programme

Monday, October 20, 2025

8:30 AM: Arrival, registration

9:30 AM: Welcome by organisers and housekeeping

Session 1: Telomeres and Telomerase (Chair: Noa Lamm-Shalem)

9:40 AM: Patrik Eickhoff (ICR, London) - "Chromosome end protection by RAP1mediated inhibition of DNA-PK" *abstract 1*

9:55 AM: Wilson Wong (Monash) - "Dimeric POT1 is the building block for single stranded telomeric DNA packaging" *abstract 2*

10:20 AM: Scott Cohen (CMRI) - "Small-molecule inhibition of human telomerase" abstract 3

10:45 AM: Morning tea break (please put up your poster!)

11:20 AM: Drew Berry (WEHI.tv) - "Molecular animations of replication and recombination" *abstract 4*

11:40 AM: Keynote: Alan D'Andrea (Dana Faber) "Disruption of Microhomologymediated End-joining in Ewing Sarcoma " *abstract 5*

Host: Elaine Sanij (SVI) abstract 6

12:25 PM: Lunch and poster session I (Post presentations for odd numbers)

Session 2: Cell cycle in human disease (Chair: Raelene Endersby)

2:25 PM: Sarah Alexandrou (Garvan) - "JNK pathway suppression mediates insensitivity to combination endocrine therapy and CDK4/6 inhibition in ER+ breast cancer" *abstract 6*

2:40 PM: Shom Goel (Peter Mac) - "Novel functions of the Rb tumour suppressor protein in cancer" *abstract 7*

3:05 PM: Janni Peterson (Flinders) - "Metabolic control of genome integrity - Insight into mechanisms" *abstract 8*

3:30 PM: Antonella Papa (SAiGENCI) - "Disruption of Cell Cycle Machinery Drives Resistance to PI3K Pathway Inhibition in Breast Cancer" *abstract 9*

3:45 PM: Vincenzo Mascol (Lumicks) - "Molecular Tweezers for analysis of DNA repair and replication" *abstract 10*

4:00 PM: ice cream break!

Session 3: Plasticity in DNA repair (Chair: Wayne Crismani)

4:30 PM: Michael Sharp (SVI) - "Natural gene therapy for Fanconi anaemia mediated by triploid mosaicism" *abstract 11*

4:45 PM: Holly Barker (WEHI) - "PARPi combination therapy in uterine serous carcinoma treatment" *abstract 12*

5:10 PM: Nikki Burdett (Peter Mac) - "Whole Genome Doubling in High Grade Serous Ovarian Cancer" *abstract 13*

5:35 PM: Merridee Wouters (UNSW) - "Assessing chromosomal instability in High Grade Serous Ovarian Cancer with molecular signatures from shallow whole genome sequencing" *abstract 14*

5:50 PM: Keynote: Chris Lord (ICR London) "Understanding and targeting mechanisms of PARP inhibitor resistance in cancer" *abstract 15*

Host: Liz Caldon

6:35 PM: Fin

6:35 PM: Welcome reception in the Museum Foyer, open to all ticket holders

Tuesday, October 21, 2025

8:30 AM: Arrival, registration

Session 4: Mechanisms of genome stability (Chair: Jacob Lewis)

9:00 AM: Shabih Shakeel (WEHI) - "Role of chromatin remodeller MORC2 in epigenetic silencing and DNA damage response" *abstract 16*

9:25 AM: Rohan Bythell-Douglas (SVI) - "Structure and function of FANCM on branched DNA" *abstract 17*

9:50 AM: Ghokan Tulon (Molecular Horizons) - "DNA repair with twists: Cryo-EM structures of viral annealases reveal diverse molecular mechanisms" abstract 18

10:05 AM: Keynote: Sharon Cantor "RAD51 is chromatin enriched and targetable in BRCA1-deficient cells" abstract 19

Host: Mathew Jones

10:50 AM: Morning coffee break

Session 5: Mitosis and cell division (Chair: Paul Clarke)

- 11:25 AM: Julia Milne (Peter Mac) "Translational reprogramming disrupts mitosis to drive SMAD4-deficient oesophageal adenocarcinoma" *abstract 20*
- 11:40 AM: Tony Cesare (CMRI) "Homologous recombination promotes nonimmunogenic mitotic death upon DNA damage" *abstract 21*
- 12:05 PM: Brian Gabrielli (Mater) "Tetraploidy versus polyploid giants: when is genome duplication dangerous?" *abstract 22*
- 12:20 PM: Caitlin Harris (SVI) "The FA pathway limits de novo inter-generational genomic instability in a mouse model" *abstract 23*
- 12:35 PM: Xiao-Yun (Amy) Wang (Frazer) "The role of the cGAS/STING pathway in determining cell fate during mitotic arrest" *abstract 24*

