

FUNDING RESEARCH IN SOUTH AFRICA

3 GOOD HEALTH



Contributing to Sustainable Development Goal 3 - Ensure healthy lives and promote well-being for all at all ages.

17 PARTNERSHIPS FOR THE GOALS



Contributing to Sustainable Development Goal 17 - Strengthen the means of implementation and revitalize the global partnership for sustainable development

RESEARCH

CANSA is one of the largest local funders of cancer research in South Africa. Funds, mainly donated by bequest, have been invested for use in enabling cancer research. Each year, CANSA dedicates approximately R7 million to direct research costs. Funds are currently used across five research programmes categorised Type A, B, C, D and E. CANSA's core research focus is on reducing risk, early detection and diagnosis and optimising patient care.

CANSA uses evidence-based research to inform our advocacy work, our health education programmes and our service delivery to those living with cancer and members of the public.

TYPE A RESEARCH

Type A research is aimed at MBChB and PhD cancer researchers based at South African universities and research organisations. The purpose is to support high-quality research to advance management and improve outcomes for the most common cancers in South Africa. Applications are accepted on the following topics:

- Epidemiology and causes of the burden of cancer in South African populations
- Health seeking behaviours, early detection and diagnosis of cancer
- Health promotion and risk reduction of cancer, with a focus on behavioural risk reduction
- Optimal patient care including rehabilitation and palliative care services
- Other health services and health system research relating to the above categories
- Health economics of cancer, including economic burden of cancer and its risk factors and cost effectiveness research
- Research relating to cancer biology/biochemistry/molecular biology as these relate to early detection, risk reduction and patient care.

Grants of up to R1.2 million over three years are awarded to projects based on scientific merit.

See www.cansa.org.za for a detailed summary of projects currently funded.

#CANSAResearch

Going forward, CANSA is revising its current research strategy. We believe we can play a better strategic role in formulating health policy to control cancer in South Africa through scientific evidence-based information. We will be launching a consultative process to establish the priorities and best investments for our research resources. This is intended to reposition CANSA's Research Programme to target the challenges of cancer risk reduction, early detection and survivorship in South Africa.

Publication awards

CANSA rewards researchers who publish their work in accredited journals with an amount based on the impact factor of the journal and the order of authorship. In total, R191 000 was awarded to the following researchers who completed their projects in 2018 and between them published 26 journal articles.

Professors Riana Bornman, Adrienne Edkins, Wentzel Gelderblom, Lizette Jansen van Rensburg, Ben Loos, Jennifer Moodley, Viness Pillay, Sharon Prince, and Dr Karl-Heinz Storbeck.

Graduates arising from CANSA granted projects

CANSA acknowledges the importance of building the capacity of a new generation of cancer researchers to further develop much needed advances in cancer research in South Africa. Where appropriate, Type A grants permit students to work under the supervision of the Principal Investigator and grant holder to obtain a postgraduate qualification. A total of six researchers completed their CANSA research grants. Emanating from these projects were the following 17 degrees awarded to students:

- BSc (Hons) = four; BMedSc (Hons) = one; MSc = six; PhD = six
- Stellenbosch University = 12; University of the Witwatersrand = three; University of Cape Town = two

CANSA Detective booklets

These booklets showcase some of the Type A research CANSA has funded. A new booklet, 'Hodgkin lymphoma in young people in South Africa: history and mystery', written by paediatric oncologist Dr Jennifer Geel of Charlotte Maxeke Johannesburg Academic Hospital, was produced and added to CANSA's series of cancer research booklets. Go to www.cansa.org.za/cansa-research-detectives-booklets/ for a list of all booklets.

CANSA Research in Action Conference, 3 to 5 July 2018, University of Pretoria

This conference, hosted by CANSA in collaboration with University of Pretoria, provided an opportunity to showcase the research work that CANSA funds, as well as bring the South African cancer research community together. The event, which included sessions on cancer surveillance, breast and cervical cancer, men's health, paediatric cancers, basic molecular and clinical sciences, mathematical modelling for cancer, cancer and nutrition, and patient care and experiences, was attended by 120 delegates. Keynote presentations from both local and international speakers added further value to the conference, as did poster presentations from numerous students working on CANSA-funded grants.





