WORKSHOP OUTLINE
Acute Interventions For Traumatic Brain Injury.
Assoc Prof Warwick Butt, Director, Intensive Care, Royal Children’s Hospital
Acute TBI is a leading cause of morbidity and mortality in developed countries. It is a complex condition complicated by secondary cerebral injury due to hypoxia, hypotension and cerebral oedema. Many strategies try and minimise these secondary insults; these strategies include rapid resuscitation and transport of injured patients to major trauma centres. Mechanisms of injury between adults and children are different with adults often having polytrauma whilst children have isolated TBI. After initial stabilisation, management usually follows a clear clinical protocol which has been established by each major trauma centre. First line treatments are common to all; discordance exists with major second line treatments which include the role of complex multimodality monitoring (intra-cerebral pressure, intra-cerebral PO2/temperature, intra-cerebral metabolism, cortisol, EEG, autoregulation) the role of osmotherapy, hypothermia, decompressive cranectomy, and barbiturate coma. Experimental therapies such as erythropoietin are in clinical trials.

What Neuroimaging Has Told Us About The Consequence Of ABI In Children.
Dr Marc Seal, Group Leader, Developmental Imaging, Murdoch Childrens Research Institute
The development of sophisticated non-invasive neuroimaging techniques such as magnetic resonance imaging (MRI) has made it possible to track brain development in children across the lifespan. An overview will be provided of what these techniques have told us about outcome in children with ABI.

Parental Concerns And Rehabilitation Received In The 12 Months Following Diagnosis Of Stroke In Children.
Dr Anne Gordon, Paediatric Occupational Therapist, Paediatric Neuroscience Department, Evelina Children’s Hospital, London
Emerging evidence suggests that while most children will regain independent mobility after a stroke, more subtle yet disabling consequences arise in the long-term. These may include behavioural, social-emotional, executive functioning and fine motor sequelae. A prospective longitudinal study of 27 children (6 neonates) in the 12 months following diagnosis of stroke was undertaken. The study aimed to measure and describe the rehabilitation services received, and child and parent concerns regarding health and development. While parents of neonates had few concerns about their child’s health and development, parents of the older children had multiple concerns that focused initially on motor skills and in subsequent months related more to behavioural, emotional, language and learning skills. Location and intensity of intervention varied widely. These study findings reinforce the need for ongoing monitoring of the paediatric stroke population to meet their changing needs long-term, and flexibility in the nature and location of rehabilitation service delivery to address concerns across multiple health domains.

KEYNOTE ADDRESS
Family Participation In The Rehabilitation Of The Child With Brain Injury.
Professor Lucia Willadino Braga, President, SARAH Network of Neurorehabilitation Hospitals, Brazil
Studies have shown that the family’s participation in the neurodevelopment and rehabilitation of their child with brain injury yields better outcomes than programs that are conducted exclusively by professionals in a clinical setting. Families play a natural role in the development of their child, but need to be informed, guided, and empowered to adequately administer the activities and exercises that maximize the child’s potential. Parent groups and instructional meetings led by trained professionals provide some of the much-needed support and instruction that enables family members to actively – and effectively – participate in the child’s neurodevelopment and rehabilitation, thereby generating important dividends to the humanization of the child’s treatment. The professional’s roles, as well as new technological advancements, tests, measures and other tools, when adequately employed, are essential, and will also be addressed within the scope of humanizing the child’s neurodevelopment and rehabilitative process.
ABOUT THE PRESENTERS

**Associate Professor Warwick Butt** graduated medicine from University of Melbourne in 1976, trained in Paediatrics in Melbourne and achieved full fellowship in 1982. Critical care training in Melbourne and Toronto, Canada and returned to become a consultant in ICU at Royal Children’s Hospital, Melbourne in 1986. Associate Professor Butt developed extracorporeal technology in children with the start of haemofiltration and plasma filtration in 1987, and extracorporeal membrane oxygenation in 1988. He became a consultant at ICU, Alfred Hospital in 1999 and was appointed to Director of the Intensive Care Unit at the Royal Children’s Hospital in early 2011. His research interests include extracorporeal life support, sepsis, neurotrauma and outcome of critical care. He has published/presented over 300 scientific communications, invited speaker to state, national, international and world critical care and anaesthesia conferences. He is on the editorial board of 3 journals and reviewer for 9 major critical care and paediatric medicine journals.

**Dr Marc Seal** is Group Leader of the Developmental Imaging research group at the Murdoch Childrens Research Institute. In this role he is responsible for coordinating and facilitating research utilising the MCRi Research MRI Scanner and supervises a multidisciplinary team of clinicians, MRI technologists and neuroscientists. He is currently involved in several ongoing studies of neurodevelopment and holds a joint appointment as a Senior Research Fellow in the Department of Paediatrics, the University of Melbourne. Dr Seal has a long-standing interest in neurodevelopment and cognitive neuroscience.

**Dr Anne Gordon** is a paediatric occupational therapist currently working at the Evelina Children’s Hospital in London in the paediatric neuroscience department. Anne’s clinical and research interests are in paediatric neurological conditions, particularly congenital and acquired brain injury, and the evaluation of functional disabilities longitudinally and in response to interventions. Her recent PhD study was a prospective longitudinal study of health and development in the 12 months following diagnosis of stroke in children.

