Centenary scientific symposium
Celebrating discovery
Wednesday 29 – Friday 31 July 2015
## Centenary scientific symposium
Celebrating discovery
**Wednesday 29 July**

<table>
<thead>
<tr>
<th>Morning session</th>
<th>9am: Welcome address</th>
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<tbody>
<tr>
<td></td>
<td>James Murphy Chair, Centenary scientific symposium committee</td>
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### Session 1: Immunity 9:05-10.30am

- **Chair** Lynn Corcoran
  Walter and Eliza Hall Institute
- **Historic perspective:** Phil Hodgkin
  Walter and Eliza Hall Institute
- Alain Fischer
  INSERM, France
  *Primary immunodeficiencies from genes to pathophysiology and therapy*
- Ellen Rothenberg
  Caltech, US
  *Dynamics and mechanism of the T-cell lineage commitment process*

<table>
<thead>
<tr>
<th>Morning tea</th>
<th>10:30-11am</th>
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### Mid-morning session

**Session 2: Blood cells and cytokines 11am-1:15pm**

- **Chair** Nick Nicola
  Walter and Eliza Hall Institute
- **Historic perspective:** Tony Burgess
  Walter and Eliza Hall Institute
  *Stimulators of the phagocytes*
- Peggy Goodell
  Baylor College of Medicine, US
  *DNMT3A in normal and malignant haematopoiesis*
- Emma Josefsson
  Walter and Eliza Hall Institute
  *Regulation of megakaryocyte and platelet survival*
- Samir Taoudi
  Walter and Eliza Hall Institute
  *Development of the prenatal platelet-forming system*
- Glenn Begley
  TetraLogic Pharmaceuticals, US
  *Transforming apoptotic regulators into valuable therapeutics: the development of birinapant*
### Lunch 1:15-2:15pm

#### Afternoon session

**Session 3: Cancer (cell death) 2:15-5pm**

Chairs *Jerry Adams* and *John Silke*

Walter and Eliza Hall Institute

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
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<tbody>
<tr>
<td>David Vaux</td>
<td>Walter and Eliza Hall Institute</td>
<td>Cell death and cancer research at the Walter and Eliza Hall Institute - 30 years in 20 minutes</td>
</tr>
<tr>
<td>Kim Newton</td>
<td>Genentech, US</td>
<td>RIPK1 and RIPK3: critical regulators of cell death and inflammation</td>
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#### Afternoon break 3:25-3:45pm

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<thead>
<tr>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>Gabriela Brumatti</td>
<td>Walter and Eliza Hall Institute</td>
<td>Caspase-8 inhibitors combine with the Smac-mimetic birinapant to induce necroptosis and treat acute myeloid leukaemia</td>
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<tr>
<td>Emma Watson</td>
<td>Walter and Eliza Hall Institute</td>
<td>Pro-survival protein MCL1 is essential for endothelial cell survival during angiogenesis</td>
</tr>
<tr>
<td>Brent Stockwell</td>
<td>Columbia University, US</td>
<td>Ferroptosis: death by lipid peroxidation</td>
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#### Mixer 5-7pm Social mixer

Tapestry Lounge

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**Notes:**

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## Morning session

**Session 4: Cell signalling 9-10:30am**  
Chair **Warren Alexander**  
Walter and Eliza Hall Institute

**Mike Stratton**  
Wellcome Trust Sanger Institute, UK  
*Signatures of mutational processes in human cancer*

**Melissa Call**  
Walter and Eliza Hall Institute  
*A conserved core TM structure required for optimal T cell receptor signalling*

**Jin Zhang**  
Johns Hopkins Medicine, US  
*Spatiotemporal regulation of protein kinases and phosphatases in living cells*

## Morning tea 10:30-11am

## Mid-morning session

**Session 5: Infection and immunity 11am-1:15pm**  
Chair **Alan Cowman**  
Walter and Eliza Hall Institute

**Historic perspective:** **Graham Mitchell**  
Foursight Pty  
*Walter and Eliza Hall Institute vs pathogens: scoreboard and match highlights*

**Elizabeth Winzeler**  
University of California, San Diego, US  
*Chemical genetics and the search for next generation antimalarial drugs*

**Wai-hong Tham**  
Walter and Eliza Hall Institute  
*A conserved structural domain for red blood cell binding proteins of malaria parasites*

