





7–8 November UNSW Sydney

Paediatric Precision Medicine: Advancing research and patient care

11.15 Treatments for those who have none platform:

PROGRAM SUBJECT TO CHANGE

Thursday 7 November 2024

Thursday / November 2024						
08.00 Registration desk open						
	08.00 - 08.45	Arrival tea and coffee				
	08.45 - 09.00	Conference Opening, Luminesce Alliance Chair Ms Kathryn Greiner AO				
		Room: Leighton Hall				
		Welcome to Country, Aunty Maxine Ryan, La Perouse Local Aboriginal Land Council				
	09.00 - 09.02	Ms Kathryn Greiner AO - Introduction of Keynote Speaker				
	9.02	2 Keynote presentation				
		NSW Health Research and Innovation Strategy				
		Dr Kim Sutherland, OHMR, NSW Health				
	9.37	Perspectives from Family Members				
		Interview Session: Mrs Emma Maly and A/Prof Wendy Gold, University of Sydney				
	09.54	SESSION 1 - Advanced Therapeutics	Session sponsor			
		Chair: Adj A/Prof Paula Bray, Sydney Children's Hospitals Network				
	09.56	Presentation	Pizer			
		The Kids Advanced Therapeutics Odyssey - Charting				
		Dr Michelle Lorentzos, Sydney Children's Hospitals Netv	vork			
	10.06					
		Opportunities and Challenges for Advanced Therapeutics: clinical translation, access, regulation, commercial and funding landscape				
		Facilitator: Ms Lani Attwood, Sydney Children's Hospitals Network				
		Panel members: Dr Michelle Lorentzos, Sydney Children's Hospitals Network				
		Prof Ian Alexander, Children's Medical Research Institu	ute			
		Dr Paul Fennessy, Paul Fennessy Advisory				
		Ms Vanessa Fitzgerald, NSW Health				
	10.45 - 11.15	Morning tea Sponsored by 1	NOVARTIS			
	11.15 - 13.00	SESSION 2.1 - Precision Therapy for Cancer	SESSION 2.2 - Conference Abstracts Presentations			
		Therapeutic and Innovative Applications Session Sponsor	Room: Tyree Room			
			Chair: Dr Laura Fawcett, Sydney Children's Hospitals			
		∭ • EQUINIX	Network			
		Poom: Loighton Hall				
		Room: Leighton Hall Chair: Prof Michelle Haber AM, Children's Cancer				
		Institute				
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11.17

