AP

CHRONICLE

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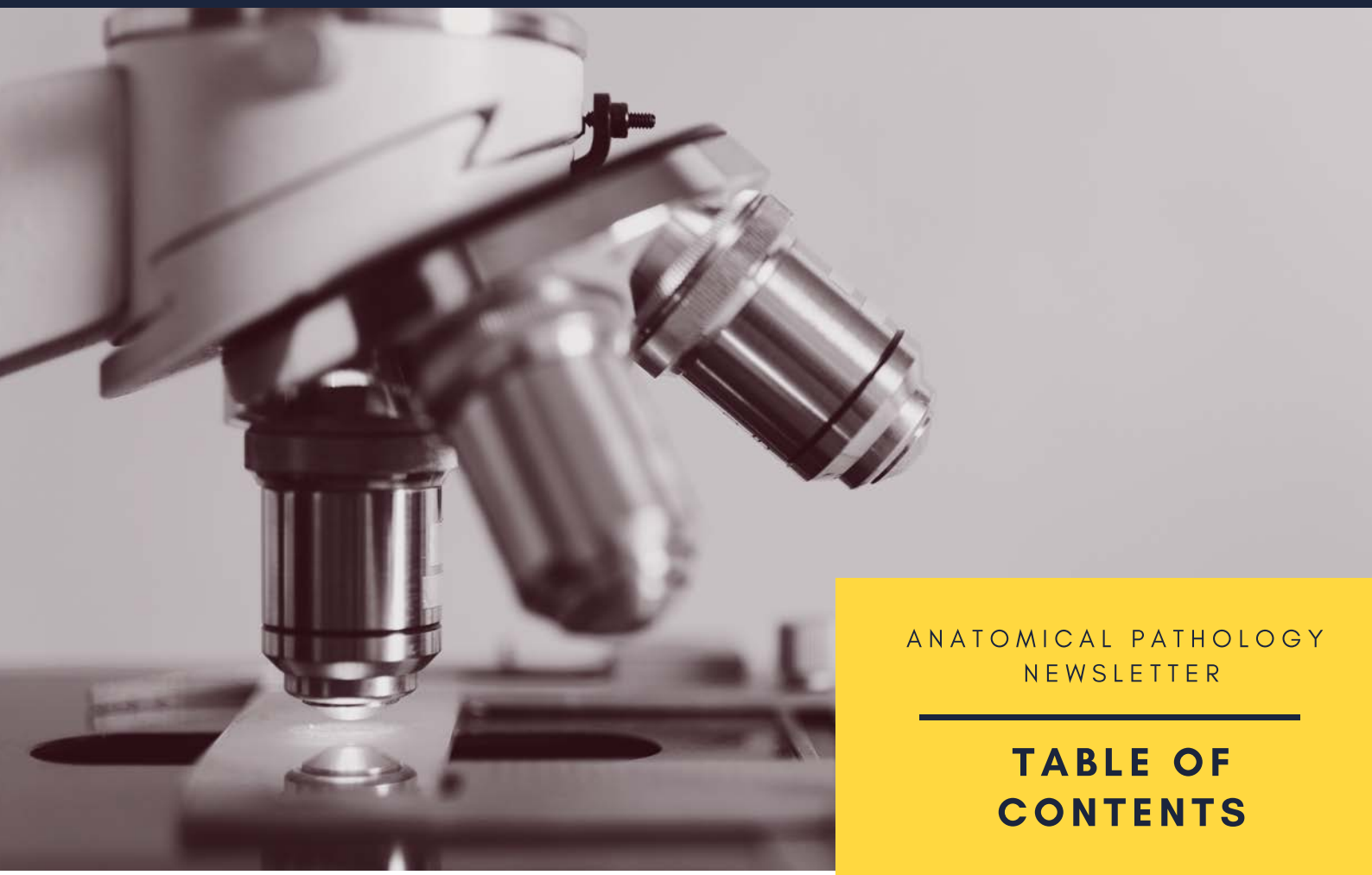

