

## DNA Replication and Recombination (Z2)

joint with the meeting on [Genomic Instability and DNA Repair \(Z1\)](#)

**Scientific Organizers:** John F.X. Diffley, Anja Groth and Scott Keeney

**April 2—6, 2017**

**Santa Fe Community Convention Center, Santa Fe, New Mexico, USA**

**Sponsored by Editas Medicine, Inc.**

Abstract submission is now closed. Registered attendees may bring a poster onsite. Please contact our office at +1 800-253-0685; +1 970-262-1230 or email [info@keystonesymposia.org](mailto:info@keystonesymposia.org) if you are interested.

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Keystone Symposia is committed to maintaining a positive and respectful environment at its meetings. To this end, please review and comply with our [policies](#).

Registered attendees of one meeting in a joint pair may participate in sessions of the other, pending space availability.

### DEADLINES:

Scholarship Deadline: Dec 5, 2016 [[details](#)]

Discounted Abstract Deadline: Dec 5, 2016 [[details](#)]

Abstract Deadline: Jan 12, 2017 [[details](#)]

Discounted Registration Deadline: Feb 2, 2017 [[details](#)]

[Click here to view Cancellation Policy](#)

No registration fees are used to fund entertainment or alcohol at this conference

## Conference Program [Print](#) | [View meeting in 12 hr \(am/pm\) time](#)

The meeting will begin on Sunday, April 2 with registration from 16:00 to 20:00 and a welcome mixer from 18:00 to 20:00. Conference events conclude on Thursday, April 6 with a closing plenary session from 17:00 to 19:00, followed by a social hour and entertainment. We recommend return travel on Friday, April 7 in order to fully experience the meeting.

### SUNDAY, APRIL 2

16:00–20:00	<b>Arrival and Registration</b>	<a href="#">Sweeney Ballroom Foyer</a>
18:00–20:00	<b>Welcome Mixer</b> No registration fees are used to fund alcohol served at this function.	<a href="#">Sweeney F</a>

### MONDAY, APRIL 3

07:00–08:00	<b>Breakfast</b>	<a href="#">Sweeney F, Main Level Breakouts</a>
08:00–09:30	<b>Welcome and Keynote Session (Joint)</b> <a href="#">Registered attendees</a> can view abstracts starting on 03/02/2017  * Julia Promisel Cooper, NCI, National Institutes of Health, USA  * Scott Keeney, HHMI/Memorial Sloan Kettering Cancer Center, USA  <a href="#">Tatsuya Hirano</a> , RIKEN, Japan <i>Condensin-Based Chromosome Organization</i>  Johannes C. Walter, Harvard Medical School, USA <i>Mechanisms of Replication-Coupled Repair</i>  Coffee Break	<a href="#">Sweeney Ballroom A-E</a>

