination (ISP) and Dr ECS Naidu receiving a University capacity development programme (UCDP) grant.



Academic staff and postgraduate students - ASSA conference 2018 Top row from left to right C Rennie, Y Chetty, P Pillay and N Ngubane Bottom Row from left to right J Luckrajh, C Jughoo, L Lazarus, N Naidoo, B De Gama and S Govender

Dr C Rennie

DEPARTMENT OF ANATOMY

FACULTY OF HEALTH SCIENCES, UNIVERSITY OF PRETORIA

Department matters

As another year draws to an end a number of postgraduate students and staff members in the department obtained their degrees. This includes 15 Honours students, and 5 MSc Acar, students: Adrienne Sabashnee Govender, Stephany van der Walt, Franci Dorfling and Akaashni Bhika (who simultaneously obtained her BChD). A special congratulations to the PhD candidates who also crossed the finish line: Chantelle Venter ('An in vivo and ex vivo investigation of the cellular effects of the heavy metals cadmium and chromium alone and in combination'), Lané Prigge ('An anatomical study of the nerves

targeted for sensory blocks of the head and neck in neonates and infants'). and June Serem ('Identification and characterisation of bioactivity of simulated gastrointestinal digested indigenous Southern African honey samples'). Prof Ericka L'Abbé completed a two-year SAFRI fellowship in Health Sciences Education. The department welcomed two new staff members to the team; Mrs Reinette van Zyl ioined the Clinical Anatomy section as a fulltime lecturer, and Mr Okuhle Sapo is the new museum assistant in the Physical Anthropology section. We bade farewell to Ms Marinda Pretorius, but wish her all the best in her future endeavours.

MEET THE SECTION OF CELL BIOLOGYAND HISTOLOGY

Head of Section: Prof. Megan J Bester

Technical assistant: Mr. Marius

Marius Loots is the sections education and

learning expert. In addition to a medical

science degree, he recently obtained a Post Graduate Certificate of Education from the

University of Pretoria as well as a Highe

Foundation of Professional Development. Due to acquisition of these qualifications, a

need was identified to redevelop the histology course, the venue used for

teaching histology practicals and to become involved in some managerial activities. The

new histology course has been through one

iterations, and the next part - done in conjunction with redesigning HistoWeb - is

currently under way. Renovations of the venue, the Histology Teaching Facility - is

nearing completion and will be in use, early

To negate work stress, he does

in

Certificate

2019.

CrossFit.

Management

from the

Prof. Megan Bester is responsible for teaching, histology, cell and tissue techniques as well as development cell biology. She is a C3 rated NRF scientist with numerous accredited publications with specific focus on the use of cellular models to investigate the effects of molecules with beneficial cellular effects. She is also involved in postgraduate training and supervision.



Back row: Left to right: Prof. Oberholzer, Dr. Serem, Mr. Loots Front row: Left to right Dr. Taute, Prof. Bester

Associate Professor: Pro Nanette HM Oberholzer Prof. Nanette Oberholzer was promoted to Associate Professor in January 2018. She is an NRF rated researcher and the focus of her research is the effect of different weight loss products and the effect of heavy metal toxicity on organ ultrastructure and function. She uses animal studies in her research and has recently finished a three-year NRF funding cycle. She applied for a new NRF rating and is awaiting the outcome. She teaches histology in the BSc (medical science program) and is involved in postgrad training and supervision.

Lecturer: Dr. June C Serem Lecturer: Dr. Helena Taute

Dr. Taute is a lecturer in the section and recently become a 2018 Tuks Young Research Leadership Program fellow. She is excited about future research prospects in the field of antimicrobial peptides as multifunctional antibiotic compounds, which may address antibiotic resistance. Her focus is on the effects of these peptides in the mammalian in vitro or in vivo environment with the goal to develop novel anti-infective agents. In addition she is an expert in ultrastructural analysis and fluorescence microscopy. She is the course co-ordinator of the BSc honours program in Cell Biology and postgrad training and supervision.

> Dr. Serem is a newly graduated PhD and a 2017 Tuks Young Research Leadership Program fellow. Her field is in functional foods and cell biology. Her research focus is majorly in functional foods, specifically foods that alleviate symptoms of metabolic syndrome. Some of the properties that these foods are investigated for include: antioxidant, anti-inflammatory and anti-obesity and anti-diabetic effects. She teaches Cell Biology to the BSc medical science students and supervision.

Sadly, the time for us to say farewell to Prof Marius Bosman is steadily approaching, as he will be retiring at the end of the year. Prof Bosman started his career in academia in 1979 at Medunsa. In 2002, he returned to his *alma mater* where he would later become the Head of the Department of Anatomy. He worked extensively in the teaching and training of undergraduate and postgraduate students in the field of clinical anatomy, with special focus on head and neck and neuro-anatomy. After many years of service to the department we would like to wish him a well-deserved retirement with his family.



Prof Bosman

Research, Conferences and Workshops

A number of students and staff attended the 46th ASSA conference where they presented a variety of oral papers and posters. We are extremely proud of Niel van Tonder for receiving the Antoinette Kotze Award for the best first time oral presentation, as well as Goodness Shakoane who was awarded the Willie Vorster Award for best first time poster presentation.

Prof Ericka L'Abbé attended the 70th Annual Meeting of the American academy of Forensic Sciences in Seattle, Washington where she presented a collaborative workshop on the forensic analysis of burnt remains.

Dr Amelie Beaudet presented her research at a score of international conferences, including the 2nd Biennial Meeting of the Cortical Evolution in Gran Canaria, Spain; the 10th Symposium national de Morphométrie et Evolution des Formes in Bordeaux, France; and the 8th Annual Meeting of the American Association of Physical Anthropologists in Texas, USA. Dr Beaudet was also joined by Ms Alison Ridel and Ms Charlotte Theye at the Journées Anuelles de la Société d'Anthropologie de Paris in Poitiers, France.

The Clinical Anatomy section presented a neuro-anatomy workshop for psychologists in August.

Prof Ericka L'Abbé and Prof Steve Symes from the Medical Examiner's Office in Mississippi were invited to present a short course at the University of Dodoma (UDOM) in Tanzania during September. The course, hosted by the College of Natural and Mathematical Sciences at UDOM, consisted of discussions on blunt and ballistic injuries to bone with particular emphasis on bone biomechanics and fracture interpretation, as well as human skeletal variation and biological profile the in anthropology. **Participants** were able to measure crania, reconstruct fractured bones and evaluate fracture variation.

The Forensic Anthropology Research Centre (FARC) obtained an Erasmus+ Higher Capacity Grant in Higher Education. The grant is a collaborative effort including local institutions (Stellenbosch University, Sefako Makgato University and Necsa), as well as a number of international institutions (University of Coimbra, University of Bordeaux and University of Leuven).



Participants at the short course at the University of Dodoma took part in interactive sessions involving skeletal analysis.