TYPE B RESEARCH: REDUCING RISK

This is research conceptualised and conducted by CANSA, sometimes in collaboration with other institutions. Projects are focused on reducing public exposure to cancer risks.

- **Knowledge, attitudes and behaviour surrounding electronic cigarettes (e-cigarette) usage**

There is currently very little information regarding prevalence of e-cigarette usage in South Africa and the way in which e-cigarettes are used by young people (for e.g. as a stop smoking aid or as a gateway to cigarette smoking). Further, public perceptions and beliefs regarding the safety of e-cigarettes is largely unknown in South Africa. A postgraduate student from UCT conducted a qualitative study to collect formative data on these issues to help inform CANSA's messaging and health campaigns, as well as our advocacy work. The research work has been completed and the student has submitted his MPH thesis. The findings will now be prepared for submission to a journal for publication. CANSA plans to make use of the findings to develop a targeted campaign on e-cigarettes for young people. Findings were also presented at a Department of Health meeting as evidence in support for the regulation of e-cigarettes in the Tobacco Products Control Amendment Act.

- **Informing and developing a skin cancer prevention campaign for Black Africans in South Africa**

While the incidence of skin cancer among people with deeply-pigmented skin (i.e. Black Africans) is relatively low, the five year survival rate after diagnosis is poor. Cutaneous melanoma in Black populations tends to manifest on sites not exposed to the sun such as the palms, soles of the feet and mucosal surfaces, and so information regarding lowering the cancer risk should be more aligned with secondary prevention (checking skin) than primary prevention (reducing UV exposure). Very little is known about the awareness and understanding of skin cancer, in this group, as well as actions taken to reduce this risk. CANSA, along with partners at the Medical Research Council have undertaken to conduct research to ascertain this. Data collection through a quantitative survey with over 1 200 Black South Africans from across of South Africa is currently underway (conducted through Nielsen) and will be used to inform further qualitative research and ultimately, development of a health campaign targeted at Black South Africans.

TYPE C RESEARCH: ENHANCING SERVICE DELIVERY

This is research conceptualised and conducted by CANSA, sometimes in collaboration with other institutions. Projects are focused on optimising services to cancer patients and addressing their needs.

- **IRONMAN** (International Registry for Men with Advanced Prostate Cancer) Project: Funded by the Movember Foundation, CANSA is co-ordinating South Africa's participation in a global observational study on advanced prostate cancer (overseen by the Prostate Cancer Clinical Trials Consortium) aimed at determining the best way to manage advanced prostate cancer. Medical history, treatment information, blood samples, and patient-reported outcomes are collected from all participants to investigate which treatment and care practices deliver the best outcomes. The study aims to recruit 5 000 men globally, 450 of whom will come from South Africa, recruited from five different clinical sites working closely with CANSA. We're excited to be involved and assisting address South Africa's highest incidence cancer in men. Ethical approval has been obtained at three of the five sites and contractual agreements signed at two to date.
- **Staff support project:** Many of our service delivery staff play a significant role in supporting those with and affected by cancer. This can at times be challenging work requiring considerable emotional input. CANSA recognises that for the service delivery team to be able to offer a high-quality, sustainable support service, it's important that they too are adequately supported. A study was initiated to assess the support needs of staff and intervene to offer support in a feasible, effective and sustainable way, working with two researchers experienced in working with organisations that offer compassionate work. Data collection is complete with

ten confidential in-depth qualitative interviews as well as a confidential online quantitative survey with 56 staff providing data for the needs-assessment. This informed the development of phase two of the project, an intervention for support that was piloted over a six-month period with two teams within CANSA, after which a quantitative and qualitative evaluation of the intervention was conducted. Data analysis has been completed and a project report has been finalised. This will be used to determine whether CANSA wishes to implement the intervention with staff across the organisation.

