Community Information Fact Sheet

ACRF grant to help WA Cancer Research by funding ACRF Cancer Imaging Facility

Where did the grant come from? This $2.4 million grant honours the memory of the late Mr Kevin McCusker who made a generous donation to Australian Cancer Research Foundation through his Will. Mr McCusker was a quiet and unassuming man of strong principles and deep feelings and his family told the ACRF he made this bequest because people he loved had died from cancer. Mr McCusker's donation will be used to help fund a state-of-the-art imaging facility to maximise WA's capacity to promote innovation in cancer research.

Why did WAIMR apply for funding for an integrated preclinical and clinical Cancer Imaging Facility in WA? To expand its preclinical and clinical cancer research program in WA, WAIMR sought an ACRF grant to establish the ACRF Cancer Imaging Facility and to equip the facility with a state-of-the-art imaging suite and cutting edge optical imaging endomicroscopes. In particular, this application sought to significantly expand the cancer imaging capability in WA with the addition of a microMagnetic Resonance Imaging (MRI), a multifunctional microPositron Emission Tomography (PET), Single-Photon Emission Computed Tomography (SPECT) combined with X-ray Computed Tomography (PET/CT/SPECT) scanner, together with additional cutting-edge confocal fluorescent imaging equipment which will be further developed by CMCA.

How can pre-clinical imaging help researchers find treatments for cancer in humans? Imaging for cancer management and diagnosis in humans is fundamental. Equally in pre-clinical models of cancer, it's a central part of cancer research. The small animal PET scanner will enable WAIMR researchers to image cancer progression in animals like never before, enabling them to monitor for the first time tumour development, angiogenesis, metastasis and response to novel therapeutics in a range of well-developed preclinical animal models.

Would WAIMR be able to achieve these outcomes without the support of the ACRF? No. These are very expensive items of equipment, and this is a once in a lifetime opportunity. Other grants don't come near this. There is no other facility in Australian that offers the infrastructure for cancer research like the ACRF.

What will this grant mean for cancer patients? It will mean that for the first time in WA researchers will be able to subject pre-clinical models of cancer to more intensive scrutiny and imaging and hopefully that will speed up progressions of new therapeutic advances with cancer. Pre-clinical models are essential for WAIMR researchers to trial new drugs and new ways of treating cancer. It will have a profound effect.

Will the new facility be limited to WAIMR staff? No. As well as WAIMR, the PET scanner will also be used by WA experts in their fields at the University of WA, QEII Medical Centre, Royal Perth Hospital, Princess Margaret Hospital, the Telethon Institute for Child Health Research, the Lions Eye Institute and Pathwest. There is currently no small animal PET scanner in Western Australia. It will drastically change the sort of pre-clinical analyses in animal models.

What impact is ACRF is having on cancer research in Australia? ACRF is absolutely essential. ACRF is filling a gap that no other organisation fills, which is core infrastructure. Core infrastructure is both 'bricks and mortar', as well as core, large cutting-edge pieces of equipment that are remarkably difficult to get any other way. The ACRF stands alone in this country. There is no other foundation that provides any large infrastructure.

How important is cancer research? Cancer is the leading cause of death in Australia with over 39,800 people deaths each year, in spite of a 30 percent improvement in survival over the last two decades. 1 in 3 Australian men and 1 in 4 Australian women will be directly affected by cancer before the age of 75. Cancer does not discriminate. It can, and does, affect people of all ages. WAIMR researchers are dedicated to their vision of a healthier future for humans across the globe and generous grants such as this funding from ACRF are hugely appreciated.