UNSW Centre for Childhood Cancer Research

Partner of Children's Cancer Institute

UNSW AUSTRALIA

Children's Cancer Institute

Message from the Director

In Australia, cancer kills more children than any other disease.

The UNSW Centre for Childhood Cancer Research exists to provide major advances in childhood cancer research with the aim to save the lives of all children with cancer and eliminate their suffering. I am immensely proud to be its inaugural Director.

The launch of the Centre in 2015 was an exciting milestone for UNSW Australia and the Centre's key partner, Children's Cancer Institute. Now I look forward to seeing it become a vibrant hub to grow the next generation of childhood cancer researchers.

Our students will have an impressive range of important translational research projects to work on, access to state-of-the-art equipment and facilities, advice and mentoring from world-leading researchers, and career development opportunities to help them reach their potential. The new Centre builds on the track record of both organisations, UNSW Australia and Children's Cancer Institute, in training research leaders and innovators of the future.

Join us as we make new discoveries and take them from bench to bedside, out of the laboratory and into the clinic to make a real difference to the everyday lives of children with cancer and their families.

Professor Murray Norris AM

Purpose of the Centre

The UNSW Centre for Childhood Cancer Research was established in 2015. The Centre will be closely interlinked with Children's Cancer Institute, the only medical research institute in Australia solely dedicated to childhood cancer. Children's Cancer Institute is highly acknowledged and collaborates with all major international centres of excellence in childhood cancer research. The Centre is committed to saving the lives of all children with cancer and eliminating their suffering through world-class translational research.

Our People

Professor Murray Norris AM
Director

BSc ANU, MAppSc NSWIT, PhD UNSW

Deputy Director; Theme Co-Head, Molecular Targets and Cancer Therapeutics Theme; Group Leader, Molecular Oncology Group, Children's Cancer Institute

Professor Murray Norris AM is the inaugural Director of the UNSW Centre for Childhood Cancer Research and was one of the first three scientists at the Centre's partner Institute, Children's Cancer Institute, when its research laboratories opened in 1984. He leads the Molecular Oncology Group and was appointed Deputy Director of Children's Cancer Institute in 2000.

His research interests focus on utilising new molecular genetic technologies to improve the diagnosis and risk classification and treatment of childhood cancer, and he has been responsible for developing and implementing unique technology enabling the early prediction of relapse in children with acute lymphoblastic leukaemia. Professor Norris has an international research reputation in childhood neuroblastoma, particularly with regard to the molecular analysis of genes and their relationship with clinical features. He has spent over 30 years investigating childhood cancers at the molecular level and has undertaken extensive research into the characterisation of genes involved in mediating resistance to chemotherapeutic drugs in paediatric leukaemia and neuroblastoma. The development of new therapeutic approaches to treating cancers and the detection of minimal residual leukaemia are key areas of his research.

Murray has published more than 200 peer-reviewed papers and is a regular reviewer for several national and international grant-funding bodies as well as numerous international journals. He has an established record of state and national grant-funded research. He was appointed a Member of the Order of Australia in 2015 for significant service to medical research as a molecular biologist and through pioneering development of treatments for cancer in children.

Professor Richard Lock
Deputy Director

BSc UC Swansea, PhD University of London
Theme Head, Blood Cancers Theme; Group Leader, Leukaemia Biology Group, Children's Cancer Institute

Professor Richard Lock is the inaugural Deputy Director of the UNSW Centre for Childhood Cancer Research and was recruited as Head of Children's Cancer Institute's Leukaemia Biology Program in 1998 from the position of Associate Professor, Department of Medicine and Department of Biochemistry and Molecular Biology, University of Louisville, Kentucky, USA. Prior to his move, he had attained an international reputation in the cancer-related fields of cell cycle control, drug resistance and mechanisms of programmed cell death (apoptosis).