Ms L Liebenberg

DEPARTMENT OF ANATOMY AND PHYSIOLOGY FACULTY OF VETERINARY SCIENCE, UNIVERSITY OF PRETORIA

Undergraduate teaching

Martina Crole and Christine Stevn were involved with the implementation of a novel programme in 2018. Role-players in the veterinary industry were invited to present lectures on selected topics (such ลร osteoarthritis, dental hygiene, sedation, nausea and vomiting) that had clinical relevance to content in the anatomy courses of both the veterinary science and veterinary nursing students. An initial survey indicates that the students found the guest lectures easy to comprehend and relevant to their future careers. The majority of students also felt that the lectures improved their understanding of the subject. This programme will be continued and expanded on in the following years. 2019 sees the first intake of the new BVN (Bachelor of Veterinary Nursing) which is a three year degree. The basic sciences have been severely cut in the new degree. Unfortunately due to the high failure rate of the old diploma in Veterinary nursing, this first year programme will be offered for a few repeating students. The veterinary science comparative anatomy course remains the same for 2019 but will see a reduction in credits by almost 25% for 2020. This further erodes the amount of basic sciences (hence anatomy) that our department will be teaching.

Departmental happenings, achievements, visits and visitors

2018 sees a new HOD in Prof Joseph Chamunorwa, a veterinary physiologist. We

wish him well for his term. John Soley has seen in his last year in the department and will not have his contract renewed for 2019. We will miss him in all facets of department life and wish him well in his retirement. Christine, a lecturer in veterinary anatomy and histology, received the New Lecturer of the Year award, as appointed by the student body, for the second time in a row during the annual Teaching and Learning Awards in March 2018. Martina Crole received the Excellence in Teaching Award at the same event. Martina also received the University of Pretoria's highest teaching award, the Laureate for Teaching Excellence. 2019 will be a stretch for our department as we have 5 or 6 lecturers to present 9 modules with conflicting schedules.

Local conferences

As the course coordinator of the veterinary comparative anatomy module Christine at the International presented a paper Siyaphumelela Conference in June 2018 on the possible effects of a short time, high intensity teaching programme and promotion rule on student success in veterinary anatomy and physiology. Christine and Martina attended the 46th Annual ASSA Congress where Christine presented on her research on Temminck's ground pangolin front limb.

Prof M Crole

DEPARTMENT OF ANATOMY UNIVERSITY OF NAMIBIA

We have started this year with the same anxieties of the past not knowing exactly how many Medical students to expect when the year started. Apart from the highly selected number of students which is regulated by the Admissions committee, we always have the repeaters of the previous year that will have another opportunity to try and past their first year of study. Then there are those with friends in 'high places' which come through the office of the Dean's route. Added to this there are those which had the privileged to go and study overseas at not so reputable Universities, which now have some urgent need to continue their studies closer to home. I am sure the majority of you know exactly what I am referring to and have the same challenges at your Institutions? All in all, we initially had 110 first year Medical students enrolled. Adding to this number the 78 Pharmacy students and then the students of the three "new" courses. We had our first intake for Dentistry (23 students); 15 Physiotherapy- and 14 Occupational therapy students this year. So, close to 250 students in the first year class of Anatomy. We still have the same amount of staff members and the physical facilities that were designed to accommodate 50 students! That is what you would call "Africommodation". (Must see if I can get this word into the dictionarv?). Most off the lectures and practical sessions had to be repeated twice or even four times just to get them all through. Although this demanded a lot more from our staff. I am proud to say that ALL of them have given their best and remained loval through the year. Well done colleagues! The following staff members have attended the 48th Annual ASSA conference at Muldersdrift:

Miss. A Du Plessis and Prof. A. Azo.

Prof. Azo also attended a meeting of the Society for prevention Research that was held in Washington DC. Prof. Jan Smit attended the Institute of Anatomical Sciences conference at Leicester University in the UK during April. He delivered a talk on "The stories in the pots: assets to be preserved for the future". This topic addresses the serious issue of the maintenance and preservation of potted human specimens in Anatomy Departments globally. Many of the older museums are closing down and these specimens are then disposed of. This is a serious lost to future generations of students. Many of these specimens will never be replaced.

Three of our staff members are busy with their PhD studies and one has applied for sabbatical leave for next year to start with her PhD. One of our technical staff members will be finishing her BSc degree through UNISA next year.

A total of 26 peer reviewed publications have seen the light from our Department and one of our members had published a book on Medical History. So, overall a very productive 2018 at the Anatomy Department of the University of Namibia.

Prof J Smit

DEPARTMENT OF HUMAN ANATOMY AND PHYSIOLOGY (HAP) UNIVERSITY OF JOHANNESBURG

The University of Johannesburg was the proud host of the Annual Conference of the Anatomical Society of Southern Africa in 2018. The event was held at the Kloofzicht Lodge and Spa in Muldersdrift, Gauteng from 22-25 April 2018.

The HAP team reached many milestones this year. Bianca Thomas and Trevor Nyakudya graduated with their PhDs - we are extremely proud of them! Meanwhile, Pilani Nkomozepi is breathing a little easier after submitting his PhD for examination - we are holding thumbs. A senior member of the HAP team, Prof Shahed Nalla, has embarked on a new venture as Acting Dean of Health Sciences; he has also been elected Vice Dean: Research. HAP hosted their annual community engagement project at the Doornfontein campus with St. Enda's Secondary School. We invited Grade 10 and 11 learners for a preview of University life. These aspiring anatomy and physiology students were given a tour of the Doornfontein campus and an opportunity to participate in interactive educational sessions in our state of the art laboratories.

HAP hosted a successful Parents' Day on 29 September 2018. Second year Anatomy and Physiology students got to showcase their knowledge and passion to their parents and loved-ones, as well as test their parent's anatomical knowledge (a very interesting experience ©). The best second year students in Anatomy and Physiology were also awarded with book prizes for their diligence and hard work at this event. This interactive engagement with parents was, as always, well received.

The HAP family is growing. In 2018, there were two new appointments: we welcomed Ms Nicolene Jooste, an Anatomy lecturer and Dr Veneesha Thaver, a Senior lecturer in Physiology. We look forward to their contributions. Our extended HAP "family" is also expanding; with Bianca Thomas giving birth to a bubbly baby boy earlier this year.



Ms S Ishwarkumar & Dr E Swanepoel

HUMAN BIOLOGY DEPARTMENT

WALTER SISULU UNIVERSITY

Department matters

In October, the University had its Long Service Award Ceremony, and six members of the Human Biology Department were recipients of the award.



From left to right Dr Ndebia, Ms Stofile, Professor Abura Mrs Mkhosi (FHS administrator), Ms Shauli, Ms Gqaza and Professor George



Research on medicinal plants

HUB Department boasts research based on indigenous knowledge about medicinal plants. In the photo an herbalist is explaining about the properties of the plant in his hand. After collection and processing, plants are stored for further research. Postgraduate research projects search for effects and mechanisms of action of plants commonly used by the rural population of the province. Traditional healers recommend those plants to alleviate infections, respiratory conditions and infertility among others. Researchers in the department work hand in hand with traditional healers who are sources of information about the plants and their uses.



Herbalist explaining plant properties



MBCHB 1 students receiving a talk by a traditional healer to learn about alternative medicine.

Social responsiveness

Social responsiveness through the integration of community service within our learning programs that emphasize on primary health care and accountability on rural development is our **Mission**.





MBCHB1 students taking anthropometric measurements and giving talks on healthy life styles to primary school pupils



Staff members participating with students in the community

DEPARTMENT OF ANATOMY SEFAKO MAKGATHO HEALTH SCIENCES UNIVERSITY

This was again a very exciting year at SMU. The year started off on a high note as the last of the orders from the 2 million DHET grant arrived. The library was equipped with 40 model skeletons for students' use and a computer with an overhead camera and video projector was acquired for the MBChB II dissection hall. The Human Bone collection was established and is under curatorship of Lucky Japhta.



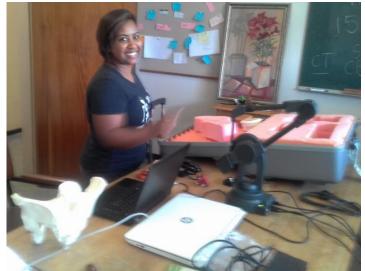
The Human Bone collection

Lucky Japhta assisted Nkosi Xhakaza to bring the histology laboratory in functional order again. Soné van der Walt had a baby boy and Lané Prigge a baby girl. Two of Anna Oettlé's students (Alison Ridel and Charlotte Theye) presented their research at the Society of Anthropology of Paris, held in Poitier this year, and other co-workers delivered a presentation at the 87th Annual Meeting of the American Association of Physical Anthropologists. Greg Lebona, Lané Prigge, Piet Ackermann and Sabashnee Govender (The Department of Anatomy's own nGap lecturer) represented SMU at ASSA this year. Several presentations were given at Faculty day, University of Pretoria as well as Research day, SMU. Ruth Kobedi, our first postgraduate research student received an award at Research day for the presentation of her project on the sacrovertebral angle in South Africans. Our first MSc student started in July this year and two Biology MSc students are being co-supervised in our department on comparative anatomy projects.

With the increasing interest in postgraduate research degrees at SMU, we are expecting five MSc students for 2019 and two PhD students. A microscribe was donated to Anna Oettlé by José Braga from Toulouse and will be a great asset for the PhD study of Suvasha Jagesur, whom she supervises.



Comparative anatomy students hard at work in Anna Oettlé's office



Suvasha Jagesur with the donated microscribe

Two computers and other electronic equipment, capable of the manipulation of high resolution images, are in the acquisition process and will support dental studies at the Department of Maxillofacial and Oral Radiology as well as facial reconstruction studies at the Department of Computer Science.

Along with five other universities (UP and SU as well as the Catholic University Leuven, University of Bordeaux and the University of Coimbra), SMU were successful in their Erasmus plus grant application of 1 million \in , to promote our scan collections and research collaborations. Another Erasmus plus application, regarding the knowledge triangle, is

contemplated along with UP, SU, Wits and four EU universities. Lané Prigge received her PhD degree this year and Anna Oettlé attended the PhD defence of Marine Cazenave in Toulouse, France in October. Clément Zanolli from University Paul Sabatier, Toulouse, France was appointed as research associate. Clément was successful in his application for the Knowledge interchange and collaboration award from the NRF and presented a public lecture: 'How teeth can inform us on the life history of extant and extinct hominins' in October at SMU. A total of seven articles were published and another accepted in accredited journals.



Clément Zanolli, University Paul Sabatier, Toulouse, France

Our department is awaiting and wish to welcome the arrival of three new academic staff members as well as three part time staff members in 2019.

Prof A Oettlé

SCHOOL OF ANATOMICAL SCIENCES UNIVERSITY OF THE WITWATERSRAND

Department matters

This year the School of Anatomical Sciences welcomed Mr M Mulaudzi, Dr JL Kruger and Dr A Ngwenya as well as Ms N Beemath and Ms R Harris in their role as support for the BHSc students. Unfortunately the School had to say goodbye to Mr K Ravhugoni, Dr A Bhagwandin and Dr JL Kruger as well as Mrs G Sithole and Mrs A Mortimer who will be retiring at the end of this year. We wish them all the best in their future endeavours.

Dr P Mazengenya, Dr I Philander and Dr J Davimes received their PhD's while N Bello, M Cloete, H Sani and F Dlamini graduated with MSc. Ms N Bemath also received her MA. Prof Schepartz received her full Professorship and Drs Ndou and Mazengenya were promoted to Senior Lecturers. Congratulations also goes to Dr Augustine on her appointment to Senate as a representative of the University forum (Institutional Forum).

A plethora of staff members received various grants during the course of the year. Congratulations to Dr Maseko on the awarded Fulbright being Drs Scholarship, Mazengenya, Ngwenya and Olateju on receiving ECAD grants, Dr Oleteju and Dr Maseko on receiving the Anderson Capelli Grant and Dr Calvey on receiving an MRC grant. Dr O Olateju received an ISN-CAEN grant and an **IBRO-African** Regional Committee (ARC) Bursary. Prof EF Mbajiorgu was awarded an NRF grant - Competitive Support for Unrated Researchers. Dr T Augustine and Dr Reddy were also awarded an Equipment Award for an Olympus MVX 10 Research Macro Zoom Microscope.

A number of staff members also received various prestigious awards. Ms G Sithole was awarded the Faculty Service Excellence Award while Mr KB Matiila received the Vice Chancellor's Service Excellence Award for Professional & Administrative Services. Profs Steyn and Ihunwo as well as Drs Augustine, Brits and Mazengenva received Research Award Certificates at the Faculty Research Awards Breakfast. Dr Kruger received the award for the most influential lecturer for GEMP 1 & 2 from the Wits Medical Students Council.

During January 2018 Dr Brits participated in the Visiting Scientist Program within the Forensic Anthropology Unit offered by the New York City Office of Chief Medical Examiner (OCME). During this time Dr Brits had the opportunity to observe autopsies, attend death scenes. witness a cadaver dog in action as well engaging with the forensic as anthropologists and pathologists at the OCME. This was a truly unforgettable experience.

In June of this year Prof M Steyn, along with Dr C Hansmeyer, from the Department of Forensic Medicine & 17th Pathology presented the prestigious lecture of the Faculty of Health Sciences entitled "Mysteries form the grave: forensic aspects of identification". This well attended lecture was very interesting and thought-provoking.

As part of our community outreach the School of Anatomical Sciences donated two light microscopes to Afrika Tikkun - Wings of Life Centre in Diepsloot. The aim of Afrika Tikkun is to "make a difference in South Africa by developing and uplifting young people in under-privileged communities". This community centre has been involved in research with staff members in the School.

Visitors

The School hosted a plethora of local and international visitors. Some of the international visitors included Profs G. Richard Scott and Martin Pilloud (University of Nevada, Reno), Prof N Lynnerup (University of Copenhagen, Denmark), Professor AH Ross (North Carolina State University, USA), Assoc Prof Stephan С (University of Queensland, Australia). Prof DR Sumner (Rush University, Chigaco, USA), Prof Martijn van den Heuve (Vrije Universiteit Amsterdam, The Netherlands), Prof Harry Steinbusch (Maastricht University, The Netherlands), Prof Marie-Eve Tremblay (University Laval, Canada), Dr H de Boer (Amsterdam Medisch Centre, The Netherlands), Dr Ankin Güvencel (Swedish National Board of Forensic Medicine, Sweden), Assistant Gregor Haring (MD) (University of Ljubljana, Slovenia) as well as a delegation from College of Health the Sciences. University, Makerere Kampala, Uganda. A number of these guests visited the Raymond Dart Collection of Human Skeletons. while others

presented talks and workshops. Two visitors also spent time in the Human Identification Unit of the Human Variation and Identification Research Unit (HVIRU).

<u>Workshop</u>

Anatomy Dissection School

The 2018 Anatomy Dissection School and 3rd in the series, took place at the School of Anatomical Sciences, Wits Medical School Parktown, Johannesburg from 25 – 29 June. There were 16 participants drawn from different health professions resident within and outside Gauteng Province. The anatomy regions dissected on human cadavers were the upper and lower limbs including joint cavities, thorax, face, brain, abdomen as well as the pelvis & perineum. For the first time, those without prior knowledge of Anatomy participated in the School. The Anatomy Dissection School is endorsed by the Anatomical Society of Southern Africa (ASSA) and attracts 30 Continuing Professional Development (CPD) points from the Wits CPD Office. The Anatomy Dissection School will again be held next year. All enquiries on the 2019 Anatomy Dissection School should be directed to Prof. Amadi O. Ihunwo (Amadi.Ihunwo@wits.ac.za).



The participants and some facilitators in the 2018 Anatomy Dissection School coordinated by Prof AO Ihunwo.

Conferences

46th Annual Conference of the Anatomical Society of Southern Africa (ASSA)

The Forensic Anthropology Interest Group (FAIG) preconference workshop was organized by the School of Anatomical Sciences, Wits University titled "3D Analvsis and was & Statistics". The presenters for the workshop included two international visitors; Prof Ann Ross from the Department of Biological Sciences at NC State University, USA and Prof Carl Stephan from the School of N Biomedical Sciences, University of Queensland, Brisbane, Australia, This preconference workshop was very popular and well attended.

The conference was attended by a number of staff and students from the School of Anatomical Sciences who presented about 20 oral papers and 5 posters. Mrs Diana Pillay won the SV Naidoo Award for best poster presentation for her poster entitled "Microarchitecture of three week old rat (Sprague Dawley) humerus following gestational alcohol exposure" which was co-authored by Dr Robert Ndou. Dr. Tobias Houlton was the first runner up for this award for his poster entitled "The relationship between soft tissue and skeletal detail of the mouth in Black Southern Africans" which was coauthored by Dr J Hemingway, Dr A Uys and Prof M Steyn. Ms Laurette Joubert, a postgraduate student in the School of Anatomical Sciences was the first runner up for the Antionette Kotze Award which is awarded for the best oral presentation by a first time presenter. Her talk was co-authored by Ms A Meyer and Dr N Briers and was entitled "Evaluation of the Suchey-Brooks and Enhanced Computational methods of pubic symphyseal age estimation in a white South African population".

Prof B Kramer presented the Thompson Stibbe Lecture (invited lecture) at the conference which was entitled Celebrating the past: Reimagining the future. This was a very interesting talk which took all down memory lane.

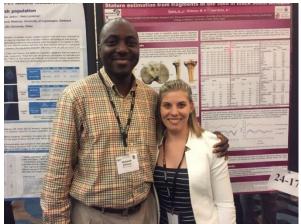
At the conference Dr Desiré Brits was re-elected as the Honorary Editor of the ASSA website, Mr Jacob Mekwa was elected as the Technical Representative and Dr Erin Hutchinson as council member.



From left to right, Prof Steyn, Mrs Diana Pillay and Dr E Swanepoel

Other conferences

Ms A Spies, a postgraduate student in the School of Anatomical Sciences presented her MSc research at two international conferences. Ms Spies did a poster presentation at the American Association of Physical Anthropologists (AAPA) (Austin, Texas, USA, April 2018) entitled "Stature estimation from fragments of the tibia in black South Africans" and gave а podium presentation at the European Anthropological Association (EAA) (Odense, Denmark, August 2018) entitled "Estimating stature of black South Africans from fragmentary tibiae". These presentations were coauthored by Dr D Brits and Prof M Bidmos.



Prof M Bidmos (College of Medicine, Doha, Qatar) and Ms A Spies at the American Association of Physical Anthropologists meeting Austin, Texas

Dr Augustine won the Sceales-Antrobus Prize at 46th Meeting of the Surgical Research Society of Southern Africa, Mmthatha (21-22 June 2018) while Ms J Johnson won the Best Scientific Research Oral Presentation Award for postgraduates and postdocs at the 2018 meeting of the American Association of Anatomists held at McMaster University, Canada. At this year's Faculty of Health Sciences Research Day Ms L Joubert won the oral presentation prize.

Dr T Calvey was invited to be a faculty member at the IBRO School on Drugs of Abuse in Nairobi, Kenya in July 2018, where she presented *Drug Use and Addiction Research in Africa- Trends, Challenges and Opportunities.*

Prof B Kramer was invited to present the keynote address at the 15th Annual Conference of the Anatomical Society of Nigeria, Sokoto Nigeria during September, 2018. Her talk was title "Redesigning Anatomy Education in Africa: Prospects and Challenges". Prof Kramer was awarded an Honorary Fellowship of the Anatomical Society of Nigeria.

Field School

Astypalaia Bioarchaeological Field School

During the months of July and August, Ms Laurette Joubert, a postgraduate student in the School of Anatomical Sciences, attended a five week field school hosted by University College London on the Greek island of Astypalaia. She was selected as one of only 20 students from across the world to attend. Students attended lectures and presented seminars relating to infant osteology. Furthermore, students assisted with the excavation and conservation of roughly 100 infant graves from a children's cemetery located on the island.



Ms Laurette Joubert at the Astypalaia Bioarchaeological Field School

Dr D Brits

DEPARTMENT OF FORENSIC MEDICINE AND PATHOLOGY UNIVERSITY OF THE WITWATERSRAND

The past year has been very exciting for the Department of Forensic Medicine and Pathology. The Department hosted two workshops; and several staff members and postgraduate students attended conferences, congresses or symposiums throughout the past year.

17th Prestigious Research Lecture

Dr Candice Hansmeyer, a specialist forensic pathologist and lecturer, was invited to jointly speak with Professor Maryna Steyn at the 17th Prestigious Research Lecture, hosted by the University of the Witwatersrand. The theme of the Prestigious Research Lecture was 'Mysteries from the grave' and focused on the forensic aspects of human identification. Dr Candice Hansmever an interestina. gave passionate and thought provoking lecture entitled 'The Southern African experience of a forgotten people'.

Conference attendance

46th Annual Conference of the Anatomical Society of Southern Africa (ASSA)

Mr Craig Keyes and Ms Trisha – Jean Mahon attended the 46th Annual Anatomical Society of Southern Africa in April 2018. The conference was hosted by the University of beautiful Johannesburg at the Kloofzicht Lodge Muldersdrift, in Gauteng. Mr Craig Keyes presented two presentations at the oral conference and won the Bob Symington Award for the best presentation by a young researcher for his presentation titled 'Quantifying the decomposition of burned remains: the interobserver reliability of the charred body scale'. Ms Trisha – Jean Mahon 'The presented use of different commercial detergents in maceration' research by Nqobile Maboke, Trisha – Jean Mahon and Dr Jolandie Myburgh. She won the ASSA Technical Award for her presentation.

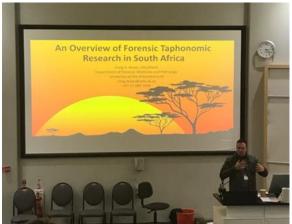
Congress attendance

Professor Jeanine Vellema was an invited speaker to the 56th International Congress of the Federation of South African Societies of Pathology (FSASP). The theme of the Congress this year was Rejuvenating Pathology and was held at Spier Estate, in Stellenbosch during August 2018. Professor Vellema presented on the Forensic Pathology Officer (FPO) qualification HPCSA diploma and Registers – history, current status and way forward.

