

CRI QUARTERLY NEWSLETTER:

Jan – Mar 2021

Welcome to the first CRI quarterly newsletter for 2021.

The newsletter showcases the many cancer-related research activities in the Faculty of Health Sciences to research colleagues, clinicians, funders and the public. The quarterly newsletter is available via email and published on the [CRI website](#):

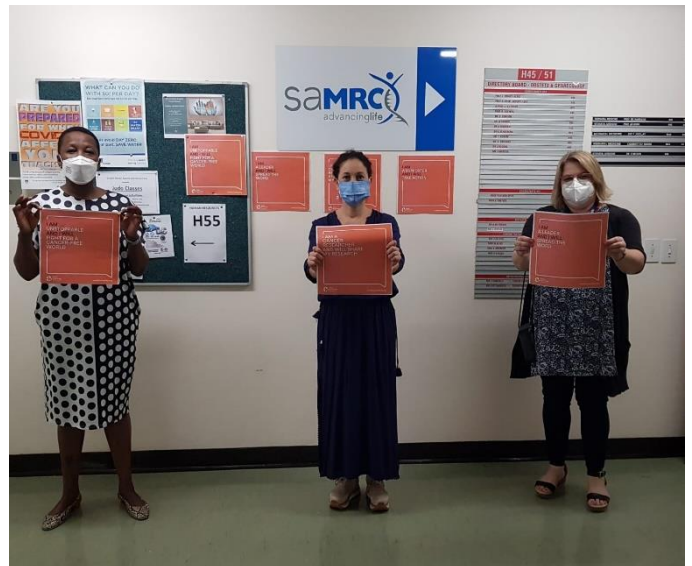
While the COVID-19 pandemic has continued to dominate everyday realities since last year, we hope that 2021 will be a productive and fulfilling year for all.

News & events

World Cancer Day 2021

World Cancer Day is commemorated on the 4th of February annually and is led by the Union for International Cancer Control (UICC). The aim of this event is to raise awareness, improve education and catalyse personal, collective and government action towards a world in which cancer deaths are prevented and there is equal access to life-saving cancer treatment. This year, due to the pandemic, we with the support of the [PG CRI Group](#) ran an online version of the World Cancer Day, by encouraging members of the CRI to submit their entries under the theme of, 'I Am and I Will'. Submitted entries were featured on the [CRI Twitter page](#).

Below are some of the entries received from research groups and individuals, all demonstrating the passion and commitment toward addressing cancer:



Haematology Research Group (clinical and pathology)



SAMRC/UCT Gynaecological Cancer Research Centre (GCRC)

I AM A
CANCER
RESEARCHER
AND WILL SHARE
MY RESEARCH

Trevor S. Mafu
PhD candidate (UCT)
ESSM Division
Human Biology Department



World
Cancer Day
4 February

worldcancerday.org

I AM
A SUPPORTER
AND I WILL
TAKE ACTION

"Exploring genetic variants for chronic pain in Breast cancer survivors"

—Firzana Firfiry (PhD Candidate)
Div. ESSM, Dept Human Biology, UCT



World
Cancer Day
4 February

worldcancerday.org

Reaching out to Africa: The new Introduction to Advanced Radiotherapy Techniques course

The new Access to Care Cape Town (A2C) Introduction to Advanced Radiotherapy (RT) techniques training course (I2A) was created in 2020 to act as a bridge between the basic 3D Conformal RT course and the in-depth Physics and Planning (P&P) training course offered by collaborators in Milan. Training days are spread out over two months and include online pre-course learning on the LäraNära and Vula teaching platforms. Participants are offered an overview of the equipment required as well as the processes and procedures associated with modern RT, while highlighting the potential clinical risks associated with this transition. They follow the RT journeys of several patients requiring advanced radiotherapy treatment and are given the opportunity to create RT treatment plans on the planning system (TPS).

The A2C teaching platform was virtualised between May and August 2020 to allow for this remote teaching and hands-on planning. Communication with participants was facilitated using the Zoom platform, including the main and breakout room sessions. In addition, all participants were granted access to the local TPS training database through a web interface, with their planning activities guided in real time by a local classroom assistant monitoring a duplicate of their TPS screen. Each assistant is responsible for two teams, each team comprising of a Radiation Oncologist, Medical Physicist and Radiation Therapist/Planner. The first combined I2A and P&P courses were offered between October and December 2020 (teams from RSA, Nigeria, Zambia and Zimbabwe) with the second planned for April to July 2021 (Nigeria, Kenya (2) and Zimbabwe).

Below are some photos from the training sessions:



To learn more about World Cancer Day, please visit the [World Cancer Day website](https://www.worldcancerday.org).



Congratulations, Leo!