Keynote Presentation

	The Molecular Characterisations Initiative: precision	from Western Australia to nationwide - 100	
	diagnosis for paediatric cancers	Dr May Aung-Htut, Murdoch University, Centre for Molecular Medicine & Innovative Therapeutics	
	Prof Elaine Mardis, Institute for Genomic Medicine at		
11.52	Nationwide Children's Hospital Setting the Australian scene: what is ZERO?	11.30 Testing gene replacement therapy in retinitis	
	Utilising precision data to drive therapeutic	pigmentosa and Leber congenital amaurosis - 101	
	recommendations and to innovate discoveries	Dr To Ha Loi, Children's Medical Research Institute	
	Prof Michelle Haber AM, Children's Cancer Institute		
11.57	Translational Tumour Biology – utilising Cas13 technology to identify therapeutic targets using a	11.45 Pre-natal AAV gene therapy for HBSL disease in Dars1 transgenic mice - 102	
	molecular biology approach	Miss Elena Venuti, UNSW Sydney	
	A/Prof Paul Ekert, Children's Cancer Institute	Pilos Liena Venuti, ONSW Sydney	
12.10	Innovation driving precision drug targeting	12.00 Gene Therapy for Brittle Bone Disease - 103	
	discoveries - translating ideas from genetic	A/Prof Aaron Schindeler, Sydney Children's Hospitals	
	disease into cancer	Network	
	A/Prof Antoine de Weck, Children's Cancer Institute		
12.23	Utilising high-throughput drug screening for	12.15 PeptAlde: Accelerating Antimicrobial Peptide	
12.23	therapeutic and innovative outputs	Discovery Using Al Ensemble Techniques - 104	
	Dr Gabor Tax, Children's Cancer Institute	Ms Lauren Lu, Children's Medical Research Institute	
12.36	Introduction from Mark Cowley to Kieran Habojan, Equinix		
12.40	Panel discussion: Transitioning precision therapy	12.30 Modelling PROM1 retinal disease in a mouse model	
	research to standard clinical care	and human retinal organoids - 105	
	Facilitator: Prof Elaine Mardis, Institute for Genomic Medicine at Nationwide Children's Hospital	Dr William Yates, Children's Medical Research Institute	
	Panel members:	12.45 Using behavioural theories to implement novel	
	A/Prof Paul Ekert, Deputy Director - Research	communication resources for healthcare profession	
	Themes, Children's Cancer Institute	-106	
	Prof David Ziegler, Sydney Children's Hospitals Network	Miss Amber-Marie Firriolo, Behavioural Sciences Unit (UNSW)	
	Prof Ian Street, Director, Therapeutic Innovations for Kids (THINK), Children's Cancer Institute		
	A/Prof Ness Tyrrell, Children's Cancer Institute		
13.00 - 14.00	Lunch Sponsored by U NO	VARTIS	
14.00 - 15.30	SESSION 3.1 - Functional Genomics and Precision	SESSION 3.2 - Innovation and Commercialisation	
	Therapy: Cell And Gene Therapy Advancements: From Bench to Bedside	Opportunities: Paediatric Cancer Drug Discovery Innovation and the Road to Commercialisation	
	Session Sponsor	Room: Tyree Room	
Session Sponsor		Chair: Emeritus Prof Richard Henry AM, UNSW Sydney	
	THE UNIVERSITY OF SYDNEY		
	Room: Leighton Hall		
	Chair: Prof Roger Reddel A0		
14.02	Cell therapy pipeline, past, present, and future success	14:02 Why is novel drug discovery needed for paediatric cancer?	
	A/Prof Anai Gonzalez-Cordero, Children's Medical Research Institute	Dr Emily Mould, Children's Cancer Institute.	

14.17 Developing New Therapeutics for Kids with

Prof Ian Street, Children's Cancer Institute

Cancer

14.15

and beyond

The world of avatar technology for cystic fibrosis

Dr Shafagh Waters, UNSW Sydney

14.28 Case study: Rett syndrome - from diagnosis to treatment A/Prof Wendy Gold, University of Sydney 14.41 Overcoming the challenges posed by pre-existing immunity to AAV viral vectors A/Prof Grant Logan, Children's Medical Research Institute

14.32 What are the challenges in finding novel drugs for paediatric cancers?

A/Prof Antoine De Weck, Children's Cancer Institute

14:55 **Panel Session**

The Family Journey: Challenges and Opportunities in Rare Genetic Disease Care

Facilitator: A/Prof Wendy Gold, University of Sydney

Panel members:

Mr Brett Anslow, Parent Lauren Jensen, Parent Ms Kris Pearce, Parent and Child Unlimited Director

A/Prof Greg Arndt, Head of Drug Discovery Biology, THINK, Children's Cancer Institute

