

## **GRIFFITH UNIVERSITY, Institute for Glycomics - close the gaps in sarcoma diagnoses and treatment to deliver novel diagnostic technologies and precision treatment options to improve patient outcomes.**

We are delighted to announce a major new partnership with Griffith University's Institute for Glycomics, a translational biomedical research Institute based on the Gold Coast with a focus on developing vaccines, diagnostics and personalised treatments for a wide range of cancers, infectious diseases and neurological disorders. The Institute for Glycomics is a flagship biomedical research institute in Australia and has a strong track record of inventing new medicines for diseases that don't currently have solutions - from discovery to human clinical testing.

Our partnership with the Institute is focused on a vital sarcoma research project titled: Developing a novel diagnostic and treatment options for Sarcoma. Their aim is to close current gaps in accurate Sarcoma diagnosis and precision treatment to deliver novel diagnostics and treatment opportunities that improve patient outcomes and survival. The term sarcoma summarises a large number of different cancers that arise in the bones and connective tissues such as fat and muscle. While it is considered a rare cancer in adults, **sarcoma is a prevalent cancer in children representing about 20% of all childhood cancer diagnoses.**

The sarcoma project is a three-year research program led by Institute for Glycomics Director Professor Mark von Itzstein AO, in collaboration with clinicians at the Perez Scremini Children's Hospital in Uruguay, where sarcoma is prevalent in children, with advice and importantly providing the research project with valuable clinical specimens not available in the quantity in Australia.

We, along with a global philanthropic foundation have linked arms on this important research program and wholeheartedly believe this partnership will propel progress in sarcoma research to deliver solutions to the disease. The Institute's world-leading expertise and technologies have been recently acknowledged through the awarding of an Australian Cancer Research Foundation (ACRF) grant and an Australian Lions Childhood Cancer Research Foundation (ALCCRF) grant.

The ALCCRF grant of \$800,000 supports this \$2.2 million project.

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### **Project Update June 2022**

#### **Linking arms with researchers at Griffith University's Institute for Glycomics tackling sarcoma with early detection and treatment options.**

Our aim is to close current gaps in accurate Sarcoma diagnosis and precision treatment to deliver novel diagnostics and treatment opportunities that improve patient outcomes and survival.

While it is considered a rare cancer in adults (1% of adult cancers), sarcoma is a prevalent cancer in children representing about 20% of all childhood cancer diagnoses.

The term Sarcoma summarises a large number of different cancers that arise in the bones and connective tissues such as fat and muscle. Depending on where they first occur in the body, the different types of Sarcoma differ significantly in their pathogenesis and thus, need to be considered as individual cancer types.

They are also often diagnosed late as many benign conditions exhibit similar symptoms. Hence, there is a great need for new ways to accurately diagnose and treat sarcomas early.

Through your generous support, Institute for Glycomics researchers will use world-leading technology to identify new treatment options and potential new diagnostic markers in a 3-year intensive program. The first six months of the program has been dedicated to extending our team of scientists and establishing new infrastructure and specialised instrumentation that will be a pivotal component of this sarcoma research and that was co-funded by a private trust. The Sarcoma program will be conducted in our world-leading ACRF International Centre for Cancer Glycomics facility. With particular regard to researcher recruitment and extending our team of dedicated scientists, we are delighted to report that a research fellow has now been appointed to the project through Australian Lions Childhood Cancer Research Foundation support, and advertising underway for additional technical staff.

Critical to the success of the project is the collaboration with our international partners. Our international partners include clinical oncologists with particular expertise in paediatric sarcoma, and are currently preparing an initial bank of patient samples to send to our team. Our imaging and mass spectrometry specialists will be processing and subsequently analysing the sarcoma tissue samples utilising the Institute's glycomics analytical platform, to identify what we term 'markers' for different sarcoma subtypes. New markers are important as they can form the basis of new ways to diagnose sarcoma disease. They can also provide clues as to why some patients respond to cancer therapy and why others don't. We are confident that our approach will help to deliver new solutions to diagnose and treat sarcoma.

We are deeply grateful to the Australian Lions Childhood Cancer Research Foundation, their community and our other support partners for supporting this critical research.

