

UP and SAACA launch oncology centre for animal treatment and research

Posted on **October 13, 2021**

The University of Pretoria's (UP) **Faculty of Veterinary Science** and the **Southern Africa Animal Cancer Association (SAACA)** have teamed up to create an oncology centre for clinical cases and research in animals.

At the end of 2020, founder and CEO of SAACA Munnik Marais approached the faculty with a proposal to join forces. Having spent many years fundraising for the Cancer Association of South Africa (CANSA), Marais wanted to create awareness of cancer in animals and encourage treatment and research. To achieve this goal, SAACA was created.

Dr Paolo Pazzi, Section Head of Small Animal Medicine at UP, heads the research aspect of the oncology centre. "The goal of this collaboration is to increase the faculty's capacity to treat cancer in animals," he said. "This will result in an increase in research in this field. It will allow for earlier diagnosis of cancer and a wider spectrum of effective treatment options for animals."

Dr Anri Celliers and Dr Varaidzo Mukorera, lecturers in Small Animal Internal Medicine, and Professor Gerhard Steenkamp, Section Head of Small Animal Surgery, head up the clinical side of the oncology centre, which is based at the faculty's Onderstepoort Veterinary Academic Hospital (OVAH). While there are specialist hospitals in South Africa that treat cancer in animals, OVAH is the only one with on-site specialist clinical pathologists/cytologists, and medical and surgical clinicians that work as a team to diagnose and treat cancers. Most patients are cats and dogs with cancer.



This cat was blind at the point of diagnosis but regained its sight after the first of four radiation treatments. Radiation therapy was performed at the Arcadia unit of Icon Radiotherapy.

"At the faculty, research in the field of oncology includes the investigation of a worm (*Spirocerca*) that can cause oesophageal cancer in dogs," Dr Pazzi explained. "The faculty has advanced

knowledge in the diagnosis of spirocercosis; the differentiation of benign and malignant spirocercosis; and identification of the surgical predictors of survival for neoplastic spirocercosis.” It can determine whether dogs with cancerous spirocercosis require surgery. “We research which clinical findings or blood work results would give us an indication of success of the surgery and long-term survival after surgery.”

Ongoing projects in the faculty include the investigation of blood and urine tests that can differentiate between localised cancer and cancer that has spread to other parts of the body. “Our aim at the oncology centre is to focus on common cancers such as mammary cancers as well as various carcinomas and sarcomas,” said Dr Pazzi. “Blood or urine tests will aid in the easier diagnosis and earlier treatment of cancers in animals. Other planned future studies will look at the role that certain blood cells play in the promotion or inhibition of cancer.”

To achieve this, the centre plans to employ more staff, enabling the faculty to accommodate more patients with cancer. “This will allow for increased research into cancer diagnosis and treatment,” Dr Pazzi said. “The clinic currently sees 10 to 30 cancer patients a month, but with the collaboration with SAACA, these numbers are predicted to double.”

In the near future, an electro-chemotherapy unit will be available at OVAH, which will allow for the treatment of localised skin tumours through a combination of chemotherapy and a local electrical current. This avoids the need for surgery or radiation therapy in many cases. “The centre will also acquire a new computed tomography scanner unit to help identify the spread of cancer to the lungs and other parts of the body, thereby improving diagnostics and ultimately patient quality of life,” Dr Pazzi said. To promote chemotherapy safety for patients and staff, a biological safety cabinet will also be necessary. Chemotherapy drugs will be prepared or mixed in this specialised unit before being injected into the patient; this will prevent contamination of the environment whenever chemotherapy drugs are handled.

“Early identification of cancer plays a vital role in the improvement of patient outcomes,” Dr Pazzi explained. “Owners should monitor their dogs and cats for any obvious lumps or bumps that may appear on the skin or in lymph nodes. We advise all pet owners to take their pets to a veterinarian or OVAH for evaluation if they are at all concerned.”

Dr Paul van Dam, Director of OVAH, said he was pleased with the collaboration with SAACA, which “will lead to benefits for the community and the co-creation of knowledge that can contribute to treating oncological conditions among animals”.

For more information on SAACA or to donate to the organisation, visit its [website](#).

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-Published by Hlengiwe Mnguni