Overcoming the roadblocks and achieving a

Facilitator: Emeritus Prof Richard Henry AM

Prof David Ziegler, Sydney Children's Hospitals Network

sustainable model of paediatric cancer drug discovery

Dr Julia Warning, NSW Health

Dr Jess Smith, Brandon Capital Partners

b NOVARTIS 15.30 - 16.00 Afternoon tea Sponsored by 16:00 - 17:30 SESSION 4.1 No one left behind: truly engaging families in precision medicine Room: Leighton Hall Chair: Prof Claire Wakefield, UNSW Sydney 16.02 Transforming patient care through genuine partnerships with families in precision medicine Ms Kris Pierce, Child Unlimited 16.17 Psychosocial Enabling Platform - purpose, current and future activities Dr Kate Hetherington, UNSW Sydney 16.32 Psychosocial Precision Medicine - Addressing the Social Determinants of Health Prof Sue Woolfenden, Sydney Local Health District and University of Sydney 16.47 **Panel Session** Doing a better job of communicating with families: addressing challenges and driving solutions Facilitator: Prof Claire Wakefield Panel members: Emeritus Prof Les White, Cancer Institute NSW Ms Kris Pierce, Child Unlimited Ms Seaneen Wallace, Sydney Children's Hospitals Network Dr Clarissa Schilstra, UNSW Sydney 17.12 Rapid Fire Presentations (5 minutes each) Adapting SIBS-ONLINE for Australian siblings of patients with genetic epilepsy - 107 Dr Lauren Kelada, UNSW Sydney Partnering with consumers to advance research and

impact for inherited retinal diseases - 108

SESSION 4.2 Innovation and Commercialisation **Opportunities**

Room: Tyree Room

14.47 Panel Session

and commercialisation.

Panel members:

Chair: Ms Lani Attwood, Sydney Children's Hospitals

Network

16:00 NAT Network - Non-animal technology network

Dr Shafagh Waters, UNSW Sydney

16:15 Health biobanking in NSW- maximising efficiency and research support

Prof Jennifer Byrne, NSW Health Pathology

16:30 Clinical trials and commercialisation

Anne O'Neill, Director, Enterprise, International Partnerships and Clinical Trials, NSW Health

16:45 AAV development and translation

A/Prof Leszek Lisowski, Children's Medical Research Institute

17:00 Functional Genomics Enabling Platform Showcase: Facility, Laboratory Services, and Equipment to Deliver New Research Capacity

Josh Studdert, Children's Medical Research Institute



Innovation for Children's Health





7–8 November UNSW Sydney

Paediatric Precision Medicine: Advancing research and patient care

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08:00 Registration desk open

08.00 - 08.45 Arrival tea and coffee

08.45 - 10.30 SESSION 5.1 Precision medicine informed by real world data

Session Sponsor



Room: Leighton Hall

Chair: Dr Teresa Anderson AM, Chief Executive,

SDPR Implementation Authority

08.49 Practicalities of using real-world electronic health data for research: insights from the UK, Great Ormond Street Hospital clinical informatics research program

Prof Neil Sebire, Great Ormond Street Hospital

Institute of Child Health

Advanced genome and transcriptome analytics using comprehensive molecular profiling techniques accelerating the uptake of precision

medicine

09.26

A/Prof Mark Cowley, Children's Cancer Institute

09.37 Accessing, extracting and interpreting eMR data

Prof Tom Snelling, University of Sydney

09.50 Kids Link: Utilising data linkage to advance datadriven healthcare to strengthen our health system

Prof Natasha Nassar, University of Sydney

10.00 NCI Australia's Precision Medicine Infrastructure and Clinic Genomics Services

Dr Warren Kaplan, NCI

08.45 - 10.30

SESSION 5.2 Kids Advanced Therapeutics Pipeline N=1 clinical trials in paediatric advanced therapies

Room: Tyree Room

Chair/Facilitator: Adj. A/Prof Paula Bray, Sydney

Children's Hospitals Network

The session will explore the opportunities and challenges of N=1 clinical trials in paediatric advanced therapies, including clinical translation, patient access, ethical considerations, and scientific innovations

Panel members:

Dr Andrea Perez-Iturralde, Children's Medical Research Institute

Prof Adam Jaffe, Sydney Children's Hospitals Network

Dr Richard Webster, Sydney Children's Hospitals Network

Dr May Aung-Htut, Murdoch University

A/Prof Sarah Garnett, Sydney Children's Hospitals Network

Ms Kris Pierce, Child Unlimited

10.10	Panel Session		
	Harnessing real-world data for patient benefit		
	Facilitator: Dr Teresa Anderson AM, Chief Executive, SDPR Implementation Authority		
	Panel members:		
	Prof Neil Sebire, Great Ormond Street Hospital Institute of Child Health		
	A/Prof Mark Cowley, Children's Cancer Institute		
	Prof Tom Snelling, University of Sydney		
	Prof Natasha Nassar, University of Sydney		
10.30 - 11.00	Morning tea and Poster Presentations Sponsored by	Roche	
	Posters:		
	P101 Steps to resolution of variants of uncertain significa	nce in RPE65	
	Dr Steven Eamegdool, Children's Medical Research Ins	titute	
	P102 Genetic editing applications for variant classification	n and therapy development for cone-rod dystrophies	
	Miss Reeva Nadkar, Children's Medical Research Institu	ute	
	P103 Estimating population prevalence of rare diseases in	children using administrative health data	
	Dr Carolyn Arico, The University of Sydney		
	P104 Systematic review of population-based studies inve	stigating rare diseases in children	
	Dr Carolyn Arico, The University of Sydney		
	P105 AAV-mediated DARS1 gene replacement in preclinical models of the leukodystrophy HBSL		
	Miss Elizabeth Kalotay and Dr Dominik Fröhlich, UNSW Sydney P106 Preclinical assessment of gene therapy for RARS2-related early onset epileptic encephalopathy		
	Ms Puja Thapa, The University of Sydney		
	P107 PRECISE - Co-designing a genomics and precision medicine program for primary care		
	Dr Alan Ma, The University of Sydney and Sydney Children's Hospitals Network		
	P108 Newborn Screening for Duchenne muscular dystrophy: Development of a scoping study		
	Miss Sarah Shin, Sydney Children's Hospital Network		
	P109 From recommendation to access: Improving procurement of precision-guided treatments with		
	implementation science		
	Mr Patrick Nay, Kids Cancer Centre, Sydney Children's Hospital		
	P110 Co-developing positive psychology resources with caregivers of children with developmental epileptic		
	encephalopathies		
	Dr Suzanne Nevin, UNSW Sydney		
	P111 A pilot study of creating a long-term follow-up clinical registry and biorepository of patients undergoing		
	cell and gene therapies Dr Laszlo Irinyi, NSW Health Pathology P112 Gene therapy proof-of-concept for spastic paraplegia 56		
	Miss Richa Chaluvadi and Dr Dominik Froehlich, UNSW	· ·	
11.00-13.00		- 13:00	
	Delivering outcomes focused sustainability for children in the era of precision medicine	ION 6.2 Conference Abstracts Presentations	
	·	· Tyree Room	
	Room: Leighton Hall Room: Tyree Room Chair: Adi A/Prof Cathryn Cox PSM, Sydney Chair: Dr Radoslaw (Radek) Szmyd, Children's Me		
		rch Institute	
11.02	health services innovations at scale: challenges pathy	Harnessing liquid biopsy to unveil somatic RAS-MEK vay variants in extracranial AVMs - 202	
	and opportunities in the US and Australia Dr Sm	adar Kahana-Edwin, The Children's Hospital at	

