



Eradicate Cancer

**2018** Can advanced immunotherapy make it possible?

**THURSDAY**

15th March

- 8:00AM** **Opening Session**  
Chair: Alan Trounson  
**Richard Boyd & Alan Trounson**
- 
- 8:10AM** **Session I: Checkpoint blockade inhibition**  
Chair: Richard Boyd
- 8:10AM The role of immune checkpoint blockade in the cure of HIV infection \\ **Sharon Lewin**  
8:30AM **Honourable Greg Hunt**, Minister for Health of the Australian Commonwealth Government.  
8:45AM The anti-cancer immunotherapy landscape \\ **Irv Weissman**  
9:20AM Tumour antigen-directed anti-cancer therapy in the era of checkpoint blockade \\ **Jonathon Cebon**
- 
- 9:40AM** **BREAK**
- 
- 10:00AM** **Session II: Chimeric Antigen Receptor – T cells (part I)**  
Chairs: Helen Heslop & Michael Brown
- 10:00AM CAR's and armoured CARs \\ **Renier Brentjens**  
10:30AM CAR-T cell therapy for the GD2 tumour target \\ **Michael Brown**  
10:50AM Pre-clinical assessment of EphA2-directed CAR-T cell adoptive therapy for paediatric solid tumours \\ **Kenneth Hsu**  
11:10AM Development of dual specific CAR-T cells – a one-two anti-cancer punch \\ **Richard Boyd**  
11:30AM Multi-pronged approaches to augmenting CAR T cell therapy for solid tumour \\ **Joe Trapani**
- 
- 11:50AM** **LUNCH** **12:15 GE HEALTHCARE Presentation**  
Smart, Closed & Connected Solutions for Cell Therapy Manufacturing \\ **Aaron Dulgar-Tulloch**  
**12:30 ATCC LUNCH AND LEARN Session** Booth #2 -  
How should you pick and choose cell lines for your cancer research
- 
- 12:50PM** **Session III: Gene editing**  
Chairs: Andreas Nagy & Bruce Robinson
- 12:50PM Transposon CAR T-cells for Relapsed Leukaemia and Lymphoma \\ **Ken Micklethwaite**  
1:10PM Genome editing provides solution for cell therapy safety and immune tolerance: a guide for a One4All pluripotent cell line \\ **Andras Nagy**
- 
- 1:30PM** **Session IV: Tumour antigen discovery and targeting**  
Chairs: Andreas Nagy & Bruce Robinson
- 1:30PM Adoptive T cell Therapy: targeting solid tumors through antigen discovery \\ **Cassian Yee**  
2:00PM The potential therapeutic role of personalized neoantigen cancer vaccines \\ **Bruce Robinson**  
2:20PM Unconventional T cell targets for cancer Immunotherapy \\ **Dale Godfrey**  
2:40PM Molecular sculpturing of scFv's and their payloads to optimise anti-cancer targeting \\ **Peter Hudson**  
2:50PM Putative neoantigens predicted from frame shift mutations of malignant pleural mesothelioma \\ **Tian Mun Chee**
- 
- 3:00PM** **BREAK**
- 
- 3:20PM** **Session V: The cancer microenvironment**  
Chairs: Kara Britt & Renier Brentjens
- 3:20PM Revealing the immune changes that associate with breast cancer risk to develop prophylactic immune therapies \\ **Kara Britt**  
3:40PM Targeting RAS/MAPK signalling to enhance tumour immunogenicity \\ **Paul Beavis**  
4:00PM IL-18 critically drives multiple myeloma progression by generating an immunosuppressive microenvironment \\ **Mark Smyth**  
4:20PM Mass cytometric analysis of life and death decisions in blood cancer (cells) \\ **Dan Gray**  
4:40PM Integrin-linked kinase expression in myeloid cells promotes colon tumorigenesis \\ **Afsar Ahmed**  
4:50PM Adoptive transfer of genetically engineered monocytes for the tumour targeted delivery of IFN- $\alpha$  \\ **Emily Wilson**

# THURSDAY

15th March

5:15PM

## Free Public Forum | Turning fear into hope: the power of anti-cancer immunotherapy to restore a healthy life style

Co-presented by the Eradicate Cancer with Immunotherapy Conference and the Melbourne Immunotherapy Network (MiN)

**Convenor - Grant McArthur**, Peter MacCallum Cancer Centre

**Co-convenor - Alan Trounson**, Cartherics and the Hudson Institute for Medical Research

Welcome \\ **Emeritus Professor Alan Trounson**, Cartherics Pty Ltd and Hudson Institute for Medical Research & Representative of **Minister for Health, Victorian Government, MP Frank McGuire**

5:30PM

The Foundations of Cancer Immunotherapy \\ **Peter Doherty**

5:45PM

Unblocking immune inhibitors - boosting responses to cancer and HIV \\ **Sharon Lewin**

5:55PM

Are T cell immunotherapies going to revolutionise the battle to eradicate cancer? \\ **Cassian Yee**

6:05PM

**"Fireside chat"** the holistic value of success: Jarryd Roughead, a great survival story \\ AFL star, **Jarryd Roughead** and his doctor, **Grant McArthur**