**Kevin Man**  
Walter and Eliza Hall Institute  
*The transcription factor IRF4 modulates metabolic activity via anabolic pathways and orchestrates T cell exhaustion during chronic viral infection*

**John Boothroyd**  
Stanford University, US  
*Home-invasion with attitude: how Toxoplasma moves in, rearranges the furniture and turns up the music!*
## Afternoon session
### Session 6: Cells, genomes and proteomes 2:15-4:30pm

**Chairs** Terry Speed and Suzanne Cory  
Walter and Eliza Hall Institute

<table>
<thead>
<tr>
<th>Presenter</th>
<th>Affiliation</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Elizabeth Thompson</td>
<td>University of Washington, US</td>
<td><em>Inheritance of genomes across chromosomes and among individuals</em></td>
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<td>Joan Steitz</td>
<td>Yale University and HHMI, US</td>
<td><em>Noncoding RNAs: with a viral twist</em></td>
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<td>Jenny Graves</td>
<td>La Trobe University</td>
<td><em>Weird animals, sex and the future of men</em></td>
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<tr>
<td>Tom Steitz</td>
<td>Yale University, US</td>
<td><em>From the structure and function of the ribosome to new antibiotics</em></td>
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### Mixer
**4:30-6:30pm Hosted mixer:** by invitation only  
Walter and Eliza Student Association and the Postdoctoral Association  
Tapestry Lounge

**7-9pm Speakers dinner:** by invitation only  
University of Melbourne, University House

## Notes:
# Centenary scientific symposium

*Celebrating discovery*

**Friday 31 July**

<table>
<thead>
<tr>
<th>Morning session</th>
<th><strong>Session 7: Infection and immunity II 9-10:30am</strong></th>
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<tbody>
<tr>
<td></td>
<td>Chair Axel Kallies</td>
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<td>Walter and Eliza Hall Institute</td>
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<td>Nicholas Huntington</td>
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<td>Walter and Eliza Hall Institute</td>
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<td></td>
<td><em>Understanding and exploiting innate lymphocytes addiction to cytokines</em></td>
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<td>Daniel Gray</td>
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<td>Walter and Eliza Hall Institute</td>
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<td><em>Apoptosis and immunological tolerance</em></td>
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<td>Jonathan Carapetis</td>
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<td>Telethon Kids Institute, WA</td>
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<td><em>Shining a light on rheumatic fever pathogenesis</em></td>
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<tr>
<th>Mid-morning session</th>
<th><strong>Session 8: Infection, immunity and inflammation 11am-1:15pm</strong></th>
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<td>Chair Tracy Putoczki</td>
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<td>Walter and Eliza Hall Institute</td>
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<td>Eicke Latz</td>
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<td>Institute of Innate Immunity, Germany</td>
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<td><em>Regulation of inflammasome activation by post-translational modification</em></td>
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<td>James Vince</td>
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<td>Walter and Eliza Hall Institute</td>
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<td><em>Targeting host cell death and inflammatory signalling pathways to treat Legionella infection</em></td>
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<td>Liz Hartland</td>
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<td>University of Melbourne</td>
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<td><em>Cell death and inflammation during bacterial gut infection</em></td>
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<td>Chris Goodnow</td>
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<td>Garvan Institute</td>
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<td><em>Experimental and computational analysis of germline and somatic mutations in immunodeficiency, autoimmunity and lymphoid malignancy</em></td>
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Lunch 1:15-2:15pm

Session 9: Cancer 2:15-5pm
Chairs Jane Visvader and Clare Scott
Walter and Eliza Hall Institute

Tyler Jacks
MIT and HHMI, US
Engineering the cancer genome

Hans Clevers
Hubrecht Institute, Netherlands
Wnt signaling, Lgr5 stem cells, organoids and cancer

Afternoon break 3:25-3:45pm

Marie-Liesse Asselin-Labat
Walter and Eliza Hall Institute
Regulation of basal cell differentiation by Ezh2 and IGF-1 in the developing lung

Ana Janic
Walter and Eliza Hall Institute
Identification of the critical p53 tumor suppression mechanisms in vivo

Elizabeth Blackburn
University of California, San Francisco, US
The implications of telomere maintenance for human health and disease

4:55-5pm: Closing remarks
Doug Hilton
Director, Walter and Eliza Hall Institute

Notes: