



CHILDHOOD BRAIN CANCER SYMPOSIUM

Friday 18 August, 2017

Australian National Maritime Museum (ANMM) – Darling Harbour

Program Chairs: Geraldine O'Neill and David Ziegler

<p>8:50 am</p>	<p>Symposium opening by Professor David Currow, CEO Cancer Institute NSW, with introduction by Professor Glenn Marshall, Director of KCA.</p> <p>Session 1: Therapy</p> <p>Chaired by A/Prof Geraldine O'Neill <i>Group Leader, Kids Research Institute, The Children's Hospital Westmead and University of Sydney</i></p>
<p>9:00 - 9:30</p>	<p>Professor Stewart J Kellie – <i>Paediatric Oncologist and Neuro-oncologist at The Children's Hospital, Westmead, Sydney and Clinical Professor in the Discipline of Child and Adolescent Health at the University of Sydney</i></p> <p>A comprehensive clinical overview and the state of play of current treatment</p> <p>Professor Stewart J Kellie was the Chairman of the 16th International Symposium on Pediatric Neuro-Oncology (ISPN0) hosted in Singapore in July 2014. He will provide an overview of the recent advances and challenges in paediatric neuro-oncology.</p>
<p>9:30 - 10:30</p>	<p>Professor Frank Winkler – <i>Professor of Experimental Neuro-oncology, Department of Neuro-oncology, University of Heidelberg, and the German Cancer Research Center (DKFZ), Heidelberg, Germany.</i></p> <p>Gliomas as malignant organs: new insights into brain tumor progression and therapy resistance</p> <p>Professor Frank Winkler is a professor of experimental neuro-oncology, using mice models, and an attending physician. The recent discovery of ultra-long and thin membrane protrusions of glioma cells, called tumor microtubes (TMs), has added to our understanding of these incurable tumours. We have demonstrated before that this TM network helps glioma cells to detect damage and repair it, and to withstand the cytotoxic effects of radiotherapy. New data will be presented on how 1p/19q intact astrocytomas (including glioblastomas) exploit neurotrophic pathways to form neurite-like extensions that give rise to functional TMs. Finally, translational research will be presented that aims to target TM formation and function.</p>
<p>10:30 - 11:00</p>	<p>MORNING TEA</p>
	<p>Session 2: New insights into brain tumour genomics and novel drug therapies</p> <p>Chaired by Dr Maria Tsoli <i>Senior Research Officer, Targeted Therapies, Children's Cancer Institute, Sydney</i></p>
<p>11:00 - 11:30</p>	<p>Dr Bryan W Day – <i>Team Head, Translational Brain Cancer Research Laboratory, QIMR Berghofer Medical Research Institute, Brisbane</i></p> <p>Eph receptors as targets for therapy in paediatric medulloblastoma</p> <p>Dr Day's research is on understanding the molecular mechanisms which are responsible for the initiation and recurrence of brain cancers and to develop and test new effective therapies, including the characterisation of the receptor EphA3 as a therapeutic target in brain cancer.</p>
<p>11:30 - 12:00</p>	<p>Professor Brandon Wainwright – <i>Director, Institute for Molecular Bioscience (IMB), The University of Queensland.</i></p> <p>A druggable-genome approach to medulloblastoma identifies new therapies</p> <p>Professor Wainwright and colleagues identified the first gene known to cause any brain tumour (Ptch1) and focuses his research efforts on understanding the biology of medulloblastoma and how that may lead to new therapeutics. Here he will focus on the application of cyclin dependent kinase inhibitors as a new class of therapeutic for paediatric brain cancer identified through genomic studies, and trials utilising patient-derived xenografts from multiple medulloblastoma sub groups.</p>
<p>12:00 - 12:30</p>	<p>Dr Dong Anh Khuong-Quang – <i>Herman Clinical Fellow at the University of Melbourne in the Children's Cancer Centre, The Royal Children's Hospital, Melbourne and the Cancer Group at the Murdoch Children's Research Institute, Melbourne.</i></p> <p>Integrative analysis of transformation in paediatric low grade glioma</p> <p>Dr Khuong-Quang is a clinician-researcher with a special focus on the genetic and epigenetic alterations of paediatric gliomas. In this session, she will focus on the alterations occurring in low-grade gliomas that have transformed into a higher grade tumour.</p>