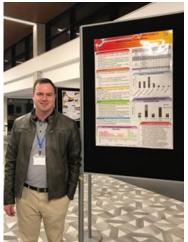
Symposium attendance

Mr Craig Keyes attended the Taphos-Nomos Symposium at the University of Central Lancashire in Preston, England in November 2018. Taphos-Nomos was an interdisciplinary symposium on taphonomic and post-mortem research in the fields of archaeology, forensic anthropology, sciences. and palaeontology. The symposium brought toaether academics and forensic investigators from all over the world representatives including from England, Ireland, Spain, France, the Netherlands, Italy, USA, Chile, and South Africa. Mr Keyes presented an overview of forensic taphonomic research in South Africa (highlighting the research at the University of the University of Cape Witwatersrand, Town, and University of Pretoria). He also presented some of his own forensic taphonomic research and that of his former student Ms Calsey

Zevenster (former Wits student and current analyst in the Biology Unit of the SAPS Forensic Science Laboratory) and Mr Lawrence Hill (Department of Forensic Medicine and Pathology, Wits).



Photograph of Mr Craig Keyes presenting his oral presentation at the Taphos-Nomos Symposium 2018



Photograph of Mr Craig Keyes presenting one of two poster presentations at the Taphos-Nomos Symposium 2018

Faculty of Health Sciences Research Day and Postgraduate Expo

The Facultv of Health Sciences. University of the Witwatersrand, hosted its biannual Research Day on the 6th of September 2018. Mr. Craig Keyes presented an oral presentation from his MSc (Med) dissertation entitled 'The decomposition rates and patterns of burned remains _ а forensic

perspective'. Ms. Bianca Southon and Ms. Trisha – Jean Mahon both presented poster presentation. Ms. Bianca Southon poster presentation was titled 'The effect of temperature and headspace on the determination of ethanol in post-mortem blood specimens: А South African perspective' and formed part of her MSc (Med) dissertation. Ms. Trisha -Jean Mahon presented a poster entitled 'A profile of dismembered and mutilated cases received at the Johannesburg Forensic Pathology Service Medicolegal Laboratory between the years 2014 - 2015' a study by Nikita Balram, Trisha – Jean Mahon and Dr Desiré Brits.

Workshops Hosted

The First Annual African Meeting of Alcohol Toxicology

April 2018 an exciting joint In collaboration and initiative was launched by African Academy of Sciences. National Institute of Occupational Health (NIOH), Alcohol Breathalysers Pty (Ltd) as well as the Department of Forensic Medicine and Pathology. Universitv of the Witwatersrand with the First Annual African Meeting of Alcohol Toxicology which was held in Johannesburg South Africa.

World leading Canadian based forensic alcohol toxicologist, Mr. Jim Wigmore, was invited to present, joined by a number of local authoritative speakers in a two-day gathering discussing alcohol toxicology. Mr. Wigmore is a forensic alcohol toxicologist, speaker, expert witness and author of Wigmore Courtroom Alcohol on 'Alcohol: Toxicology for the Medicolegal Professional'. An alumnus of the University of Toronto, he has served as member of the Alcohol Test а Committee. advised the Canadian Federal Minister of Justice on breath and blood alcohol testing and testified

in over 600 criminal trials at various levels of court.

other notable Alona with local Wigmore speakers. Mr. lead discussions on alcohol consumption, and legal implications of medical alcohol levels in bodies. the pharmacology of alcohol, detection and interpretation of alcohol results and the legal and occupational health framework of alcohol consumption. Other exciting personalities speaking alongside Mr. Wigmore include Tshepiso Mphamo from the National Metrology Institute of South Africa, Caryn Hepburb from Microsep Pty. Ltd., Dr. J. N. R. Lapere from the South African Society of Occupational Medicine and Advocate J.

Scheeper from the National Prosecuting Authority.

The event raised interestina insights and discussion into areas enforcement. relating to law the insurance sector, mining safety, occupational health and safety, those in the legal fraternity, forensic specialists as well as individuals who deal with alcohol in the workplace and on the road. We hope to repeat the event on a yearly basis, encouraging like-minded scientists. medical and legal professionals and corporate governance personnel to unite in their information and scientific battle into the effects of alcohol on individual and societv.



Participants from the First Annual African Meeting of Alcohol Toxicology

Human Identification Workshop

The Department of Forensic Medicine and Pathology, in collaboration with the International Committee of the Red Cross, hosted a three day workshop on Human Identification in July 2018. The workshop provided both a theoretical and practice component to human identification and was attended by 23 individuals. It aimed to provide a broad background and understanding into the procedures and protocols used worldwide and within South Africa for evidence collection and best practices for collecting, documenting, handling and safekeeping of evidence from a human identification perspective.

Topics covered during the workshop of included forms identification: principles of evidence collection: photography and its role in evidence collection; procedures and databases used for identification: national and international case studies. Invited speakers from the International Committee of the Red Cross were Mr. S. Fonseca and Mr. N. Morris and Captain C. Evert from the Victim Identification Centre of the South African Police Services. It is hoped that this workshop will be hosted annual by the Department.

The workshop forms part of the Identification Unit housed at the Johannesburg Forensic Pathology Services. This Unit was formed in collaboration with the Southern Cluster Pathology Forensic Services. Witwatersrand, University of the International Committee of the Red Cross and South African Police Services. It is currently a pilot study which helps in the documentation and collection of postmortem data from unidentified individuals admitted into the Johannesburg Forensic Pathology Services Medico-Legal Laboratory.



Guest speakers and participants who attended the Human Identification Workshop (Photograph courtesy of Tracy Reindorp)

Workshop attendance

African School of Humanitarian Forensic Action 2017 (EAAF / Argentine Government / FOAR / ICRC / UP)

From 11 – 29 September 2017, the University of Pretoria hosted the African School of Humanitarian Forensic Action 2017. This workshop was held in association with the International Committee of the Red Cross (ICRC), University of Pretoria (UP), FOAR Cooperacion Argentina, Argentine Government, and Equipo Argentino de Antropologia Forense (EAAF). Miss Tracy Reindorp from the Department of Forensic Medicine and Pathology attended, amongst 21 other delegates from across Africa. It was an exciting and informative three week training involving Disaster Victim program Identification, Forensic anthropology, various forensic applications, and creating mass fatality response plans.



Group photograph of some participants from ASHFA 2017 (Photograph courtesy of Tracy Reindorp)



Photograph of the practical exhumation exercise (Photograph courtesy of Tracy Reindorp)

Additional

International Day of the Disappeared 2018

To commemorate the International Day of the Disappeared, 31 August, the International Committee of the Red Cross, held an event in Pretoria on the evening of 30 August 2018. Miss Tracy Reindorp Department of Forensic Medicine and Pathology – participated and contributed to this event with a Photographic exhibition titled *In* Anonymity: The search for identity. This exhibition was a 15-photograph series, depicting the process of identification of individuals unknown in the Johannesburg and the area, information used to find identities for these individuals - with the purpose of honouring them and other disappeared individuals across the world. The Exhibition was open at the Adler Museum of Medicine from 3 - 7 September 2018.



International Day of the Disappeared 2018, exhibition, Adler Museum of Medicine, University of the Witwatersrand, Johannesburg (Photograph courtesy of Tracy Reindorp)

Disaster Scene and Mortuary Management

On the 31 May 2018 Mr Craig Keyes, Miss Tracy Reindorp and Ms Trisha – Jean Mahon were invited to observe the one day practical session of the Disaster Scene and Mortuary Management course which was held on the ground of the Wonderboom Airport, Pretoria. The practical session gave a simulated experience of the protocols and procedures currently in place to handle a plane disaster in South Africa.



Fire disaster simulation exercise



Fire disaster simulation exercise, fire being extinguished



Forensic Pathology Services present at the Fire disaster simulation exercise



Fire disaster simulation exercise



Fire disaster simulation exercise, group photograph (All photographs courtesy of Tracy Reindorp)

Ms T Mahon

DEPARTMENT OF HUMAN BIOLOGY UNIVERSITY OF CAPE TOWN

Academic achievements

CABA members have enjoyed a number of academic achievements in the last year.

Chandra Finaughty attained her MPhil degree in Biomedical Forensic Science. For her dissertation, she sought to solve one of the pressing problems in forensic science: obtaining DNA from bodies which have been submerged in a marine environment. She optimised a DNA extraction method for degraded DNA samples from teeth and was able to successfully extract nuclear DNA from these samples. She also highlighted the forensic usability of mitochondrial DNA (mDNA) which her method was able to extract in higher quantities and of higher quality compared to nucleic DNA. This offers an exciting new avenue for forensic practitioners in South Africa who do not routinely use mDNA. Her work enjoyed some media coverage from the popular press in late October, with an article in the October 27th edition of the Saturday Star (pg. 4) by journalist, Shaun Smillie, entitled: "Hope for dead retrieved from the sea".

https://www.news.uct.ac.za/.../-2018-10-25-identifying-those-...

https://www.pressreader.com/.../die-.../20181026/281762745245477

Devin Finaughty recently submitted his PhD, establishing baseline data on the rates and processes of decomposition in two terrestrial habitats of the Western Cape, South Africa. Several of his findings have already enjoyed validation in local forensic practice, and new and exciting avenues for research have been

growing forensic revealed, the taphonomy research program at UCT. Maximilian Spies obtained his BSc in (Med) Hons. degree Biological Anthropology, with distinction. For his dissertation, Max investigated the taphonomic impact of scavenging on decomposition in the Western Cape. He recently published his research with cosupervisors, Dr Victoria Gibbon and Devin Finaughty, as two papers in Forensic Science International. These represent the first reports of the taphonomic effect of scavenging in South Africa, with a focus on the acceleration of decay and the scavenger-mediated scatter patterns of skeletal remains. The results of the work have already borne fruit, proving useful in local forensic death investigations. Two papers have been published from this work and if you require further information, you are welcome make to contact with Maximilian.

Marisa Forbes, a visiting Honours student from the University of New undertook Brunswick in Canada. research using data from Devin Finaughty's PhD. For her dissertation, she assessed the accuracy of two accumulated degree day methods of estimating the post-mortem interval in the local Cape Town environment. She found the methods ultimately underestimated post-mortem the actual interval. highlighting the necessity of developing region-specific methods. She obtained her degree with distinction earlier this vear (2018).

The past year also saw **Steven Randall** and **Stevie Biffen** publish two articles in *Frontiers in Neuroanatomy.* Steven published his Master's research on the effect of HIV and early antiretroviral treatment on subcortical grey matter structures in young children, and coauthored an article with Stevie and other colleagues on how reductions in corpus callosum volume partially mediate the effects of prenatal alcohol exposure on IQ. Two papers have been published from this work and if you require further information, you are welcome to make contact with Steven and Stevie.

Elizabeth Dinkele was awarded the Rare Disease Foundation Microgrant to fund her doctoral research into the aetiology of Mseleni Joint Disease. Mseleni Joint Disease (MJD) is a precocious and progressively degenerative form of osteoarthritis endemic to the Maputaland Region in KwaZulu Natal. MJDs pattern of morbidity implicates multiple factors, both genetic and environmental, as possible contributing factors towards this disease. Elizabeth's PhD will combine biocultural disease modelling with in vitro three-dimensional organoid modelling to investigate the mechanisms involved with the pathogenesis of this disease. It is hopeful that findings from this research may inform clinical practice with regards to the treatment of MJD and other osteoarthritic diseases in addition to elucidating gene targets for future drug development studies.

Tafadzwa Tawha, is in the process of completing MPhil. Biomedical Forensic Science research project entitled 'Geometric morphometric (GM) analysis of the zygoma for estimating ancestry in a South African sample'. This project employed geometric morphometric analyses to evaluate ancestral variations in zygomatic shape and size in a South African sample. Preliminary results

indicate that the zygomatic bone is more variable in three-dimensional shape than size, but that these two variables are closely linked in the overall morphology Differences in the zygoma. in morphology between ancestry groups were greater than those between sex groups, and the zygomatic bone yielded better separation between European ancestry individuals relative to Mixed and African ancestry individuals. Further assessments are being done to investigate the impact of antemortem tooth loss on zygomatic morphology.

In 2018 the Division of Clinical Anatomy and Biological Anthropology had three honours students.

Athi Baliso, has completed a project entitled "Forensic Anthropology Cape Town: Are we helping?" wherein she assessed the effectiveness of FACT at the University of Cape Town before and after its establishment, and provided a detailed description of the cases received by FACT. In addition, case closure from FACT analyses was evaluated and the accuracy of FACT's anthropological assessment was included.

Bronte Davies, has completed a project entitled "A biocultural assessment of cranial injuries, pathology and deformations in Khoesan crania dating to the Holocene period". This project explored frequencies of pathology and cranial variation amongst 150 Khoesan adult individuals in UCT's Human Skeletal Collection. Data were analysed according to estimated sex and age, and temporal and spatial distribution; aiming to provide further insight into - and understanding of - the cultural practices, lifestyle, and environmental or social stressors of this southern African population.

Zikhona Kupiso, has completed a project entitled "Assessing

transformation of racial terminology in anatomical research and biological anthropology research in the South African population". This review explored transformation in the use of racial terminology scientific articles published in South African a PubMed review. The analysis covered three periods: 1989-1993, 2004-2008 and 2013-2017, the previous five years of a democratic South Africa.

Forensic science shines at UCT Summer School

Each year, UCT's Summer School partners with several community outreach/social responsiveness initiatives aimed at giving school children from disadvantaged communities a chance to experience the university environment and learn about the opportunities available to them. This year, Devin and Chandra Finaughty participated as volunteer quest lecturers. presenting forensic science to high schoolers from the Ikamva Youth and 100UP initiatives. Their presentations proved to be a real hit with the scholars, opening their eyes to the fascinating world of forensic investigations and the career opportunities available in South Africa. You can read some of the feedback from the students here: https://www.news.uct.ac.za/article/-2018-09-28-mini-summer-schoolprimes-future-students.

Involvement with High School learners in outreach to showcase what CABA is all about

In collabo	ration	with	IVIS.	Sandy
Catterson,	the	Division	of	Clinical

Anatomy and Biological Anthropology was involved in a hands on practical where members of academic staff (Prof. Graham Louw, Dr. Victoria Gibbon, Ms. Claire Lewis and Ms. Kentse Mpolokeng) and post graduate students (Mr. Devin Finaughty (PhD), Ms. Liesel Arendse (PhD), Mrs Elizabeth Dinkele (PhD), Mr. Steven Randall (PhD), Ms. Tafadzwa Tawha (MSc), Ms. Nadine Kocerhan (MSc), and our three honours students: Ms. Bronte Davis, Ms. Athi Baliso, and Ms. Zikhona Kupiso) in the division, shared with a group of high school learners: UCT-Forensic Science and medicine Schools Experience. The first group came in in 10-11 August 2018 and the second 4-5 October 2018. The learners were taken through the Anatomy museum and the dissection halls where they were shown from all systems of the body in a form of models (plastinated, wet and plastic) to demonstration of full dissected human bodies in the dissection halls. The biological anthropology team showed them about excavations and assessing of the human remains.