ANATOMICAL PATHOLOGY NEWSLETTER

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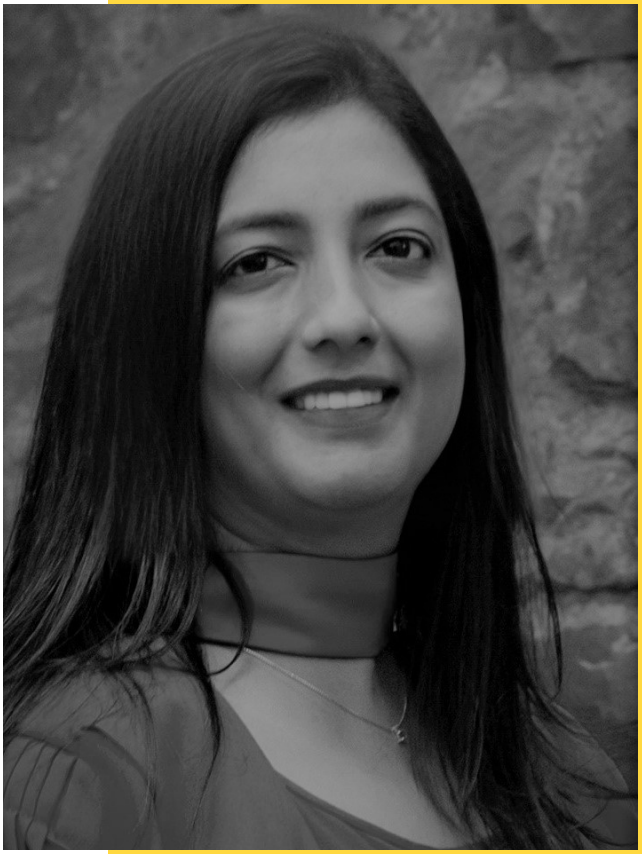
WELCOME!

WE'RE HAPPY TO SEE YOU!

Welcome to the newsletter for the Division of Anatomical Pathology at the University of Cape Town/National Health Laboratory Service.

This biannual publication seeks to share news from the Division and highlight the important work of Anatomical Pathology.

CHECKING IN WITH PROF PILLAY



"Checking" is an integral part of Anatomical Pathology training and service delivery. Prof Pillay gives us insight into this essential practice.

In Anatomical Pathology, the daily checking session with registrars according to a roster forms an important part of registrar teaching. It occupies many hours a day where surgical cases, cytology and autopsy slides are reviewed by the consultants.

These interactions provide the most valuable teaching opportunities. Cases are worked up and a report is formulated using all the clinical and radiological information available with additional stains and ancillary investigations if needed. Difficult cases often require research, clinicopathological discussions and review (small ad hoc conversations or formal multidisciplinary meetings) and possibly further consultation (within the department, nationally or internationally).

The approach to a case may differ among consultants and eventually one finds their unique style of practising while conforming to minimum data sets required in a report.

Occasionally during the checking session and especially when the consultant requires additional time to exam slides carefully, the silences may be filled in with interesting and valuable conversation.