- **Cancer Stigma Project:** The stigma associated with cancer has been found to play a significant role in negatively impacting the psychosocial wellbeing of cancer patients, as well as cancer risk reduction behaviour and adherence to treatment. While there is research evidence of this internationally, this has not been examined in any detail in South Africa. The experiences of our Service Delivery team indicate that cancer stigma is a significant problem in many of the communities in which they work. CANSA launched a qualitative study in KwaZulu-Natal and Cape Town. A total of 40 interviews and six focus groups with cancer patients were conducted to explore experiences of stigmatisation, its impact, how people have coped and what their needs are for support. In addition, six focus groups were conducted with members of the public to explore from an external perspective why cancer is stigmatised. Data is currently being analysed and the results will be used to inform interventions to address stigma in the communities.
- **Evaluation of training for oncology registrars in palliative care:** In collaboration with UCT, CANSA co-funded a study led by Dr Rene Krause, Prof Jeanette Parkes, Dr Liz Gwyther, Dr David Anderson and Dr Nadia Hartman, to evaluate a palliative care module that was implemented

with oncology registrars at five universities across South Africa. The study is complete and will be written up for publication and findings presented at several conferences. The researchers now plan to make the course available through UCT and expand it in order to make it available to all universities (oncologist and surgical oncology fellows) and private oncologists. There will be a cost involved and the proposed model is that it is subsidised by including private oncologists paying for it and universities paying a global fee. The researchers are also working towards compulsory inclusion of this kind of training in the curriculum. Dr Rene Krause is also now writing her PhD protocol doing a realist evaluation on the integration of Palliative care into Groote Schuur Hospital and evaluating three strategies used.

TYPE D PROJECTS: COLLABORATIVE RESEARCH

These projects are funded by CANSA and usually take the form of a partnership between CANSA and one or more research institution with the objective of combining resources to achieve a common goal.

- **Vitamin D:** Determinants of serum 25-hydroxyvitamin D levels in adults in the Western Cape Province of South Africa: Vitamin D deficiency has been associated with an increased risk of breast, prostate and colorectal cancer. Exposure to solar radiation is a major source of Vitamin D production. Greater exposure is required by those with darker skin tones in order to produce Vitamin D. CANSA funded a study led by Janicke Visser at Stellenbosch University to determine Vitamin D levels of people with diverse skin tones and geographic regions in South Africa at two time points (Winter and Summer) in order to establish whether darker skin tones are at risk for Vitamin D deficiency and therefore at increased risk. Data collection and analysis is complete, and a manuscript is in preparation. A low prevalence of vitamin D deficiency was found amongst healthy young adult participants, despite low dietary vitamin D intakes. Significant relationships were found between serum 25(OH)D and gender, skin tone and vitamin D intake. Further research is needed particularly in high-risk groups. A journal paper has been published on this research and it has been presented at several conferences. Read more on www.cansa.org.za under research.

TYPE E PROJECTS

These projects are aimed at building the capacity of South African cancer researchers through funding or co-funding of symposia and congresses on cancer research as well as travel grants of researchers presenting at research conferences or attending training locally and internationally.

Travel grants were awarded to:

- **Dr Margaret Venter** – Palliative Care Education and Practice course at Harvard Medical School, Boston, USA
- **Dr Bianca Rowe** – Annual Society of Paediatric Oncology (SIOP) Conference in Kyoto, Japan
- **Prof Jeannette Parkes** – Annual Society of Paediatric Oncology (SIOP) Conference in Kyoto, Japan
- **Dr Lynn Edwards** – 20th World Congress of Psych-Oncology and Psychosocial Academy in Hong Kong
- **Linda Greeff** – 20th World Congress of Psych-Oncology and Psychosocial Academy in Hong Kong
- **Mukovhe Phanguphangu** – 34th World Congress of Audiology in Cape Town
- **Dr Gisela Kahl** – 6th International Symposium on Childhood, Adolescent and Young Adult Non-Hodgkin Lymphoma in Rotterdam
- **Janicke Visser** – ESPEN (European Society for Clinical Nutrition and Metabolism) Congress in Madrid, Spain
- **Dr Thurán Naiker** – Society for Neuro-Oncology in Sub-Saharan Africa meeting in Nigeria