09:50–12:00	<p><b>Replication/Repair Structure and Function</b> <a href="#">Sweeney Ballroom C-E</a></p> <p><a href="#">Registered attendees</a> can view abstracts starting on 03/02/2017</p> <p>* <b>John F.X. Diffley</b>, Francis Crick Institute, UK</p> <p><b>Michael E. O'Donnell</b>, Rockefeller University, USA <i>Structure and Function of the Eukaryotic Replisome</i></p> <p><b>Tyler H. Stanage</b>, University of Wisconsin - Madison, USA <i>Short Talk: The Escherichia coli RarA Protein is Involved in the Switch between DNA Replication and Translesion Synthesis in vivo</i></p> <p><b>Karlene A. Cimprich</b>, Stanford University, USA <i>When RNA Meets DNA: Dangerous Liaisons in the Genome</i></p> <p><b>Alessandro Costa</b>, Francis Crick Institute, UK <i>Cryo-EM Approaches to Understanding the Eukaryotic Replisome</i></p> <p><b>Matthew L. Bochman</b>, Indiana University, USA <i>Short Talk: Hrq1, The Yeast Homolog of RecQ4, Inhibits Telomerase Activity on Long Telomeres</i></p>
<p>Following Session is for <a href="#">Genomic Instability and DNA Repair (Z1)</a></p>	
09:50–12:00	<p><b>Mechanisms of DNA Repair</b> <a href="#">Sweeney Ballroom A-B</a></p> <p><a href="#">Registered attendees</a> can view abstracts starting on 03/02/2017</p> <p>* <b>Timothy C. Humphrey</b>, University of Oxford, UK</p> <p><b>Wei Yang</b>, NIDDK, National Institutes of Health, USA <i>Structural Insights into Translesion DNA Polymerases</i></p> <p><b>James E. Haber</b>, Brandeis University, USA <i>Short Talk: Rad51-Mediated Double-Strand Break Repair and Mismatch Correction of Highly Diverged Substrates</i></p> <p><b>Joseph J. Loparo</b>, Harvard Medical School, USA <i>Short Talk: Single-Molecule Imaging of Non-Homologous End Joining</i></p> <p><b>Michael D. Stone</b>, University of California, Santa Cruz, USA <i>Mechanical Transitions in Long Duplex Telomere DNA Molecules</i></p> <p><b>Fena Ochs</b>, University of Copenhagen, Denmark <i>Short Talk: Dynamic Chromatin Superstructures Safeguard Integrity of Nuclear Compartments Challenged by DNA Breakage</i></p> <p><b>Cecilia Cotta-Ramusino</b>, Editas Medicine, USA <i>Short Talk: Characterization of the Interplay between DNA Repair and CRISPR/Cas9-Induced DNA Lesions at an Endogenous Locus</i></p>
12:00–17:00	<p><b>On Own for Lunch</b></p>
12:00–13:00	<p><b>Poster Setup</b> <a href="#">Sweeney F, Main Level Breakouts</a></p>
13:00–22:00	<p><b>Poster Viewing</b> <a href="#">Sweeney F, Main Level Breakouts</a></p>
14:30–16:30	<p><b>Workshop 1: Recombination and Repair</b> <a href="#">Sweeney Ballroom C-E</a></p> <p><b>Tracey E. Beyer</b>, Biotech Research and Innovation Centre, Denmark <i>Ontogeny of Genome Rearrangements in Budding Yeast</i></p> <p>* <b>Simon N. Powell</b>, Memorial Sloan Kettering Cancer Center, USA <i>Replication Fork Cleavage Occurs within 100bp from Local ATM Signaling of Site-Specific DNA Replication Block in Human Cells</i></p> <p><b>Sneha Saxena</b>, Indian Institute of Science, India <i>ATR Signaling Uncouples Role of XRCC2 in Homologous</i></p>

*Recombination and Replication Stress Response*

**Erin Hannah Sybouts**, University of Texas Health Science Center at San Antonio, USA  
*Recombination and BLM Helicase Compensate for Replication Fork Defects in the Absence of 53BP1 Protein*

**Shane McDevitt**, Temple University Lewis Katz School of Medicine, USA  
*Mechanisms of RNA-Transcript Templated DNA Recombinational Repair Promoted by RAD52*

**Susanne S. C. Bantele**, Max Planck Institute of Biochemistry, Germany  
*Regulation of the Conserved Chromatin Remodeler Fun30SMARCAD1 at DNA Double-Strand Breaks*

**Walter J. Chazin**, Vanderbilt University, USA  
*Mechanisms for Counting and Handoff by Human DNA Primase- A Role for the 4Fe-4S Cluster?*

**Holger Puchta**, Karlsruhe Institute of Technology, Germany  
*The RTR Complex Partner RMI2 and the DNA Helicase RTEL1 Are Both Independently Involved in Preserving the Stability of 45S rDNA Repeats in Arabidopsis thaliana*

Following Session is for [Genomic Instability and DNA Repair \(Z1\)](#)

14:30–16:30

**Workshop 1: Genome Instability and DNA Repair I**

[Sweeney Ballroom A-B](#)

\* **James E. Haber**, Brandeis University, USA

**Elena Balkanska-Sinclair**, Duke University, USA  
*The BRD4-NUT Fusion Protein from Nut-Midline Carcinoma modulates DNA Damage Signaling and Ionizing Radiation Response*

**Michael M. Cox**, University of Wisconsin-Madison, USA  
*Ionizing Radiation Resistance in Experimentally Evolved Escherichia coli Populations*

**Qing Li**, Peking University, China  
*Chaperoning RPA during DNA Replication*

**Ryan M. Baxley**, University of Minnesota, USA  
*Progressive Genomic Instability and Telomere Erosion in Human Cells following Inactivation of a Single MCM10 Allele*