Student-authored publications

Congratulations to the following students from Dr Georgia Schafer's lab on their recent publications:

- **Emma van der Meulen**, Honours student: van der Meulen E, Anderton M, Blumenthal MJ, Schäfer G. Cellular Receptors Involved in KSHV Infection. *Viruses* (IF=3.8). 2021, 17;13(1):118. DOI: 10.3390/v13010118.
- **Meg Anderto**, Honours student: Anderton M, van der Meulen E, Blumenthal MJ, Schäfer G. The Role of the Eph Receptor Family in Tumorigenesis. *Cancers* (Basel: IF=6.1). 2021, 8;13(2):206. DOI: 10.3390/cancers13020206
- **Sinead Carse**, PhD student: Carse S, Bergant M, Schäfer G. Advances in Targeting HPV Infection as Potential Alternative Prophylactic Means. *International Journal of Molecular Sciences* (IF=4.6). 2021, 23;22(4):2201. DOI: 10.3390/ijms22042201.

Upcoming events

Webinar series: "Strengthening Capacity to Implement Services for Prevention and Treatment of Cervical Cancer in under-resourced areas in South Africa"

The Khayelitsha Cervical Cancer Screening Project (KCCSP) of the UCT Department of Obstetrics & Gynaecology, will be hosting, in collaboration with Columbia University Irving Medical Centre, a series of Webinars entitled: "Strengthening Capacity to Implement Services for Prevention and Treatment of Cervical Cancer in under-resourced areas in South Africa". These webinars will be held on the last Thursday of every month (5 - 6.30pm SA time). The aim of these webinars is to enhance knowledge and to advance women's health by research into appropriate methods of cervical cancer prevention in South Africa.

Webinar dates and topics are as follows:

25 February 2021: Dr Nomonde Mbatani and team, Dept Obstetrics & Gynaecology, UCT

Kudos to the A2C team for putting this training platform together!

Grants

The Division of Haematology has received the following grants:

1. A R500 000 grant from Roche to support specialist training of Dr Simon Brett
2. A R380 000 grant from Astellas to support specialist training of Dr Nokubonga Vundla
3. R100 000 from Abbvie for specialist training in the Division of Clinical Haematology
4. A supplement to our NIH-Fogarty D43 grant enabling collaboration with CPUT on lymphoma research and training of CPUT students at UCT/NHLS.
5. Leonardo Alves de Souza Rios was the recipient of the FHS Faculty postdoctoral award (a pic of him is attached).

Graduate news

- Dr Katherine Antel was granted her PhD degree entitled: Lymphoma: Understanding the diagnostic challenges and improving outcomes in a TB-and HIV-endemic area. Congratulations and best wishes to Dr Antel!
- Dr Leonardo Alves de Souza Rios (picture shown below) was granted his PhD degree. His PhD title was "Understanding the molecular pathogenesis of HIV-associated Burkitt lymphoma – the impact of HIV-1 protein Tat on lymphoma driver genes". Dr de Souza Rios was also the successful recipient of the FHS Faculty postdoctoral award.

Advanced principles of colposcopy inclusive of review of new nomenclature and recommendations.

25 March 2021: Dr Nondumiso Ngxola and team, Frere Hospital, East London

Rationale and description of The Cervical Cancer Screening and Treatment Algorithms (CESTA) study in collaboration with International Agency for Research in Cancer (IARC).

22 April 2021: Dr David Levitz, developer of concept of Automatic Visual Evaluation (AVE), National Cancer Institute, USA

Using digital imaging technology in cervical cancer screening: MobileODT, cell phones and beyond.

27 May 2021: Dr Maribel Almonte and team, International Agency for Research in Cancer (IARC), Lyon, France

Using biomarkers to improve HPV triage in screen and treat programs: ArborVitae OncoE6 test.

24 June 2021: Dr Louis Kuhn, Columbia University Irving Medical Center, New York, USA

Combining mRNA biomarkers with HPV Xpert to improve performance of screening.

29 July 2021: Dr Rakiya Saidu, Dept of Obstetrics & Gynaecology, University of Cape Town

Using Cycle threshold values from HPV Xpert results from self-samples how to improve specificity when using HPV testing in screen and treat programs

Zoom Meeting link: Meeting ID: 962 2847 3246; Passcode: 726705

<https://columbiacuimc.zoom.us/j/96228473246?pwd=V2F1TjYxQ3RiRWlvRnlOVm1ucG0yUT09>

The 13th AORTIC International Conference on Cancer in Africa

The conference will take place virtually from 5 to 10 November 2021, bringing together multidisciplinary specialists from the global cancer community to reduce the impact of cancer in Africa.

The African Organisation for Research and Training in Cancer (AORTIC) is an Africa-based organisation with members throughout Africa and the international cancer community. Our objectives are to support, integrate, and facilitate evidence-based interventions and innovative programmes towards the prevention and control of cancer in Africa.

See the [AORTIC website](#) for more information about the conference and abstract submission.

Recent Cancer Publications

1. Adegoke AM, Prince S, Odunola OA (2021) Cytotoxic and antiproliferative properties of methanol extract of the stem bark of *Adansonia digitata* LINN. (MESBAD) in breast cancer cells,

Afr. J. Biomed. Res. Vol. 24 (January, 2021); 123-128.