Ms. Tafadzwa interacting with the learners



From left, Ms. Sandy Catterson with learners from various schools



Prof. Graham Louw with learners before entering the dissection hall



Miss Kentse Mpolokeng interacting with students on demonstration

At the end of the sessions, the students were given an opportunity reflect on the day about what they have learnt and below is an example of such a letter.

TWITCH

His fingers twitched.

It was an almost endless room of glass jars. He'd never seen anything like it before. He was on his knees, on his tiptoes, stretching and craning to see everything. He'd never been as fascinated by something in his life. Jars and jars of organs. He was astounded. It was so strange to him, yet so interesting. Human livers, kidneys, little foetuses, brains. As he looked at each one, he felt them in his own body. Or, at least, he imagined them. Looking at the stomachs, he imagined his breakfast slowly being digested. Looking at the hearts, he felt his own pumping steadily in his chest. And looking at the lungs, he inhaled and felt his own trying to expand.

His fingers twitched.

Those lungs looked so healthy. They were two spongy sacs, held together by an upside down Y. He knew it was the trachea, and two bronchi. Both sacs were so evenly coloured, so gently, lightly pink, it was as if the air they once held would have been barely clasped, but rather securely coaxed into them, and softly let out again. The even expanse of their outside was disturbed only by the delicate creases of the splits of the lobes. He looked at another, this one cut open, to see the insides. It had little holes in it, but only if he looked very closely. He could tell how once upon a time, they allowed someone to live breathing fresh air.

His fingers twitched.

Another jar. Another lung. Why did it make his stomach twist when he looked at it? What used to be spongy sacs now looked harder, almost rusted. It was black, like charcoal, but an ugly black. The kind of black you see on burnt corpses on the news, the kind of black that instills an unknown sense of eeriness in you. No longer smooth, the outside tissue was bumpy, almost like mould. But the worst part was right in the middle of the left lung. A dark whitish, greenish patch, with no clear borders, but still sticking out of the rest of the organ like it was coloured with a highlighter. A cancer, he read underneath. He took a deep breath, trying to feel whether his own lungs expanded and held air like the healthy ones, or crudely grabbed and dropped it like the ones in front of him.

His fingers twitched, yearning for the small packet of filled paper cylinders in his bag.

"A smoker's lung," he read, "the patient died shortly after admission."

Cape Peninsula University of Technology (CPUT)

Peninsula Cape Universitv of Technology (CPUT) Optical dispensing first year students come to the Department of Human Biology (UCT) for anatomy the orbital practical demonstration (October 2017). A group of first year Optical Dispensing students came to UCT together with their lecturer, Mr. Prasidh Ramson came for the practical demonstration. https://protectza.mimecast.com/s/MDe0B5s23ekWC9 In October 2018 a second group of students visited. The idea for a field trip to UCT's Department of Clinical Anatomy and Biological Anatomy, came out of the need to facilitate the learning objectives for first year learners studying Ocular Anatomy and Pathology. Students are meant to have a holistic appreciation of the structures of the eye, its functioning, and recognizing signs and symptoms in patients when things go wrong.



Prof. Graham Louw and Miss Kentse Mpolokeng with the first year Optical Dispensing students form CPUT

Division of Clinical Anatomy & Biological Anthropology (CABA) rocks UCT's Department of Human Biology 2018 Research Day

The Department of Human Biology held the Research Day on the 12th September 2018 welcoming all postgraduate students, postdoctoral fellows and junior

staff to submit their abstract to be presented either via poster or oral presentation. Several members of the CABA decided not miss the to and opportunity submitted their abstracts. They participated and did poster presentations and scooped three of the awards on offer. During the prizegiving ceremony later on the day, among the winners, staff members Kerri Keet and Kentse Mpolokeng were awarded first and second place for best staff poster, respectively. PhD student, Devin Finaughty, won first prize for best student poster. Kerri presented her research on the branching pattern of the aortic arch and diameter of the femoraliliac arterial pathways; Kentse on pulmonary unusual fissures and supernumerary lobes; and Devin on precocious natural mummification in the Western Cape.



From left to right: Ms. Kerri Keet, Ms. Kentse Mpolokeng, Mr. Devin Finaughty

The 46th Annual conference of the Anatomical Society of Southern Africa Four members of academic staff came all the way from Cape Town representing the University of Cape Town at the 46th Annual ASSA conference. They all participated in the talks, oral and poster presentations, to judging and chairing of the sessions. At the award ceremony that was held at the gala dinner, Miss Kerri Keet was amongst the winners as the 1st runner up of Best Young Presenter Award for one of two oral presentations that she gave relating to clinical cardiovascular anatomy research.



From left; Ms. Kerri Keet, Ms Kentse Mpolokeng, Dr. Victoria Gibbon and Prof. Graham Louw

International Association of Student Surgical Societies (IASSS) & Southern African Student Surgical Society Symposium

Ms. Kerri Keet was invited as a guest speaker at the International Association of Student Surgical Societies (IASSS) & Southern African Student Surgical Society Symposium, that was held in South Africa in July 2018, where she opened the oral presentations with a talk that highlighted the importance of undertaking anatomical research that will benefit surgical practice.

Ms Keet held a seminar for the fitness and rehabilitation professionals (gym, pilates and yoga instructors) who attended an Anatomy workshop within the Department of Human Biology.

Through collaboration with the Division of Cell Biology, together with Dr. Geney Gunston, they were involved in Science in our Schools Initiative where they hosted two grade 10 students in Clinical Anatomy, who joined a heart dissection practical with the first-year medical students, and a brief excursion to the operating theatre.

International conference presentations

Viantha Naidoo (Division of Cell Biology) attended an international conference: "Keystone Symposia on Frontiers in Islet. Biology and Diabetes" in Keystone, Colorado, USA, in 4-8 February 2018, being the only delegate from Africa. The conference was solely based on unpublished data from her PhD project under supervision of Dr. Elizabeth van der Merwe. She did a poster presentation titled: "Investigating islet vascularization and innervation in the regenerating rat pancreas".



Ms Viantha Naidoo in Colorado: Keystone Conference Centre with her research poster on the left

Initial phase of restitution project meeting on October 1st, 2018 with local stakeholders Restitution with Scientific Engagement



The historical unethical use and procurement of skeletal remains is something that haunts the discipline of biological anthropology globally. After attending a symposium in 2017 on Human remains management and repatriation hosted by Iziko museum I returned to UCT and examined the UCT Human Skeletal Collection records for evidence of unethical procurement of remains. Unfortunately, I found 11

individuals with known names, dates of deaths or were known to the donor in life suggesting these remains should not be at UCT. While it was immediately obvious that restitution was the correct procedure, how to go about it? Firstly, with Prof Graham Louw (HODiv) and Prof Collins (HOD) we put a moratorium on the access to these remains and their records. The remains were sealed and removed from the collection. Fast forward to 2018 after a lengthy process of figuring out a way forward, with the the **Deputy-Vice** assistance of Chancellor professor Loretta Feris and the Office of Inclusivity and Change we have embarked on the initial phase of the restitution project. Of the 11 unethically procured nine are from the town of Sutherland in the Northern Cape. As the University we decided to start with these nine for restitution. The records indicate that in the 1920's the farm owner of the time dug up remains from the worker burial ground on the Kruisrivier farm and brought them to UCT. The records further indicate that some of these individuals were free living hunter-gatherers that were captured and forced into labour on the farm; they state one individual was possibly murdered, others were elderly, and some died of illness.