**Michael H. Hauer**, Friedrich Miescher Institute for Biomedical Research, Switzerland  
*Histone Degradation in Response to DNA Damage Enhances Chromatin Dynamics and Recombination Rates*

**Mariano Labrador-San Jose**, University of Tennessee, USA  
*Components of the DNA Damage Response Pathway, ATR and ATM, Modulate Chromatin Insulator Activity through Phosphorylation of Histone H2Av at Insulator Sites*

**Mitch McVey**, Tufts University, USA  
*Coordination of ATPase and Polymerase Activities of Drosophila DNA Polymerase Theta during Interstrand Crosslink and Alternative End-Joining Repair of Double-Strand Breaks*

**Hilda A. Pickett**, Children's Medical Research Institute, Australia  
*BLM and SLX4 Play Opposing Roles in Recombination-Dependent Replication at Human Telomeres*

16:30–17:00

**Coffee Available**

[Sweeney Ballroom Foyer](#)

17:00–19:00

**Starting Recombination**

[Sweeney Ballroom C-E](#)

[Registered attendees](#) can view abstracts starting on 03/02/2017

Covering meiotic initiation, somatic lesion formation, DSB

processing.

\* **Bernard de Massy**, Institut de Génétique Humaine, France

**Scott Keeney**, HHMI/Memorial Sloan Kettering Cancer Center, USA

*Breaking and Chewing DNA during Meiosis*

**Florenca M. Pratto**, NIDDK, National Institutes of Health, USA

*Linking Replication and Meiotic Recombination Initiation in Mammals*

**Kara A. Bernstein**, University of Pittsburgh School of Medicine, USA

*Short Talk: The Function of the Shu Complex and the Rad51 Paralogs in Repair of Replication Intermediate by Promotion of Rad51 Presynaptic Filament Assembly*

**Maria Jasin**, Memorial Sloan Kettering Cancer Center, USA

*Protecting the Genome by Homologous Recombination*

**Sofija Mijic**, Institute of Molecular Cancer Research, Switzerland

*Short Talk: Replication Fork Reversal Triggers Fork Degradation in BRCA2-Defective Cells*

Following Session is for [Genomic Instability and DNA Repair \(Z1\)](#)

17:00–19:00

### RNA Metabolism and Genome Stability

[Registered attendees](#) can view abstracts starting on 03/02/2017

[Sweeney Ballroom A-B](#)

\* **Hengyao Niu**, Indiana University Bloomington, USA

**Vihandha Wickramasinghe**, Peter MacCallum Cancer Centre, Australia

*Effects of Altered RNA Processing on Genome Stability and the Proteome*

**Frédéric L. Chedin**, University of California, Davis, USA

*Short Talk: R-Loop Formation is a Hallmark of Active Early Replication Origins in Mammalian Genomes*

**Julius Brennecke**, IMBA - Institut für Molekulare Biotechnologie GmbH, Austria

*An RNA-Based Genome Immune System Safeguards Genome Stability*

**Eric A. Hunt**, New England Biolabs, USA

*Short Talk: Prokaryotic Argonautes and their Potential as New Molecular Tools*

**Alice Meroni**, University of Milan, Italy

*Short Talk: DNA Polymerase  $\epsilon$  Sensitizes Cells to Nucleotide Pool Deprivation in Absence of RNase H*

**Francesca Storici**, Georgia Institute of Technology, USA

*Short Talk: Double-Strand Break Repair by Transcript RNA Is Stimulated by Rad52 and Requires Limited End Resection*

19:00–20:00

### Social Hour with Lite Bites

No registration fees are used to fund alcohol served at this function.

[Sweeney F, Main Level Breakouts](#)

19:30–22:00

### Poster Session 1

[Sweeney F, Main Level Breakouts](#)

## TUESDAY, APRIL 4

07:00–08:00

### Breakfast

[Sweeney F, Main Level Breakouts](#)

08:00–11:00

### Interplay between Chromatin Structure and DNA Replication/Repair (Joint)

[Sweeney Ballroom A-E](#)

[Registered attendees](#) can view abstracts starting on 03/02/2017

\* Jennifer A. Cobb, University of Calgary, Canada

\* Anja Groth, University of Copenhagen, Denmark

**Geneviève Almouzni**, Centre National de la Recherche Scientifique, France  
*Shaping Chromatin in the Nucleus, the Bricks and the Architects*

**Gary Karpen**, Lawrence Berkeley National Laboratory, University of California, Berkeley, USA  
*Regulation of DNA Repair in Heterochromatin and Euchromatin*

**Francesca Mattioli**, HHMI/Colorado University Boulder, USA  
*Short Talk: DNA-Mediated Association of Two Histone-Bound CAF-1 Complexes Drives Tetrasome Assembly in the Wake of DNA Replication*

#### Coffee Break

**Robert A. Martienssen**, Cold Spring Harbor Laboratory, USA  
*RNAi Promotes Heterochromatic Silencing through Replication-Coupled Release of RNA Polymerase II*

**Bernard de Massy**, Institut de Génétique Humaine, France  
*The Control of Initiation of Meiotic Recombination by PRDM9*

**Philipp Oberdoerffer**, NCI, National Institutes of Health, USA  
*Short Talk: Replication Stress Shapes a Protective Chromatin Environment Across Fragile Genomic Regions*

11:00–17:00

#### On Own for Lunch

11:00–13:00

#### Poster Setup

[Sweeney F, Main Level Breakouts](#)

13:00–22:00

#### Poster Viewing

[Sweeney F, Main Level Breakouts](#)

16:30–17:00

#### Coffee Available

[Sweeney Ballroom Foyer](#)

17:00–19:00

#### Regulating Recombination

[Sweeney Ballroom C-E](#)

[Registered attendees](#) can view abstracts starting on 03/02/2017  
Cell cycle, site choice, partner choice, pathway choice.

\* Xiaolan Zhao, Memorial Sloan Kettering Cancer Center, USA

**Eva Hoffmann**, University of Copenhagen, Denmark  
*Gene Conversion and Crossover Maps in the Human Germline*

**Lorraine S. Symington**, Columbia University, USA  
*DNA End Resection and Repair Pathway Choice*

**Aurele Piazza**, University of California, Davis, USA  
*Short Talk: Multi-Invasions Are Recombination Byproducts that Induce Chromosomal Rearrangements*

**Eric C. Greene**, Columbia University, USA  
*Single-Molecule Studies of Recombination Pathways*

**Jennifer A. Cobb**, University of Calgary, Canada  
*Short Talk: Nej1 Regulates Repair Pathway Choice by Inhibiting Dna2-Sgs1 Mediated Resection*

Following Session is for [Genomic Instability and DNA Repair \(Z1\)](#)

17:00–19:00

#### Cell Cycle Regulation of DNA Damage Response

[Registered attendees](#) can view abstracts starting on 03/02/2017

[Sweeney Ballroom A-B](#)

\* Frédéric L. Chedin, University of California, Davis, USA

**Tanya T. Paull**, University of Texas at Austin, USA  
*Double-Strand Break Repair Factors and R-Loop-Mediated Genomic Instability*

**David Cortez**, Vanderbilt University School of Medicine, USA  
*Regulation of Replication Fork Stability by Single-Stranded DNA Binding Proteins*

**Kyle M. Miller**, University of Texas at Austin, USA  
*Chromatin Regulation of the DNA Damage Response*

**Michael P. Sheetz**, Mechanobiology Institute, National University of Singapore, Singapore  
*Short Talk: DNA Damage Causes Rapid Accumulation of Phosphoinositides to Recruit ATR but not ATM*

**Linda J. Kenney†**, National University of Singapore, Singapore  
*Short Talk: Salmonella Typhimurium forms Biofilms on Solid Tumors*

19:15–20:00	<b>Social Hour with Lite Bites</b> No registration fees are used to fund alcohol served at this function.	<a href="#">Sweeney F, Main Level Breakouts</a>
19:30–22:00	<b>Poster Session 2</b>	<a href="#">Sweeney F, Main Level Breakouts</a>

### WEDNESDAY, APRIL 5

07:00–08:00	<b>Breakfast</b>	<a href="#">Sweeney F, Main Level Breakouts</a>
07:30–08:00	<b>Poster Setup</b>	<a href="#">Sweeney F, Main Level Breakouts</a>
08:00–17:00	<b>Poster Viewing</b>	<a href="#">Sweeney F, Main Level Breakouts</a>
08:00–11:00	<b>Replication Fork Progression and Restart</b> <a href="#">Registered attendees</a> can view abstracts starting on 03/02/2017	<a href="#">Sweeney Ballroom C-E</a>