2. Anderton M, van der Meulen E, Blumenthal MJ, Schäfer G. The Role of the Eph Receptor Family in Tumorigenesis. *Cancers (Basel)*. 2021 Jan 8;13(2):206. DOI: 10.3390/cancers13020206.
3. Antel, K., Chetty, D., Oosthuizen, J., Mohamed, Z., Van der Vyver, L., & Verburch, E. (2021). CD68-positive tumour associated macrophages, PD-L1 expression, and EBV latent infection in a high HIV-prevalent South African cohort of Hodgkin lymphoma patients. *Pathology*.
4. Carse S, Bergant M, Schäfer G. Advances in Targeting HPV Infection as Potential Alternative Prophylactic Means. *Int J Mol Sci*. 2021 Feb 23;22(4):2201. DOI: 10.3390/ijms22042201.
5. Chi RA, van der Watt P, Wei W, Birrer MJ, Leaner VD. Inhibition of Kpn β 1 mediated nuclear import enhances cisplatin chemosensitivity in cervical cancer. *BMC Cancer*, 2021; 21(106): doi: 0.1186/s12885-021-07819-3. Epub 2 Feb 2021.
6. Fagan JJ, Noronha V, Graboyes EM. Making the Best of Limited Resources: Improving Outcomes in Head and Neck Cancer. *Am Soc Clin Oncol Educ Book*.2021;41:1-11.DOI: 10.1200/EDBK_320923.
7. Fagan, JJ. Africa: A window on challenges and opportunities for head and neck cancer. *Laryngoscope Investigative Otolaryngology*. 2021; 1– 6. <https://doi.org/10.1002/lio2.554>
8. Godsmark, G. Souza Rios L. Mowla, S. (2021) Activation-Induced Cytidine Deaminase Promotes Proliferation and Enhances Chemoresistance and Migration in B-cell Lymphoma. *Anticancer Research*.
9. Koo MM, Unger-Saldana K, Mwaka AD, Corbex M, Ginsburg O, Walter FM, Calanzani n, Moodley J, Rubin GP, Lyratzopoulos G. Conceptual framework to guide early diagnosis programs for symptomatic cancer as part of global cancer control. *JCO Glob Oncol* 2021 jan; 7: 35-45. Doi: 10.1200/GO.20.00310. PMID: 33405957.
10. Mbatani N. Management of low-risk gestational trophoblastic neoplasia. In: *Gestational Trophoblastic Disease*. Nayak B, Singh U (Editors). Springer, 2021; pp 71-78.
11. Moodley J, Constant D, Mwaka AD, Scott SE, Walter FM. Anticipated help seeking behavior and barriers to seeking care for possible breast and cervical cancer symptoms in Uganda and South Africa. *eCancer* 2021; 15:1171. Doi: 10.3332/ecancer.2021.1171
12. Mwaka AD, Walter FMW, Scott SE, Harries J, Wabinga H, Moodley J. Symptom appraisal, help seeking and perceived barriers to healthcare seeking in Uganda: an exploratory study among women with potential symptoms of breast and

- cervical cancer. *BMJ Open* 2021; 11: e014365. Doi:10.1136/bmjopen-2020-041365.
13. Nnaji CA, Moodley J. Impact of the COVID-19 pandemic on cancer diagnosis, treatment and research in African health systems: a review of current evidence and contextual perspectives. *eCancer* 2021; 15: 1170. Doi.org/10.3332/ecancer.2021.1170
 14. Peres J, Damerell V, Chauhan J, Popovic A, Desprez P-Y, Galibert M-D, Goding CR, Prince S (2021) TBX3 promotes melanoma migration by transcriptional activation of ID1 which sequesters MITF to repress E-cadherin, *Journal of Investigative Dermatology*, <https://doi.org/10.1016/j.jid.2021.02.740>.
 15. Seftel, M. D., & Louw, V. (2021). A century between pandemics and poisonings. *The Lancet Haematology*, 8(4), e251.
 16. Shein, R., Mashigo, N., du Toit, C. E., Oosthuizen, J., Seftel, M. D., Louw, V. J., & Verburgh, E. (2020). Outcomes for Patients with Acute Promyelocytic Leukaemia in South Africa. *Clinical Lymphoma Myeloma and Leukemia*.
 17. Taku O, Brink A, Meiring T, Phohlo K, Businge CB, Mbulawa ZZA, Williamson A-L. Detection of sexually transmitted pathogens and co-infection with human papillomavirus in women residing in rural Eastern Cape, South Africa. *PeerJ* 9:e10793. Do.org/10.7717/peerj.10793.
 18. Taku O, Mbulawa ZZA, Phohlo K, Garcia-Jardon M, Businge CB, Williamson A-L. Distribution of human papillomavirus (HPV) genotypes in HIV-negative and HIV-positive women with cervical intraepithelial lesions in the Eastern Cape, South Africa. *Viruses*, 2021. Doi.org/10.3390/v13020280.
 19. van der Meulen E, Anderton M, Blumenthal MJ, Schäfer G. Cellular Receptors Involved in KSHV Infection. *Viruses*. 2021 Jan 17;13(1):118. DOI: 10.3390/v13010118.

Please send any cancer-related news, events, publications and conference information for the period Jan-March 2021 for inclusion in our next quarterly newsletter to:

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