To be followed by a panel discussion and questions from the audience:

PANEL: Grant McArthur, Rebecca Delconte (Moderators); Miles Prince, Sharon Lewin, Cassian Yee, Alan Trounson, Jarryd Roughead, Leigh Dayton

6:45PM

## Informal Networking Reception & Poster Session

### Poster Listing

**Simon C Barry** \\ Melt electrospun 3 D lattices for the clinical scale expansion of immunomodulatory cells including human regulatory T cells (Tregs) abs# 101

**David C Bishop** \\ TCR silencing with shRNA as a foundation for a bank of allogeneic CAR19 T-cells generated by single-step genetic modification using the piggyBac transposase abs# 102

**Natasha Brockwell** \\ Working towards personalized immunotherapy in breast cancer abs# 103

**Arnajak Dechsupa** \\ Expression of cancer stem cell CD44 in patients with chronic gastritis, pre-cancerous and gastric cancer abs# 104

**Riccardo Dolcetti** \\ New strategies to improve the efficacy of personalized cancer immunotherapy abs# 105

**David Eisenbarth** \\ Constitutive activation of YAP/TAZ disrupts pancreatic homeostasis abs# 106

**Filipp Esselborn** \\ Rational design of cancer vaccines by targeting dendritic cells abs# 107

**George Kastrappis** \\ SAR131675 a VEGFR-3 specific inhibitor reduces tumour growth in a mouse model of colorectal cancer liver metastases by modulating the immune system. abs# 108

**Jing Liu** \\ Defining the Scheduling and Immunological Parameters underlying the Efficacy of Neoadjuvant Immunotherapy abs# 109

**Tim Oldham** \\ Is Australia "cell and gene therapy ready"? A vision for a world class cell and gene therapy industry in Australia abs# 110

**Amanda J Oliver** \\ Tissue-specific differences in the tumour microenvironment and immunotherapeutic responses abs# 111

**Washiraya Polkang** \\ Expression and polymorphisms of MDM2 in gastric cancer correlate with clinicopathological characteristics abs# 112

**Tinaz Samiei** \\ Mechanisms of resistance of tumors to adoptive cell transfer and vaccination abs# 113

**Roland Shu** \\ Targeting of multiple determinants on solid tumors using chimeric antigen receptor T cells abs# 114

**Pakorn Tangjanyatham** \\ Association of MDM2 Protein Expression and Histopathological Grading of Cholangiocarcinoma in Northeast Thailand abs# 115

**Taweesak Tongtawe** \\ Expression of CD44 cancer stem cell and MDM2 in Cholangiocarcinoma Correlates with Poor Clinicopathological characteristics abs# 116

**Nga Truong** \\ Optimising T-cell transduction and expansion conditions for CAR T-cell therapy in solid cancers abs# 117

**Katrina A Walsh** \\ Inhibition of the renin-angiotensin system reduces tumour growth and modulates macrophage activation in a mouse model of colorectal cancer liver metastases. abs# 118

**May Lin Yap** \\ Imaging Activated Platelets in Cancer- An Avenue For Early Cancer Detection and Targeted Therapy. abs# 119

**Le Ying** \\ PD-L1 expression is a prognostic factor in subgroups of gastric cancer patients stratified according to their levels of CD8 and FOXP3 immune markers abs# 120

**Lisa M Ebert** \\ Fibroblast activation protein (FAP) is overexpressed in glioblastoma brain tumours and represents a potential target for immunotherapy abs# 121

**Aaron Dulgar-Tulloch** \\ Smart, Closed & Connected Solutions for Cell Therapy Production abs# 122

**Aaron Dulgar-Tulloch** \\ Rational Development for Cell and Gene Therapy Manufacturing abs# 123

## 8:00AM In Vitro Seminar

Label-Free Real-Time Monitoring of Immune Cell-Mediated Killing Using Cellular Impedance \\  
**Stephanie Ting**

---

## 8:30AM SESSION VI Chimeric Antigen Receptor – T cells (Part II)

Chairs: Tessa Gargett & Cameron Turtle

- 8:30AM CD19 CAR-T cell immunotherapy for B cell malignancies \\ **Cameron Turtle**  
9:00AM Using Chimeric Antigen Receptor (CAR) T cell to Treat Solid Tumours \\ **Clare Stanley**  
9:20AM Generating dual-specific T cells in treating cancers \\ **Aesha Ali**  
9:30AM The development, functional evaluation and optimisation of CAR-T cells attacking novel epitopes on ovarian cancer \\ **Vera Evtimov**  
9:40AM Chimeric antigen receptor T cells and the immune synapse \\ **Misty Jenkins**  
9:50AM Validation of a novel CAR-T cell targeting non-functional P2X7 \\ **Simon Barry**  
10:00AM Optimisation of third generation CAR-T cells for the treatment of solid tumours \\ **Tessa Gargett**
- 