\* **Anne D. Donaldson**, University of Aberdeen, UK

**Karim Labib**, University of Dundee, UK  
*The End of Chromosome Replication*

**Kenneth J. Marians**, Memorial Sloan Kettering Cancer Center, USA  
*Imaging Individual Replisomes Reveals Independence and Decoupling of Polymerases During Replication*

**Alberto Ciccia**, Columbia University, USA  
*Short Talk: Restoration of Fork Stability in BRCA1- and BRCA2-Deficient Cells*

#### Coffee Break

**Xiaolan Zhao**, Memorial Sloan Kettering Cancer Center, USA  
*The Effects of Cancer-Associated DNA Polymerase Epsilon Mutations on Replication*

**Anja Groth**, University of Copenhagen, Denmark  
*Chromatin Replication and Epigenome Maintenance*

**Advaita Madireddy**, Albert Einstein College of Medicine, USA  
*Short Talk: FANCD2 Facilitates DNA Replication through Common Fragile Sites*

Following Session is for [Genomic Instability and DNA Repair \(Z1\)](#)

08:00–11:00	<b>Nuclear Dynamics and Genome Stability</b> <a href="#">Registered attendees</a> can view abstracts starting on 03/02/2017	<a href="#">Sweeney Ballroom A-B</a>
	* <b>Arnab Ray Chaudhuri</b> , National Institutes of Health, USA	
	<b>Marco F. Foiani</b> , Istituto FIRC di Oncologia Molecolare, Italy <i>An Integrated ATR, ATM and mTOR-Mechanical Network Controlling Nuclear Plasticity and Cell Migration</i>	

**Angela Taddei**, Institut Curie, France  
*Nuclear Organization and Chromatin Status Modulate Homologous Recombination Efficiency and Outcome*

**Irene Chiolo**, University of Southern California, USA  
*Short Talk: Highways for Repair: Nuclear Myosins and Actin Filaments Relocalize Heterochromatic DNA Breaks to the Nuclear Periphery*

#### Coffee Break

**Martin W. Hetzer**, The Salk Institute, USA  
*How the Nuclear Membrane Controls Genome Function*

**Emmanuelle Fabre**, Hopital St Louis, France  
*Short Talk: DNA Damage Increases Chromatin Stiffening in Budding Yeast*

**Neil T. Umbreit**, Dana-Farber Cancer Institute, USA  
*Short Talk: Chromosome Bridge Resolution Requires Mechanical Forces from Actin-Based Contractility*

**Peter Ly**, Ludwig Institute for Cancer Research, University of California at San Diego, USA  
*Short Talk: Mitotic Errors Promote Chromosome Shattering and DNA Break Repair by Non-Homologous End Joining*

11:00–12:00	<b>Lunch</b>	<a href="#">Sweeney F, Main Level Breakouts</a>
12:00–14:30	<b>Poster Session 3</b>	<a href="#">Sweeney F, Main Level Breakouts</a>
16:30–17:00	<b>Coffee Available</b>	<a href="#">Sweeney Ballroom Foyer</a>
17:00–19:00	<b>Replication Initiation Mechanisms</b>	<a href="#">Sweeney Ballroom C-E</a>

[Registered attendees](#) can view abstracts starting on 03/02/2017

\* **Kenneth J. Marians**, Memorial Sloan Kettering Cancer Center, USA

**Stephen P. Bell**, Massachusetts Institute of Technology, USA  
*Mechanism and Timing of Mcm2-7 Ring Closure during Origin Licensing*

**Stephen D. Bell**, Indiana University, USA  
*DNA Replication in Archaea*

**Heath Murray**, Newcastle University, UK  
*Short Talk: A New Bacterial Replication Origin Element Specifies Single-Strand Initiator Binding*

**Anne D. Donaldson**, University of Aberdeen, UK  
*The Conserved Role of Rif1 as a Substrate-Targeting Subunit of Protein Phosphatase 1*

**Dominik Boos**, University of Duisburg-Essen, Germany  
*Short Talk: MTBP Is an Essential Replication Initiation Factor with Vertebrate-Specific and Sld7-Like Features*

Following Session is for [Genomic Instability and DNA Repair \(Z1\)](#)