GET IN TOUCH

Professor Komala Pillay

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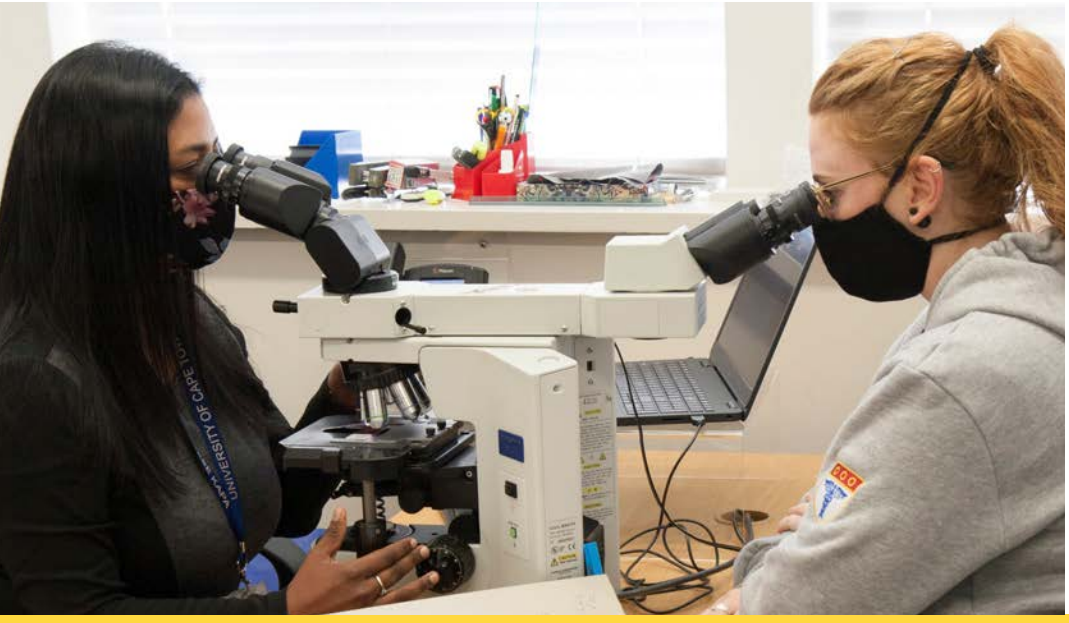


BRAG BOARD

We have had some incredible achievements in the Division of Anatomical Pathology.
Well done!
Period: March 2021 - October 2021.

Part I CMSA exams: Ghaalied Fakier
Jarryd Lunn

Part 2 CMSA exams: Patricia Pamacheche
Sindy Tu

MMed Anatomical Pathology:
Patricia Pamacheche

Congrats!

PROMOTIONS:

ADMINISTRATIVE ASSISTANT: MRS THELMA GALSWORTHY

SENIOR LECTURER: DR LYNELLE GOVENDER

CHIEF TECHNICAL OFFICER: MR JURGEN GEITNER

MEET THE MOLECULAR TEAM

DR AMSHA RAMBURAN

There are many molecular techniques used in Anatomical Pathology diagnostics and research. In this section we chat with Prof Richard Naidoo and Dr Amsha Ramburan who are medical scientists in Division of Anatomical Pathology, whose work focuses on these techniques.

LG: When did you join the Division of Anat Path here at UCT/NHLS?
AR: I transferred here from Durban in August 2016.

LG: Tell us a bit about what your day-to-day work here involves?
AR: I am responsible for the molecular diagnostic service which involves using a molecular test to help the pathologist reach a diagnosis. I also have to perform research that is of diagnostic relevance. Molecular diagnostic tests are now a part of the routine histopathology workflow, so our technologists and intern scientists are skilled on the practical aspects of diagnostic testing. In addition to teaching practical skills, I have to lecture on genetics and molecular pathogenesis of disease to undergraduate medical students and registrars in postgraduate training. Lastly, management largely involves the operational aspects of maintaining a research and diagnostic laboratory. So in a day, I definitely don't get to do all of these, but it will be some combination of these aspects.

LG: What do you enjoy most about your job?
I recently, helped a pathologist make a diagnosis of a very rare soft tissue tumour using an assay that I had set up for a research project and that was not available on any diagnostic platform in private or public practice. The patient was a young child and reaching an accurate diagnosis impacted their treatment and I hope there was a favorable outcome. It was also the first time that particular tumour was diagnosed here. It is very satisfying to know that I can help in that way. This example also highlights the importance of research to the diagnostic service which is equally relevant and exciting but provides the more long-term gratification.