12:50 PM: Lunch and poster session II (Post presentations for even numbers)

Session 6: PARP PARP PARP (Chair: TBA)

2:40 PM: Olga Kondrashova (QIMR Berghofer) -

"BRCA1 methylation dynamics and PARP inhibitor resistance in high-grade serous ovarian carcinoma" *abstract 25*

3:05 PM: Rebecca Smith (Oxford) - "HPF1-dependent

histone ADP-ribosylation regulates PARP1

trapping, promoting PARP inhibitor

resistance" abstract 26

3:25 PM: Victor Anggono (UQ) - "FTO suppresses DNA repair by inhibiting PARP1"

abstract 27

3:40 PM: Stacey Edwards (QIMR) - "Targeting the POLR2J4 IncRNA enhances

PARP inhibitor sensitivity in triple-negative breast cancer" abstract 28

3:55 PM: Afternoon tea break

Session 7: Replication and replication stress (Chair: Lisanne Spenkelink)

4:25 PM: Sarah Henrikus (SVI) - "Unwinding of a eukaryotic origin of replication visualised by cryo-EM" *abstract 29*

4:40 PM: Vi Wickramasinghe (WEHI) - " A cell-cycle mediated checkpoint that regulates mRNA export in response to replication stress" *abstract 30*

5:05 PM: Donna Whelan (LaTrobe) - "Detecting and differentiating DNA replication stress events using super-resolution fluorescence imaging" *abstract 31*

5:30 PM: Mathew Jones (UQ) - "Assessing the kinase-dependent coordination of DNA replication using high content imaging and nanopore sequencing" abstract 32

5:45 PM: Award Presentation: Kum Kum Khanna "From ATM to Impact: a

journey through DNA damage and repair"

Host: Andrew Deans

6:30 PM: Fin

7:00 PM: Conference dinner Venue: Chin Chin (upstairs!)

Make your way to 125 Flinders Ln, Melbourne approx. 20 mins walk or use tram 86 or 96,

scan QR code for directions

Ticket holders only



Wednesday, October 22, 2025

8:30 AM: Arrival

Session 8: Alternative Lengthening of Telomeres (Chair: Tracy Bryan)

9:00 AM: Yangxiu Wu (CMRI) - "A large-scale survey of telomere maintenance mechanisms across 976 human cancer cell lines" *abstract 34*

9:15 AM: Jessie Gao (CMRI) - "Targeting the FANCM-BTR axis for ALT cancer therapy" *abstract 35*

9:30 AM: Lisa Alcock (Curtin) - "Cell permeable inhibitors of Alternative Lengthening of Telomeres" *abstract 36*

9:55 AM: Alex Sobinoff (CMRI) "Stabilisation of break-induced telomere replication intermediates" abstract 37

10:10 AM: Keynote: Simon Boulton "SLFN11 restricts escape from telomere crisis to prevent ALT" abstract 38

Host: Hilda Pickett

10:55 AM: Morning tea break

Session 9: New therapeutic opportunities in Cell Cycle, DNA repair and Telomeres (Chair: Lee Wong)

- 11:30 AM: Marija Dinevska (Garvan) "BreakDNAcer: A novel mouse model for the real-time assessment of DNA damage response dynamics in live tissue" abstract 39
- 11:45 AM: Elaine Sanij (SVI) "Local nucleolar surveillance mechanisms maintain stability of rRNA genes" *abstract 40*
- 12:00 PM: Nikola Bowden (Hunter) "Repurposing drugs to target DNA repair and cell cycle for treatment resistant melanoma and ovarian cancer" abstract 41
- 12:25 PM: Ashley Harman (CMRI) "Telomere maintenance by telomerase is regulated by DNA replication stress and nuclear F-actin" *abstract 42*
- 12:40 PM: Tamas Fischer (ACU) "RNA-DNA Hybrids at the Crossroads of DNA Repair and Genome Stability" *abstract 43*
- 1:05 PM: Thanh Tu (Monash) "Oncohistone H3.3 mutations block differentiation by disrupting ATRX-mediated heterochromatin formation" *abstract 44*

1:20 PM: Awards and wrap up

1:30 PM: Finish, lunchbox to take to the park

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