Doreen Februarie of Nosipho Consultancy was hired as our public participation advisor for the project and went into the community to locate relevant stakeholders. On October 1, 2018 a group of us from UCT went to Sutherland to meet with the identified families, the community leadership and in the evening had a public meeting in the local town hall. As one can expect the news of the situation with these remains was painful for the community. However, they were accepting of us and we all agree these people will be laid back to rest in Sutherland. These are only the early phases of the public participation process. In accordance with the Heritage Act an advert will go out in the local papers in the Sutherland area this weekend.

While in Sutherland a few weeks ago the families requested that I analyse the remains and provide them with a biological report, radiographic and stable isotope analyses, they also requested I

seek facial reconstruction and ancient DNA analyses on their behalf. They are very interested in cause of death. With my team at UCT I have started the biological analyses. Dr. Tinashe Mutsvangwa will be doing the radiographic analyses and Professor Judith Sealy the stable isotope analyses. Professor Simon Hall and Nigel Penn will be writing a contextual piece on the historical and archaeological history of the area and the hunter-gatherers and hunter-herders who lived in the area precolonial and the interaction in the colonial era. I am busy working with external stake holders to provide the additional expertise requested by the families. In the next couple of weeks, I will return to Sutherland and meet with the families to share the results of the initial biological analyses.

This is only the initial phases of the restitution and there is still a long path in front us. How do I feel now? We are doing the right thing, the process has started and so far has gone relatively smoothly. I am grateful to the leadership within my Division, Department and University to guide a path forward. I am heartful to the families and communities for helping quide us forward, acknowledging that science can provide a piece of the puzzle and answers to the injustice done to their ancestors, for their kindness and acceptance. It brings me pride to be part of project where we practice what we preach and are doing restitution with scientific community engagement. Next year I will provide an update. By then the remains of these people should have been returned to their families and laid to rest with the dignity and respect they deserve.

https://www.news.uct.ac.za/article/-2018-10-24-uct-to-restore-ancestors-totheir-home https://www.news.uct.ac.za/article/-2018-10-11-restoring-ancestors-to-their-home

ASSA members marry

On 28th July 2018, two members of ASSA, Devin and Chandra Finaughty (from UCT) got married in the beautiful Eastern Free State. The two met during a lecture series at UCT on, of all things, comparative anatomy, back in 2015. Sharing a mutual love of science and all things natural, their relationship grew strong and fast, culminating in their decision to take the big leap into married life earlier this year. Congratulations to you both, and we wish you a wonderful shared future together!





Ms K Mpolokeng & Dr V Gibbon

NEWS FROM THE INTERNATIONAL FEDERATION OF ASSOCIATIONS OF ANATOMISTS (IFAA)

Meeting with East African Anatomist in Kenya, March 2018

While Africa hosts thousands of Medical Schools, very few of the anatomists at these Schools are members of formal Associations of Anatomists or are aligned to the IFAA. I recently travelled to Kilifi in rural Kenya, to meet with a small group of dedicated East African anatomists. Anatomists from Kenya, Uganda, Tanzania and even one person from Zambia attended the meeting, which was hosted by Professor Jameela Hassanali of Pwani University in Kilifi. Many of the attendees travelled by bus for two days in order to attend. The hot and humid (85%) climate did little to dampen the enthusiasm of the group, although it did cause the loss of excessive amounts of eccrine secretions! I was asked to provide information on the benefits of joining the IFAA. The vision of the IFAA and its various Programmes and Committees were discussed. I hope that in the near future we will have both the Kenyan Association of Anatomists and the Ugandan Association of Anatomists joining the IFAA. The group also wishes to establish an East African Association.

I took with me a message from the President of ASSA, Professor Maryna Steyn, inviting the East African anatomists to attend our ASSA Congress in April.



Seen seated in the photo with me is the Deputy Vice Chancellor of Pwani University, Professor Sunuu, who joined us for part of the meeting. Professor Hassanali is standing behind me.

The 15th Annual Scientific Conference of the Anatomical Society of Nigeria (ASN)

The 15th Annual Scientific Conference of the Anatomical Society of Nigeria (ASN) was held at the Usmanu Danfodiyo University, Sokoto, Nigeria in September, 2018. The keynote lecture "Redesigning Anatomy Education in Africa: Prospect and Challenges" was delivered by the President of the International Federation of Associations of Anatomy (IFAA), Professor Beverley Kramer. Professor Kramer was awarded a prestigious Honorary Fellowship of the Anatomical Society of Nigeria by the Executive Committee of the ASN.



Anatomical Society of Nigeria Executive (2016-2018). At the centre is Prof. Beverley Kramer (President, IFAA). On her right are Prof. T. W. Jacks (President, ASN), Dr. O.A. Ayannuga (Vice President, ASN) and Dr. E. A. Osunwoke (Treasurer, ASN). On her left are Prof. A.D. Zagga (Secretary General, ASN), Dr. G.S. Oladipo (Editor-in-Chief, JAS), Ms K. Bobbo (Assistant Secretary General, ASN) and Dr. B.U. Enaibe (Ex-Officio II, ASN)

Prof B Kramer, President IFAA

UPCOMING EVENTS

Human Variation and Identification Research Unit workshops 2019

SAVE THE DATE!!

HVIRU WORKSHOPS 2019

The Human Variation and Identification Research Unit (HVIRU), School of Anatomical Sciences, University of the Witwatersrand will be hosting two workshops in 2019.

Forensic Archaeology: Excavating buried remains

Date: 2 - 3 September 2019 Cost: R2000

Taphonomy and Decomposition

Date: 4 - 6 September 2019 Cost: R3000

Special price for attending both courses - R4000

Both workshops are limited to 20 persons

Venue: School of Anatomical Sciences, Faculty of Health Sciences, University of the Witwatersrand

Enquiries: Dr Desiré Brits Desire.Brits@wits.ac.za

These workshops are partly funded by the American Academy of Forensic Sciences (AAFS) Humanitarian and Human Rights Resource Center (HHRRC)





The 19th Congress of the International Federation of Associations of Anatomists



We are pleased to announce that registration for IFAA 2019 <u>www.ifaa2019.com/</u> is now open.

For details on registration fees, key dates and how to register please see the congress website: <u>www.ifaa2019.com/rates-and-deadlines</u>

OTHER

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MESSAGE FROM THE EDITOR

And so we reflect on yet another year...

Captured in these pages are our achievements, our successes and our goodbyes.

It is with great fondness that we reflect on our experiences and achievements during the recent ASSA conference and we would like to thank Dr Swanepoel and here team for an amazing time. We also look forward with great excitement to the next ASSA conference and we wish Prof Bester and her team all the best with their arrangements.

We also thank Prof Steyn for her enormous contribution as President of the Society and wish the new president all the best for their tenure.

With this, my last ASSA newsletter. Over the past six years it has been my pleasure to read and report on everyone's news. We have grown the newsletter form a 17-page newsletter to a monstrous 43-page document. It would not have been possible without everyone's, especially the ASSA liaison officers, massive contribution – thank you to all.

I wish all a wonderful festive season and the best for the New Year.

Best wishes,

Desiré