Since arriving at Children's Cancer Institute, Richard has successfully developed a clinically relevant laboratory model for the in vivo growth of human acute lymphoblastic leukaemia cells – the first such model in Australia. The model now plays a central role in the preclinical evaluation of anticancer agents and the identification of new targets for targeted therapies. Richard's contribution to cancer research has been reflected in his authorship of more than 180 peer-reviewed papers, including several in prestigious journals such as *Blood, Cancer Research, Cell Stem Cell, Clinical Cancer Research, The Journal of Biological Chemistry, Molecular and Cellular Biology*, and *Oncogene*. He is currently a National Health and Medical Research Council Senior Research Fellow, and has been awarded research grants by the National Cancer Institute (USA), the Cancer Council NSW (Australia), and the National Health and Medical Research Council (Australia). He is a Principal Investigator in the NCI-funded Pediatric Preclinical Testing Consortium, which aims to provide reliable preclinical testing data for paediatric drug candidates that can be used to inform new agent prioritisation decisions.

Dr Angelica Merlot

BMed USyd, PhD USyd
Project Leader, Tumour Biology and Targeting Group,
Children's Cancer Institute

Dr Angelica Merlot is a Project Leader in the Tumour Biology and Targeting Group. She moved to UNSW in May 2018 and joined Children's Cancer Institute after being awarded a Scientia Career Development Fellowship. Before this, she worked at the University of Sydney, developing anti-cancer drugs for aggressive, hard-to-treat cancers, such as pancreatic cancer.

Dr Merlot is the youngest ever recipient of a National Health and Medical Research Council (NHMRC) Fellowship. She currently concurrently holds three Fellowships (NHMRC, Cancer Institute NSW and Scientia) and multiple national research grants. In 2019, Dr Merlot was announced as the 2019 NSW Young Woman of the Year, Tall Poppy Award Winner and 2019 Premier's Early Career Researcher of the Year (Biological Sciences). She is a committed champion for women in science, medicine and technology, encouraging girls and women to pursue careers in research.

Our Research

Molecular Oncology

Professor Norris's Group utilises molecular genetic techniques to improve the diagnosis and risk classification of childhood cancers including leukaemia and neuroblastoma. A major area within the Group is the use of functional genomics and high-throughput screening strategies to detect novel molecular targets and relevant inhibitors.

CONTACT

Professor Murray Norris

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Leukaemia Biology

Leukaemias account for approximately one third of all paediatric malignancies and represent one of the most frequent causes of cancer-related deaths in children. The long-term goal of the Leukaemia Biology Group is to improve the treatment of children with leukaemia through the development of new therapies and their preclinical testing in clinically relevant experimental models.

CONTACT

Professor Richard Lock

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Tumour Biology and Targeting

Dr Merlot leads a project in the Tumour Biology and Targeting Group focused on (1) identifying drivers that cause resistance to cancer therapy, particularly the endoplasmic reticulum pathways; (2) understanding how the tumour microenvironment supports and protects cancer cells; and (3)

developing and validating novel targets, drugs and drug delivery systems to treat the deadliest cancers, including pancreatic and brain cancer.

CONTACT

Dr Angelica Merlot

amerlot@unsw.edu.au

Study with Us

At the UNSW Centre for Childhood Cancer Research, we are strongly committed to fostering the next generation of research leaders. As one of our students, you will be provided with personalised training in state-of-the-art facilities to bring out your best.

Students at the Centre enjoy a number of benefits:

- Access to state-of-the-art equipment and facilities
- Development opportunities including travel to conferences, skill building workshops and an annual student retreat
- Supplementary scholarship award of $6,000 per annum to 'top up' scholarships and assist with cost of living for all PhD students who hold a competitive scholarship (APA or equivalent)
- Annual competitive PhD excellence award of $10,000 per annum to the top ranking new PhD student each year.

For more information on studying with us, please contact our Researcher Development & Strategy Manager, Dr Amanda Philp education@ccia.unsw.edu.au

General Enquiries and Membership

CONTACT

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