	Prof Gary L Freed, University of Michigan	Westmead	
11.37	Strengthening Child Health Systems Prof Raghu Lingam, UNSW Sydney	11.15 Cryptico: A Computational Approach for Exploring Cryptons in Search of Novel Therapeutics - 203	
		Dr Pablo Acera, Children's Cancer Institute	
11.55	What is PEACH and PEACH-E? Current Update and Next Steps	11.30 Inferring the life history of NTRK-fusion paediatric tumours - 204	
	Prof Karen Zwi & Ms Seaneen Wallace, Sydney Children's Hospitals Network	Dr Piyushkumar Mundra, Children's Cancer Institute	
12.08	Panel Session	11.45 CBL mutations in CNS and solid tumours - a new therapeutic opportunity? - 205	
	Thinking outside the silos: innovations to optimise the health system for children	Dr Lauren Brown, Children's Cancer Institute	
	Facilitator: Adj A/Prof Cathryn Cox PSM, Sydney Children's Hospitals Network	12.00 Identifying non-coding IncRNA dependencies in	
	Panel members:	high-risk MLL-rearranged acute myeloid leukaemia - 206	
	Prof Raghu Lingam, UNSW Sydney	Mr Steven He, Children's Cancer Institute	
	Prof Gary L Freed, University of Michigan	40.45 to 15.54 of bounds to 6 and 4 and 4 and 5	
	Prof Sue Woolfenden, University of Sydney	12.15 Individualized-tumour-informed panel approach enables ultra-sensitive ctDNA-based minimal disease	
	Dr Helen Goodwin, NSW Health	monitoring for paediatric cancers - 207	
	Dr Sophy Shih, Kirby Institute	Dr Wenhan Chen, Children's Cancer Institute	
12.33	Abstract Presentations	12.30 A Data Lakehouse for Childhood Cancer Precision	
	The consumer group landscape: identifying advocacy gaps and improving precision medicine	Medicine - 208 Mr James Bradley, Children's Cancer Institute	
	outcomes - 200 Ms Kris Pierce, Child Unlimited	12.45 PREDICT and Validate: Investigating Germline	
	Paediatric service navigation to address life	Alterations in Paediatric Cancer Predisposition [RAPID]	
	challenges: a mixed-methods study - 201	Miss Safaa Al Haj Hussein, The Children's Hospital at	
	Ms Rebecca Bosward, Sydney Local Health District	Westmead, The University of Sydney	
13.00 - 14.00	Lunch Sponsored by	Roche	
14.00 - 15.30	SESSION 7.1 The road ahead in genomics and	14.00 - 15.30	
	genetic testing	SESSION 7.2 - Health Systems Implementation and	
	Room: Leighton Hall	Economics (HSIE) & Psychosocial Workshop	
44.07	Chair: Prof Adam Jaffe, UNSW Sydney The future direction for genomics testing: a	Room: Tyree Room	
14.03	global perspective on improving access to	Facilitator: Prof Raghu Lingam, UNSW Sydney	
	genomics knowledge and technology Tiffany Boughtwood, Australian Genomics	Summary: Health systems and interventions are complex with complex humans at the core as both providers and receivers.	
14.18	Genomic testing - what is the roadmap for Australia	Prof Lingam will provide an engaging session on health systems implementation research, exploring frameworks for	
	Dr Emma Palmer, Sydney Children's Hospitals Network	the development and evaluation of complex health interventions. Ms Wallace, Dr Ostojic alongside two research	
14.33	The State of Rare Diseases in Australia	advisors will explore the intricacies and key considerations of 'co-design' and involvement of consumers in the planning,	
	Prof Adam Jaffe, UNSW Sydney	design and evaluation of health interventions.	
14.48	Abstract Presentation: A collaborative	Prof Raghu Lingam, UNSW Sydney	
	implementation science approach to genomics	Ms Seaneen Wallace, Sydney Children's Hospitals Network	
	and precision medicine multidisciplinary teams - 210	Dr Katarina Ostojic, University of Sydney	
	Dr Alan Ma, University of Sydney/Sydney Children's Hospitals Network	Consumer research advisors - Mr Jack Calderan (Young Adult Research Advisor) and Ms Alunya Wilkinson (Parent Research Advisor)	
15.03	Panel Session Challenges of sustained translation in genomic screening and testing: battle scars, lessons	Prof Gary L Freed, University of Michigan	
	learned, and priority actions to move forward		

Facilitator: Prof Adam Jaffe, UNSW Sydney

Panel members:

Ms Tiffany Boughtwood, Australian Genomics

A/Prof Ness Tyrrell, Children's Cancer Institute

Prof Claire Wakefield, UNSW Sydney

Adj A/Prof Paula Bray, Sydney Children's Hospitals

Network

Dr Emma Palmer, Sydney Children's Hospitals

Network

15.30 - 16.00

Afternoon tea

Sponsored by

Roche

16.00 - 16.30

Panel discussion: Reflections and next steps for

paediatric precision medicineFacilitator: Ms Kathryn Greiner AO

Panel members:

Prof Michelle Haber AM

Prof Michelle Haber AM
Prof Roger Reddell AO

Prizes

Sponsored by



16.45

Conference close - Chair Ms Kathryn Greiner AO

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