Wednesday, April 29

14:00  Conference registration and accommodation check in

15:30 – 15:35  Welcome

15:35 – 16:20  **Keynote:** Stephen Kowalczykowski (University of California, Davis, US)
- Biochemical regulation of recombination

**Session 1**  
**Chairperson:** Lorraine Symington

16:20 – 16:45  Roland Kanaar (Erasmus University, The Netherlands)
- Function of BRCA2 in homologous recombination

16:45 – 17:10  Kara Bernstein (University of Pittsburgh Cancer Institute, US)
- RAD51 paralog function in DNA damage tolerance

17:10 – 17:35  Petr Cejka (Institute for Research in Biomedicine, Switzerland)
- The action of nucleases in homologous recombination

17:35 – 18:00  Eric Greene (Columbia University, US)
- Single molecule studies of homologous recombination

18:00 – 18:25  Maria Jasin (Memorial Sloan Kettering Cancer Institute, US)
- Protecting the genome by homologous recombination

18:30 – 19:00  Welcome reception

Dinner

Thursday, April 30

Breakfast

**Session 2**  
**Chairperson:** Petr Cejka

09:00 – 09:25  Lorraine Symington (Columbia University, US)
- Mechanism and regulation of DNA end resection

09:25 – 09:50  Douglas Bishop (University of Chicago, US)
- A gain-of-function mutant form of Dmc1 bypasses Mei5-Sae3

09:50 – 10:15  Patrick Sung (University of Texas Health Science Center at San Antonio, US)
- Mechanism of BRCA2/DSS1-dependent RAD51 presynaptic filament assembly
10:15 – 10:30  Ulrich Rass (University of Sussex, UK)
DNA2 protects cells from toxic homologous recombination-coupled replication

Break

11:00 – 11:25  Rodney Rothstein (Columbia University, US)
Poetry in motion: increased chromosomal mobility after DNA damage

11:25 – 11:50  Ralph Scully (Harvard Medical School, US)
Repair and restart of stalled forks in mammalian cells

11:50 – 12:15  Andre Nussenzweig (NIH/NCl, US)
TBA

12:15 – 12:30  Florencia Pratto (NIH, US)
Multi-scale control of recombination initiation in mammalian meiosis

12:30 – 12:55  Poster flash talks

12:55 – 13:05  Abcam talk

Lunch and free time

Session 3  Chairperson: Steve West

14:00 – 14:25  Anne Villeneuve (Stanford University, US)
TBA

14:25 – 14:50  Francesca Cole (MD Anderson Cancer Center, US)
Defective crossover homeostasis compromises chromosome segregation in aged mouse spermatocytes

14:50 – 15:15  Matthew Neale (University of Sussex, UK)
Measure once, cut twice: Concerted cutting by Spo11 illuminates DNA break mechanisms during meiosis

15:15 – 15:30  Aura Carreira (Institut Curie, France)
BRCA2 cooperates with DDX5 helicase to resolve RNA-DNA hybrids at DNA double-strand breaks

Break

16:00 – 16:25  Steve West (The Francis Crick Institute, UK)
Sensitisation of BRCA cancer cells to PARPi by targeting nucleotide metabolism

16:25 – 16:50  Sharon Cantor (University of Massachusetts Medical School, US)
Replication gaps underlie chemotherapy response

16:50 – 17:15  Jo Morris (University of Birmingham)
Mechanistic insights into BRCA1 function

17:15 – 17:30  Rimma Belotserkovskaya (University of Cambridge, UK)
PALB2 chromatin recruitment restores homologous recombination in BRCA1-deficient cells depleted of 53BP1
17:30 – 19:30 Poster Session 1 and networking reception

Dinner

Friday, May 1

Breakfast

08:00 – 09:00 Open poster session

Session 4  Chairperson: Ralph Scully

09:00 – 09:25 Massimo Lopes (Institute of Molecular Cancer Research, Switzerland)
Replication fork remodelling in cancer and stem cells

09:25 – 09:50 Joao Matos (ETH Zurich, Switzerland)
Regulatory control of BLM/Sgs1 helicase during mitotic proliferation and meiosis

09:50 – 10:15 Akira Shinohara (Osaka University, Japan)
Control of the assembly of RAD51/DMC1 by mediators and anti-recombinases

10:15 – 10:30 Andrew Blackford (University of Oxford, UK)
Mechanism of Bloom Syndrome helicase activation and recruitment to damaged DNA

Break

11:00 – 11:25 John Petrini (Memorial Sloan Kettering Cancer Institute, US)
Genetic analysis of DNA damage signaling

11:25 – 11:50 Sarah Lambert (Institut Curie, France)
Replication fork restart in space and time

11:50 – 12:15 Xiaolan Zhao (Memorial Sloan Kettering Cancer Institute, US)
SUMO-based regulation of recombinational repair

12:15 – 12:30 Jeff Sekelsky (University of North Carolina, US)
Mend the gap: mechanisms of double-strand break repair

12:30 – 13:00 Poster flash talks

Lunch and free time

Session 5  Chairperson: Scott Keeney

14:00 – 14:25 Wolf-Dietrich Heyer (University of California, Davis, US)
D-loop processing during homologous recombination

14:25 – 14:50 Kenneth Marians (Memorial Sloan Kettering Cancer Institute, US)
TBA
Susan Gasser (Friedrich Miescher institute for Biomedical Research, Switzerland)
Proteomic approach to DDR reveals genome-wide changes in histone modifications and nucleosome stability

Stewart Shuman (Memorial Sloan Kettering Cancer Institute, US)
Mechanism of double strand break resection by the mycobacterial motor-nuclease AdnAB

Bernard de Massy (Institute of Human Genetics, France)
Insight into the architecture of the meiotic DNA double-strand break complex

Simon Boulton (The Francis Crick Institute, UK)
Single molecule analysis of homologous recombination

Dana Branzei (IFOM, Italy)
DDX11 acts with BRCA1/2 to promote fork stability and DNA damage repair

Jennifer Cobb (University of Calgary, Canada)
Nej1 inhibits nucleases and 5' resection at DNA double strand breaks

Simon Boulton (The Francis Crick Institute, UK)
Single molecule analysis of homologous recombination

Dana Branzei (IFOM, Italy)
DDX11 acts with BRCA1/2 to promote fork stability and DNA damage repair

Jennifer Cobb (University of Calgary, Canada)
Nej1 inhibits nucleases and 5' resection at DNA double strand breaks

Poster Session 2 and networking reception

Saturday, May 2

Breakfast

08:00 – 09:00
Open poster session

Session 6  Chairperson: Neil Hunter

Ian Hickson (University of Copenhagen, Denmark)
Recombination-based DNA synthesis at common fragile sites

James Haber (Brandeis University, US)
Recombination involving homology, homeology and microhomology

Boris Pfander (Max-Planck Institute of Biochemistry, Germany)
DNA double-stranded breaks and futile repair caused by unscheduled DNA replication

Timothy Humphrey (Oxford University, UK)
The fate of an unrepaired broken chromosome in fission yeast

Break

Grzegorz Ira (Baylor College of Medicine, US)
Large DNA insertions at DNA double strand breaks

Valerie Borde (Institut Curie, France)
TBA
11:50 – 12:10  Anna Malkova (University of Iowa, US)
Rad51 and Rad59 machineries cooperate to promote one unified pathway of alternative lengthening of telomeres (ALT) in yeast

12:10 – 12:30  Markus Löbrich (Darmstadt University of Technology, Germany)
ATRX and RECQ5 define distinct homologous recombination sub-pathways

Lunch and free time

Session 7  Chairperson: Ian Hickson

14:00 – 14:25  Titia de Lange (The Rockefeller University, US)
The role of CST/Polalpha/Primase in DSB repair

14:25 – 14:50  Michael Lichten (National Institutes of Health, US)
Exploring the inner workings of meiotic recombination

14:50 – 15:10  Michael Lisby (University of Copenhagen, Denmark)
Regulation of BRCA2 by the protein phosphatase PP2A-B56

15:10 – 15:30  Simon Powell (Memorial Sloan Kettering Cancer Institute, US)
The role of RAD52-mediated RNA-templated DNA repair in human cells

Break

16:00 – 16:25  Scott Keeney (Memorial Sloan Kettering Cancer Institute, US)
Mechanism and regulation of meiotic recombination initiation

16:25 – 16:50  Neil Hunter (University of California, Davis, US)
Essential roles of the small ubiquitin-like modifier in meiotic recombination

16:50 – 17:10  Ying Liu (University of Copenhagen, Denmark)
Role of homologous recombination in stability of the human fragile X locus FRAXA

17:10 – 17:30  Michael Cox (University of Wisconsin, Madison, US)
Genome stabilization by the E. coli RadD and Uup proteins

Dinner

Sunday, May 3

Breakfast and Departure

* Please note, these timings are provisional and are subject to change.