LG: What do you think is the biggest misconception about this kind of career in pathology?
AR: I think those who consider a career in science are much more informed than previously. Further, the internet makes information available at our fingertips so just about anything can be found out. I will say though that a career in science is not glamourous and the path is long academically. You will need to pursue an honours, masters and PhD degrees after a basic science degree. These are the foundational building blocks that cannot be bypassed. Also, it appeals to a certain personality type: those that have an interest in problem-solving, are meticulous, resilient and adaptable.

"Ultimately, anything worth having requires your commitment and is not easy."

PROF RICHARD NAIDOO

Prof Richard Naidoo is a medical scientist and researcher in the Division of Anatomical Pathology, at UCT.

The journey to now

His journey into Anatomical Pathology, specifically using molecular techniques is intricately tied with building relationships with people. He met his mentor Prof Margaret Baron while at Harvard University. Thereafter worked with Prof Runjan Chetty, heading the Pfizer molecular research laboratory at the University of KwaZulu Natal. He then joined UCT, where he helped develop the labs now used to conduct research in Anat Path.

These days...

Prof Naidoo's work is focused on supporting and mentoring postgraduate students. His current research interest involves looking at proteomics in different cancers. He is very passionate about transformation, and investing in the development of students.

What about life outside work?

Prof Naidoo is a man of many interests. He is an avid bird-watcher, jazz aficionado, enjoys cycling and squash. An early-riser, he spends quiet contemplative mornings in his own company. He loves travelling, especially as a means to reconnect with friends and family; although he doesn't get to do as much travelling as he would like to these days. Richard loves cooking, and is known for his fantastic Thai cuisine.

CONTACT

richard.naidoo@uct.ac.za

UCT STUDENTS SUCCESSFULLY SUPERVISED:

2 HONOURS
3 MASTERS
5 PhDs
3 PhDs ongoing

"YOU CAN DO ANYTHING IN LIFE, AS LONG AS YOU HAVE THE PASSION AND DESIRE FOR WHATEVER YOU ASPIRE FOR. BUT, YOU'VE ALSO GOT TO MAKE THE TIME. **TIME MANAGEMENT.** IT IS ALL ABOUT PRIORITIZING TIME."

HOT OFF THE PRESS

Research, and sharing work with the academic community through publication is an important part of scholarly work.
Congratulations to the staff who contributed to these academic publications (March 2021 - October 2021).

Aldera, A. P., & Govender, D. (2021). Carbonic anhydrase IX: a regulator of pH and participant in carcinogenesis. Journal of Clinical Pathology, 74(6), 350-354.

Aldera, A. P., Govender, D., & Locketz, M. L. (2021). Neuroendocrine neoplasms of the digestive tract: incorporating the 2019 WHO grading schema in the South African context. *South African Journal of Surgery*. 59(1), 27a-27e.

Aldera AP, Hes O. Eosinophilic Solid and Cystic Renal Cell Carcinoma With Melanin Pigment - Expanding the Morphological Spectrum. Int J Surg Pathol. 2021; 10668969211038737.

Alves de Souza Rios, L., Mapekula, L., Mdletshe, N., Chetty, D., & Mowla, S. (2021). HIV-1 Transactivator of Transcription (Tat) Co-operates With AP-1 Factors to Enhance c-MYC Transcription. Frontiers in cell and developmental biology, 9, 693706. https://doi.org/10.3389/fcell.2021.693706

Antel, K, Chetty D, Oosthuizen J, Mohamed Z,Van der Vyer L, Verburgh E. (2021). CD68+ Tumour-infiltrating Macrophages, PD-L1 expression and the effect of EBV latent infection in in Hodgkin Lymphoma in a high HIV-prevalence South African cohort;; Pathology 53(5):628-634

Coccia CNI, Makambwa E, Jackson CN, Chetty DR, Said-Hartley Q, Symons G (2021). A case of secondary syphilis manifesting as a pulmonary pseudo-tumour with nephrotic syndrome. J Thoracic Crit Care Med 27(2):63-65

De Stadler, J. L., Kruger, N., Singh, S., Banderker, E., Dix-Peek, S., & Pillay, K. (2021). Malignant transformation in an 11-year-old child with multiple hereditary exostosis. *South African Orthopaedic Journal*. 20(3):183a-e

Govender D, Jackson C, Chetty D (2021). Syphilitic Pulmonary Inflammatory Pseudotumour: A Diagnostic Challenge. International Journal of Surgical Pathology 29(1) : 90-96

READ ALL ABOUT IT

HOT OFF THE PRESS

And there's more where that came from!