## 10:20AM BREAK

---

## 10:40AM SESSION VII Adoptive cellular immunotherapy (Part I)

Chairs: Emily Blyth & Rajiv Khanna

- 10:40AM Immunotherapy with antigen specific T cells \\ **Helen Heslop**  
11:10AM Mass cytometry and a systems biology – new tools to explore the biological effects of adoptive T cell therapy \\ **Emily Blyth**  
11:30AM Using cell banks to treat opportunistic infection and haematological malignancy \\ **David Gottlieb**  
11:50AM Orthogonal approaches to regulate CAR T cell activity and safety \\ **Dan Powell**
- 

## 12:20PM LUNCH

### 12:45 LONZA Presentation

Efficient and Scalable Non-viral Modification of Primary Cells and Cell Lines \\ **Andrea Toell**

### 12:30 ATCC LUNCH AND LEARN Session Booth #2 -

How should you pick and choose cell lines for your cancer research

---

## 1:20PM SESSION VII Adoptive cellular immunotherapy (Part II)

Chairs: Sandra Nicholson & David Gottlieb

- 1:20PM Cbl-b – towards a new paradigm in T cell based anti-cancer therapy \\ **Josef Penninger**  
1:50PM Allogeneic Graft vs Tumor effect: pros, cons and pointers for the future \\ **David Ritchie**  
2:10PM SOCS protein regulation of NK cell-mediated tumour immunity \\ **Sandra Nicholson**  
2:30PM Emerging advances in cellular therapies for virus-associated cancers \\ **Rajiv Khanna**  
2:50PM Predicting and enhancing benefit of immunotherapies in triple negative breast cancer \\ **Belinda Parker**  
3:10PM The importance of immune modulation in the management of cancer \\ **Angus Dalgleish**
- 

## 3:30PM BREAK

---

## 3:50PM SESSION VII Adoptive cellular immunotherapy (Part III)

Chairs: Dan Powell & Kristen Redford

- 3:50PM Predicting the future of novel immunotherapy agents for Haematological Malignancies: one size does not fit all \\ **Miles Prince**  
4:10PM Developing novel therapies to treat cancer based on targeting the nucleolus \\ **Ross Hannan**  
4:30PM Interferon Epsilon – a new weapon in innate immunity against ovarian cancer \\ **Paul Herztog**  
4:50PM Using genomic innate immune function(IIF) profiling to predict patient response to immunotherapy \\ **Robyn Lindley**

# SATURDAY

17th March

- 8:20AM** **In Vitro Seminar**  
Probing the Energy Metabolism of Cancer and Immunotherapy \\ **Alex Rowland**
- 
- 8:50AM** **SESSION X Adoptive cellular immunotherapy (Part IV)**  
Chairs: **Ranjey Thomas & Joe Trapani**
- 8:50AM Modulation of innate immunity for cancer therapy \\ **Bryan Williams**  
Targeting cross-presenting dendritic cells with nanoparticulate vaccines for antigen-specific cancer immunotherapy \\ **Ranjey Thomas**
- 9:10AM Exploiting CD141+ dendritic cells for immunotherapy \\ **Kristen Radford**
- 9:30AM A preclinical platform for evaluating targeted therapy and immunotherapy combinations in BRAFV600E melanoma \\ **Emily Lelliott**
- 9:50AM Restoring immuno-competency in Chronic Lymphocytic Leukemia \\ **Fabienne Mackay**
- 
- 10:00AM** **BREAK**
- 
- 10:20AM** **SESSION XI Immune reconstitution**  
Chairs: **Fabienne Mackay & Georg Hollander**
- 10:40AM Thymic function in T cell reconstitution after cell-ablative therapy \\ **Georg Hollander**
- 11:00AM Harnessing natural mechanisms of tissue regeneration to boost immune function in cancer patients \\ **Jarrold Dudakov**
- 11:20AM In vitro generation of T cells for therapeutic application \\ **J-C Zuniger-Pflucker**
- 11:40AM Generation of CTLs from iPSCs transduced with TCR genes: toward the development of "off-the-shelf T cells" \\ **Hiroshi Kawamoto**
- 12:00PM Development of functional, mature cytotoxic T-cells from cord HSC via a molecularly-defined, scalable and clinically translatable culture system \\ **Nicholas Boyd**
- 12:10PM The origins of thymic NK cells and ILC1 \\ **Gabrielle Belz**
- 
- 12:20PM** **LUNCH**
- 
- 1:20PM** **Session Sponsored by Mesoblast**  
Chair: **Richard Boyd**
- 1:20PM **Keynote Address:** Multipotential mesenchymal stem/progenitor cells - a novel player in immuno-oncology \\ **Geraldine Storton**
- 2:00PM Exploring the interface between ethics and practice: unproven cell therapies in the twilight zone? \\ **John Rasko**
- 
- 2:20PM** **Final Summit: If money was no object: a blue print for future curative practical immunotherapy**  
Opening: **Honourable John Brumby**  
Convenors: **Alan Trounson & Sharon Lewin**  
Co-convenor: **Richard Boyd**
- Panel**  
Joe Trapani  
Rajiv Khanna  
Helen Heslop  
Maureen Howard  
Miles Prince  
David Gottlieb  
Leigh Dayton  
Fabienne MacKay
- 
- 4:30PM** **Conference closes**