12:30 - 1:00	<p>Professor Terrance Johns –<i>Director Brain Cancer Discovery Collaborative, Monash University, Melbourne.</i></p> <p>Targeting the OLIG2 transcription factor in brain cancer</p> <p>Professor Johns has had a long and successful career in brain cancer that focuses on driving new therapeutic approaches into the clinic. His antibody, mAb806 (now called ABT-414), is in Phase III clinical trial for the treatment of high grade glioma.</p>
1:00 - 2:00	LUNCH
<p>Session 3: Causes and effects – origins and impact of childhood brain tumours</p> <p>Chaired by Dr Federica Saletta <i>Research Officer, Molecular Oncology, Kids Research Institute, The Children's Hospital Westmead</i></p>	
2:00 - 2:30	<p>Professor Bernard Stewart – <i>Conjoint Professor School of Women's & Children's Health University of New South Wales and South-East Sydney Local Health District Public Health Unit.</i></p> <p>Coping with fake news about mobile phones and power lines</p> <p>Professor Stewart has assisted WHO concerning cancer control for three decades by evaluating carcinogenic risks including those attributable to eating meat and to diverse pollutants. Here he will apply comparable scientific scrutiny to assess concerns about cancer causation by electromagnetic fields.</p>
2:30 - 2:40	<p>Mr [REDACTED] – <i>Parent of a child treated for brain cancer</i></p> <p>A parents experience – life during and beyond brain cancer treatment</p> <p>[REDACTED] child, Alexander, was diagnosed with a medulloblastoma when he was just 6 months old. He was treated with intensive chemotherapy, which was successful in treating the tumour but resulted in both short and long term toxicity. Alexander was also found to have an underlying germline mutation that predisposed him to getting his tumour. David will discuss the journey for the parent of a child with medulloblastoma.</p>
2:40 - 3:00	<p>Dr Cinzia De Luca – <i>Senior Clinical Neuropsychologist, Children's Cancer Centre, The Royal Children's Hospital and Honorary Research Fellow, Murdoch Childrens Research Institute, Melbourne and University of Melbourne.</i></p> <p>Cognitive late effects in survivors of a paediatric brain tumour</p> <p>Dr De Luca, a member of the ANZCHOG psycho-oncology research group, will present local data on the cognitive, behavioural and academic challenges facing survivors of a brain tumour, along with current international guidelines for monitoring these outcomes and attempts at cognitive remediation.</p>
3:00 - 3:20	<p>Dr Joanna Fardell – <i>Deputy Program Leader, Behavioural Sciences Unit, Kids Cancer Centre, Sydney Children's Hospital and Post-doctoral Research Fellow, Faculty of Medicine, University of New South Wales.</i></p> <p>Psychosocial and quality of life outcomes of long term survivors of childhood brain cancer</p> <p>Dr Fardell's research focuses on psychosocial, cognitive and educational outcomes of children with cancer. Here she presents data from the Australian and New Zealand Long-term Follow-up Study on the psychosocial and quality of life outcomes of children surviving brain cancer.</p>
3:20 - 3:45	AFTERNOON TEA
<p>Session 4: Precision Medicine</p> <p>Chaired by A/Prof David Ziegler <i>Group Leader of Targeted Therapies, Children's Cancer Institute, Kids Cancer Centre, Randwick and University of New South Wales</i></p>	
3:45 - 4:05	<p>Dr Loretta Lau – <i>Clinical Research Fellow, Sydney Children's Hospital, Randwick and Children's Cancer Institute and Conjoint Senior Lecturer at University of New South Wales.</i></p> <p>Personalised medicine trial for children with high risk brain tumours – results of a pilot study</p> <p>Dr Lau is a clinician-scientist with expertise in cancer genomics. In this session, she will present the results of a pilot study which investigated the feasibility of developing a personalised therapy program with a comprehensive platform for children with high-risk brain tumours.</p>
4:05 - 5:05	<p>Associate Professor Mark Kieran – <i>Associate Professor of Pediatrics, Harvard Medical School and Director, Pediatric Medical Neuro-Oncology, Dana-Farber-Boston Children's Cancer and Blood Disorders Center, Boston, USA.</i></p> <p>Biology driven treatment and re-classification of gliomas in the era of precision medicine</p> <p>Dr. Kieran's particular focus has been on the development of novel agents in the treatment of paediatric tumors of the brain and spine. He is a recognised leader in the development of antiangiogenic agents (TNP470, thalidomide, AZD2171, cellingitide, metronomics), targeted approaches to paediatric low-grade gliomas signaling through the ras/ raf pathway as well the epigenetic and signal transduction pathways that drive diffuse intrinsic pontine gliomas (DIPG). Here, he will discuss biology driven treatment and re-classification of gliomas in the era of precision medicine.</p>
5:05 - 6:00	REFRESHMENTS & NETWORKING