Congratulations to the staff who contributed to these academic publications (March 2021 - October 2021).

Govender L, Archer E. (2021). Feedback as a spectrum: The evolving conceptualisation of feedback for learning. African Journal Health Professions Education. 13(1):12-13

Hodgson A, Benayed R, Ladanyi M, Snuderl M, Matrai C, James R, Aldera AP, Park K, Antonescu C, McCluggage WG, Chiang S. Uterine Sarcomas With A Novel SS18-VEZF1 Fusion - Another Neoplasm in the Uterine Myxoid Neoplasm Differential Diagnosis. Mod Pathol. 2021;34 (suppl 2):695-696.

Ibrahim Khalil A, Mpunga T, Wei F, et al. (2021) Age-specific burden of cervical cancer associated with HIV: a global analysis with a focus on sub-Saharan Africa. International Journal of Cancer.

Ikumi, N. M., Malaba, T. R., Pillay, K., Cohen, M. C., Madlala, H. P., Matjila, M., ... & PIMS Study Group. (2021). Differential impact of antiretroviral therapy initiated before or during pregnancy on placenta pathology in HIV-positive women. *AIDS*, 35(5), 717-726.

Nowalaza, Z., Zampoli, M., Pillay, K., Singh, S., & Zar, H. J. (2021). Pulmonary cysticercosis in an urban South African child. Pediatric Pulmonology.

Riedemann, J., Figaji, A., Davidson, A., Stannard, C., Pillay, K., Kilborn, T., & Parkes, J. (2021). Sequential improvement in paediatric medulloblastoma outcomes in a low-and-middle-income country setting over three decades. South African Journal of Oncology. 5(11):a174.

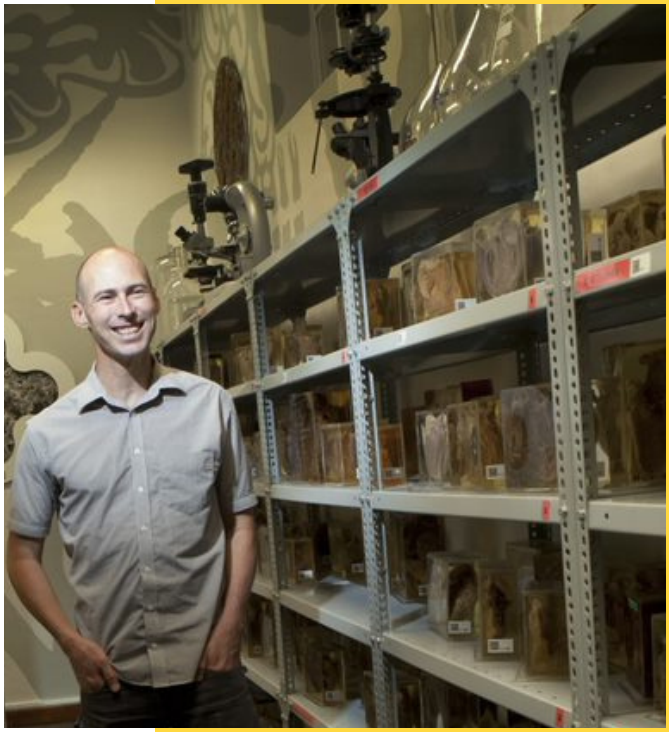
Rugakingira, R., John, J., Singh, E., Chen, W. C., Wu, H. T., & Lazarus, J. (2021). Renal cancer: First look at a potential South African urological cancer registry. African Urology, 1(01).