**Anne Kissane** is a Physiotherapist who is currently undertaking PhD research investigating mobility and physical activity outcomes following childhood brain injury. Anne has 15 years of clinical experience providing rehabilitation for children and adolescents with brain injury including 10 years at the Royal Children’s Hospital, Melbourne and the Victorian Paediatric Rehabilitation Service. She has particular interest in the development and rehabilitation of physical skills required for school-aged children to participate in playground and sporting activities.

**Dr Angela Gent** is a psychologist and researcher with an interest in understanding both the positive and negative consequences of paediatric illness, injury and disability for all family members, but particularly for siblings where evidenced-based approaches to addressing their unique needs are lacking. Angela is a Lecturer in psychology at the University of Ballarat and has experience working with children and adolescents living with chronic illness and disability and their families, in both clinical and community settings.

**KEYNOTE SPEAKER**

**Professor Lucia Willadino Braga** has been working in the field of Neuropsychology for over 30 years. Her focus has been on the neurorehabilitation of children with brain injury and over the last decade her clinical and research work has branched out to include studies in the neurosciences, incorporating tools such as functional MRI and Gait laboratory to help improve understanding of the brain post-injury. A main goal of her work is to improve the quality of life of children with BI and their families, and has spent many years designing approaches and techniques that aim at actively involving families and caregivers in the rehabilitation and neurodevelopment of children with BI. Professor Braga is currently President of the SARAH Network of Neurorehabilitation Hospitals, a member of its Board of Governors, Associate Dean of the SARAH University for Rehabilitation Sciences, Director of SARAH’s Neuropsychology Department and founder of its Neuroscience Research Programs in Rio de Janeiro and Brasilia. She is on a number of editorial boards, and has published several books, book chapters and articles in various peer review journals. In addition to overseeing the daily executive and administrative operations of the nine hospitals of the SARAH Network, Dr. Braga is also active in clinical and research activities with local and international institutions and universities.

**Meisha Clark** is a Social Worker with over 12 years experience both nationally and internationally working with vulnerable children, young people and their families in the area of trauma and grief. She currently works within the Victorian Paediatric Rehabilitation Service (VPRS) at the Royal Children’s Hospital. Meisha was awarded the Royal Children’s Hospital Brainwave Travel Scholarship in 2009 to attend and present at the International Brain Injury Association’s Eighth World Congress on Brain Injury in Washington, USA. The research investigated the experience and impact upon caregivers when caring for a child with an acquired brain injury. Meisha’s clinical interest is providing therapeutic family work surrounding acquired childhood injury and illness and the process of adjustment. Meisha has an interest in enhancing the communication between family members and the treating teams involved in a hospital setting. She is currently completing her Masters of Clinical Family Therapy at the Bouverie Centre, Latrobe University Melbourne.

**Dr Lynne McKinlay** is the Director of Rehabilitation Services at the Royal Children’s Hospital, Brisbane, Queensland. The Department includes a range of statewide services including the Queensland Paediatric Rehabilitation Service, the Queensland Cerebral Palsy Health Service and the Queensland Children’s Gait Laboratory. In 2006, the clinical service was strengthened by the establishment of the Queensland Cerebral Palsy and Rehabilitation Research Centre, a research centre in the School of Medicine, The University of Queensland.

Dr McKinlay has dual specialist qualifications in Paediatrics (1995) and Rehabilitation Medicine (2001). In 2002, she won a Churchill Fellowship to travel to North America to investigate systems of rehabilitation care for children. Her clinical interests include acquired brain injury in childhood, cerebral palsy and childhood limb deficiency and amputation. She has a particular interest and experience in the development of new models of rehabilitation care for children, with the development of clinical practice within a framework and team culture that supports active, high quality research.

**Shifting The Focus Of Rehabilitation: Therapists, Children And Families Working Together.**

Tuesday, 15th May, 2012
Ella Latham Auditorium,
Ground Floor, Royal Children’s Hospital
Flemington Road, Parkville
8.15 am – 4.15 pm
REGISTRATION
Registrations close: 1st May, 2012
Fees: $200 ☐  $100 ☐ (Full time students/staff)

Name: ____________________
Position/discipline: ________________________
Organisation: ________________________
Address: ________________________

Telephone: ________________________
Email: ________________________

PAYMENT DETAILS:
☐ I enclose a cheque/money order made payable to: Murdoch Childrens Research Institute
☐ I authorise payment from my credit card for the amount of $________: 

☐ VISA ☐ Mastercard ☐ American Express

Card number  ___________ ___________ 
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Card holder's name (as shown on card) ________________________

Expiry date  ____/____

Signature ________________________

☐ RCH tour (please tick if you are interested in a tour of the Hospital during lunch)

Mail to: Mary Iliadis, Child Neuropsychology, 4 West, Murdoch Childrens Research Institute, Flemington Road, Parkville VIC 3052
Email to: mary.iliadis@mcri.edu.au
Murdoch Childrens Research Institute
ABN 21 006 566 972 (this registration form becomes a tax invoice upon receipt of payment)