Event grants were awarded to:

- **Dr Karl-Heinz Storbeck** – co-funding of the 17th International Congress on Hormonal Steroids and Hormones and Cancer in Stellenbosch
- **Dr Palesa Sekhejane and Dr Steven Mufamadi** – co-funding of the HSRC and Nabio Consulting Cancer Policy Dialogue 2018: Biomedical Innovation for Early Diagnosis and Treatment of Cancer

EVENTS AND PRESENTATIONS

Head of Research, Dr Melissa Wallace was invited to an event in April 2018, hosted by Stellenbosch University to acknowledge significant funders of research at the university.

She further presented at a UCT symposium entitled 'Beyond the metrics: measuring research impact'. UCT is considering alternate ways to evaluate the impact of research beyond academic publication, and invited research funders and other stakeholders to provide their perspectives.

Dr Melissa Wallace attended UICC's World Cancer Congress in October 2018, in Kuala Lumpur, Malaysia to present on 'Cancer-related stigma in South Africa: exploring beliefs and experiences among cancer patients and the general public.'

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RESEARCHER
QUOTES
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from Prof Francois van der Westhuizen

“This project opened up the opportunity to initiate the first cancer-based project within Human Metabolomics at North-West University. Post-graduate students working as research assistants and laboratory technicians had the ability to learn new technical skills.”

from Dr Georgia Schafer

“Importantly, all techniques learnt in Prof Schulz’s laboratory have now been successfully set up in our laboratory at UCT. Most of these techniques were either not available or underdeveloped in South Africa. Therefore, this project is an important contribution of knowledge transfer to South Africa.”

AG OETTLÉ MEMORIAL AWARD

The AG Oettlé Memorial award is presented in remembrance of the late Dr Oettlé, a cancer researcher and epidemiologist working in the South African Institute for Medical Research in Johannesburg in the 1960's, financed by CANSA. His research over 16 years strengthened the theory that environment may play a considerable role in causing cancer. He discovered an epidemic of oesophageal cancer in Africa and particularly the East Coast of South Africa. After his premature death, his family and colleagues created the Oettlé Memorial awards to be awarded by CANSA to recipients who had significantly contributed to cancer control in South Africa.

2018 OETTLÉ AWARD

The award was presented to Professor Jennifer Moodley, a Public Health Medicine physician with expertise in health systems research, epidemiology and public policy development. She is the Director of the Faculty of Health Sciences Cancer Research Initiative at UCT, leading the development of a comprehensive, integrated cancer research programme, promoting collaborative partnerships and supporting the translation of cancer research into clinical and public health benefit. She is also the Deputy Director of the UCT/SAMRC Gynaecology Cancer Research Centre.

Prof Moodley is a committed, highly regarded and socially responsive researcher. Her work focuses on cervical and breast cancer and includes epidemiological research on the association between HIV, HPV, and cervical cancer in South Africa, programmatic challenges in prevention of cervical cancer, research on the cost-effectiveness of the HPV vaccine, quality of life research and research to better understand patient journeys to cancer care. Prof Moodley has published more than 50 peer-reviewed articles on these topics.

Her commitment to social development and translating research in policy and practise is evidenced by her involvement and contributions to the development of national cancer policies. Namely her service as a technical consultant to the World Health Organization on the implementation of the HPV vaccine, her invitation to serve on the Ministerial Advisory Committee on the Prevention and Control of Cancer (MACC) where she chaired the MACC cancer research working group and her invitation to serve on the American Association for Cancer Research Regional Advisory Committee for Africa. In addition, she has made important contributions on cancer through arrangement of seminars open to the public, involvement with cancer non-governmental groups and interactions with the media.

Prof Moodley commits a significant amount of time to teaching and has developed a module as part of the UCT Masters in Public Health (MPH) on Cancer Prevention and Control, the first such module in the country. She has also convened courses to support translational cancer research for researchers from low and middle-income countries.