Singh, A. S., van der Walt, C. J., & Singh, S. (2021). Assessing the reasons for late presentation skin cancers-what can we do about them?. South African Journal of Plastic & Reconstructive Aesthetic Surgery & Burns, 4(1), 4-9.

LEARN ALL ABOUT IT

GET TO KNOW

Mr Jurgen Geitner is the technical officer working at the Pathology Learning Centre (PLC). We get to know him and his work a bit better...



LG: Tell us a bit about your role here in the Division of Anat Path, and at the PLC.
JG: I'm the Technical Officer in the PLC. I was originally employed to restore the pathology teaching specimens, photograph them, and put them online as an OER resource. Over the years my contributions and responsibilities increased; my job has has evolved into a multi-faceted digital technology role, supporting undergraduate and postgraduate education. During this time I have developed several websites and applications that serve to support pathology teaching.

LG: I know that a substantial amount of your work involves managing the virtual microscope (VM). Can you tell us a bit about that?
JG: The VM is proving to be a popular device. We also host 12GB of slides online - currently 4692 slides are shared across 5 online databases. This enables researchers to access their slides remotely. It also makes collaboration easier. Histology and pathology teaching slides for several UCT undergrad and postgrad courses are also hosted online. I maintain the databases, creating password-protected user accounts and discrete user groups to keep sensitive data secure. We provide a VM service to all departments of UCT as well as to other institutions. We welcome anyone who would like to make use of this awesome system to book via our online reservation system (https://vm-uct.calpendo.com/). Teaching slides are scanned and hosted online for free. For research, there is a small fee of R12.50 per slide. Online hosting is optional (R1.00 per slide per month). We provide free software for viewing the slides.

LG: Can you tell us a bit about the role of digital image analysis here?
JG: Prof Pillay has noticed an international shift towards digital pathology and does not want UCT anatomical pathology to be left behind. I have an interest in Digital Image Analysis (DIA) and have started teaching myself basic DIA techniques, using QuPath software, online tutorials, and user forums.

LG: Congratulations on passing with distinction, your BSc Honours last year in Information Systems. What's next for you in terms of studies?
JG: Thank you! I am doing a Masters in Information Systems at UCT. My research interests include digital privacy and online surveillance.

LG: Outside of work, what are your interests?
JG: Surfing! Surfing is something that I always wanted to try, although I only started surfing 3 years ago.

I ALSO ENJOY IMPROVING MY PROGRAMMING SKILLS BY DEVELOPING WEB AND MOBILE APPS AND CONTRIBUTING TO OPEN-SOURCE SOFTWARE.

GET TO KNOW

Dr Sindy Tu has recently completed her postgraduate specialization in Anatomical Pathology at UCT. Let's get to know her a little...

LG: When did you join the Division of Anat Path?
ST: I was initially appointed as a registrar in Anatomical Pathology at the University of Witwatersrand in December of 2015. I transferred to the University of Cape (UCT) Town in February 2016.

LG: What made you choose Anat Path?
ST: I did my undergraduate degree at UCT. We spent many afternoons in the mortuary for post mortem (PM) demonstrations. We were all scared because would be quizzed, but I never missed a session. I still remember a classmate calling a gravid uterus a brain! In my clinical years, I remember feeling frustrated in how limited other fields were. Anatomical pathology encompasses all organ systems, normal histology to malignancies and infectious diseases, macroscopy to the molecular level. The field continues to evolve. Old diseases are clarified and new entities are still being discovered. Rest assured, it will never be a boring career.

LG: Do you have a particular area of Anat Path that you enjoy? Why?
ST: I am mostly a generalist. I find PM's interesting, and it is an opportunity to provide closure to the family and clinicians. I think it is a skill that is being lost over time. I enjoy cytopathology because it is like taking clues and putting a puzzle together.

Cytology stains are beautiful with vibrant colours.

LG: Do you have any words of wisdom to offer junior colleagues, or those who may be interested in pursuing Anat Path?
Anatomical Pathology is a challenging field with a steep learning curve. I think it is important to acknowledge and normalize the thoughts and feelings that come with this challenge. There isn't really anything in clinical medicine that can prepare them for this. Be prepared to work hard and consistently, but balance with time off and rest. This is the start to a challenging, exciting and rewarding career.

LG: I'm sure Anat Path keeps you very busy, but what can we find you doing in your spare time?
ST: I enjoy figure sketching, painting and illustration and attend art sketch groups. My favourite artists are the Impressionists and Rodin. I like film analysis and watching art house films. I enjoy video gaming and treat it as an escape. I like cooking and exploring different food cultures.

CONFERENCE PRESENTATIONS

Engaging with the academic community at conferences is an important part of scholarly work. We commend the staff who contributed to the PathRed congress in August 2021.

Prof Komala Pillay: Chairperson of Day 1 and Day 3 sessions.

Dr Jackie Chokoe: Chairperson of Day 2 session.

Dr Dharshnee Chetty: *HIV-associated Multicentric Castleman's disease: a clinical review of 53 cases.*

Dr Shivani Singh: *Primary effusion lymphoma, presented at PCD20 negative B cell lymphomas workshop. Poster presentation: Ureteric involvement in nephroblastoma.*

Dr Brendon Price: *Poster presentation: Thrombotic microangiopathy as a cause of progressive renal failure in a patient post haematopoietic stem cell transplant*

Dr Riyaadh Roberts: *My approach to lung transplant biopsies, presented at the Medical Lung pathology workshop.*

Dr Raisa Wessels: *Case presentation: Sex cord tumour with annular tubules arising from a granulosa cell tumour.*

Dr Nelson da Costa: *Case presentation: A suprasellar mass in a teenage girl.*
Poster presentation: Malignant mixed tumour of the skin, a rare and unusual tumour - the first reported case in South Africa.

M Meiring, K Shires and R Naidoo (Conducted a workshop): *Medical Scientist: Performance Matrix What is expected?*

Discipline advisory committee: Dr Jackie Chokoe-Maluleke

Scientific committee: Prof K Pillay

Logistics Committee: Prof R Naidoo, Dr D Chetty and Mr E Dollie

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PathReD
Pathology Research and Development
Enriching Health Through Research

NATIONAL HEALTH
LABORATORY SERVICE

CONFERENCE PRESENTATIONS

It's been a busy time!
We commend the staff who have contributed to these additional conferences.

14th Kenyan Association of Clinical Pathologists scientific conference, October 2021
Prof Komala Pillay - Paediatric pulmonology

International Society of Paediatric Oncology, October 2021
Prof Komala Pillay - Expert panel for problem cases

8th South African Immunology Society Virtual Conference, August 2021
Tafadzwa Chimbetete, Choshi P., Pedretti S., Roberts R., Lehloenya R., Peter J. The immunological profile of the skin in DRESS and SJS/TEN reactions to first line tuberculosis drugs in HIV-infected patients.

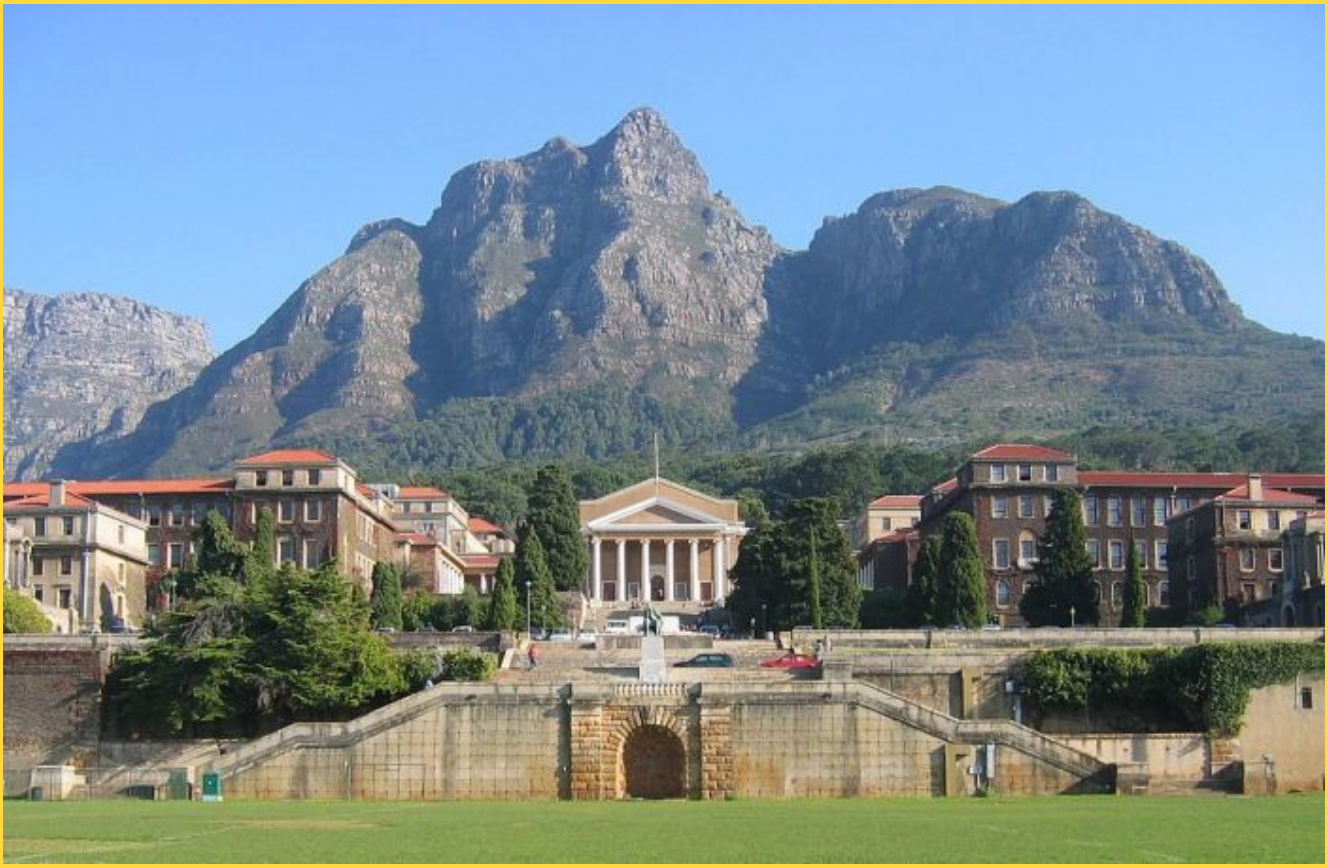
RECENT EVENTS

FAREWELL A/PROF MICHAEL LOCKETZ

In August 2021, we held a virtual farewell (picture: below) for A/Prof Michael Locketz.

Mike, a brilliant pathologist has contributed immensely to the field of Anatomical Pathology. We wish him well as he embarks on his journey to Middle Earth.

New Zealand will be lucky to have you.



We hope you've enjoyed this glimpse into the work of Anatomical Pathology, and the people who make it possible. Keen to learn more? Here's where you can find us:

University of Cape Town
Division of Anatomical Pathology
Falmouth Building
Faculty of Health Sciences
Anzio Road
Observatory
Cape Town

National Health Laboratory Service
Groote Schuur Hospital
Observatory, Cape Town

Red Cross War Memorial Children's Hospital
Mowbray, Cape Town

CONTACT US

This newsletter welcomes comments, feedback and submissions. Please send all correspondence to the editor.

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