17:00–19:00	<b>DNA Repair and Human Diseases</b>	<a href="#">Sweeney Ballroom A-B</a>
	<a href="#">Registered attendees</a> can view abstracts starting on 03/02/2017	
	* <b>Hilda A. Pickett</b> , Children's Medical Research Institute, Australia	
	<b>Agnes Sfeir</b> , New York University School of Medicine, USA <i>Single-Molecule Analysis of mtDNA Replication Uncovers the Basis of the Common Deletion</i>	
	<b>André Nussenzweig</b> , NCI, National Institutes of Health, USA <i>DNA Breaks and End-Resection Measured Genome-Wide by End Sequencing (END-seq)</i>	

**Simon J. Boulton**, London Research Institute, Clare Hall  
Laboratories, UK  
*Mechanistic Insights into Telomere Dysfunction Disorders*

**Madalena Tarsounas**, University of Oxford, UK  
*Short Talk: MUS81 Nuclease Activity Is Essential for Replication  
Stress Tolerance and Chromosome Segregation in BRCA2-  
Deficient Cells*

**Janet Partridge**, St Jude Children's Research Hospital, USA  
*Short Talk: Histone H3G34R Mutation Causes Replicative Stress,  
Defective Homologous Recombination and Genomic Instability in  
Fission Yeast*

19:00 **On Own for Dinner**

## THURSDAY, APRIL 6

07:00–08:00	<b>Breakfast</b>	<a href="#">Sweeney F, Main Level Breakouts</a>
08:00–11:00	<b>Replication Fork Establishment and Replication- Coupled Repair (Joint)</b> <a href="#">Registered attendees</a> can view abstracts starting on 03/02/2017	<a href="#">Sweeney Ballroom A-E</a>
	* <b>Jeannine Gerhardt</b> , Weill Cornell Medicine, USA	
	* <b>Karlene A. Cimprich</b> , Stanford University, USA	
	<b>James M. Berger</b> , Johns Hopkins University School of Medicine, USA <i>Physical Mechanisms for Initiating DNA Replication in Cells</i>	
	<b>Agata Smogorzewska</b> , Rockefeller University, USA <i>Stress Response at the Replication Fork</i>	
	<b>Eric J. Brown</b> , Perelman School of Medicine, University of Pennsylvania, USA <i>Short Talk: Characterizing Replisome Ubiquitination upon Fork Stalling</i>	
	<b>Coffee Break</b>	
	<b>Virginia A. Zakian</b> , Princeton University, USA <i>Adaptation to Heat Stress Results in Reversible Telomere Shortening, Reduced Telomerase, and Shelterin Rearrangement</i>	
	<b>Helle D. Ulrich</b> , Institute of Molecular Biology, Germany <i>Coordination of DNA Damage Bypass with Genome Replication and Checkpoint Signaling</i>	
	<b>Stephane Koundrioukoff</b> , Institute Gustave Roussy, France <i>Short Talk: DNA Replication Compensation: A Two Steps Mechanism</i>	
11:00–17:00	<b>On Own for Lunch</b>	
14:30–16:30	<b>Workshop 2: Replication</b>	<a href="#">Sweeney Ballroom C-E</a>
	* <b>Linda B. Bloom</b> , University of Florida, USA <i>Active Sliding Clamp Opening in Three Steps</i>	
	<b>Joseph Yeeles</b> , MRC Laboratory of Molecular Biology, UK <i>How the Eukaryotic Replisome Responds to DNA Damage in the Leading- and Lagging-Strand Templates</i>	
	<b>Christopher Sansam</b> , Oklahoma Medical Research Foundation, USA <i>DNA Replication Timing during Development Anticipates Transcriptional Programs and Parallels Enhancer Activation</i>	
	<b>Boris Pfander</b> , Max Planck Institute of Biochemistry, Germany <i>Robust Replication Control by Temporal Gaps between Licensing and Firing Phases</i>	



**Hasan Yardimci**, Francis Crick Institute, UK  
*Super-Resolution Fluorescence Imaging of DNA Replication Intermediates*

**Jon Baxter**, University of Sussex, UK  
*Transcription Promotes Replication Fork Rotation and Double-Stranded DNA Intertwining via a Cohesin-Dependent Pathway*

**Ivan Psakhye**, IFOM, the FIRC Institute of Molecular Oncology, Italy  
*DDK-Mediated Regulation of the deSUMOylating Enzyme Ulp2 Facilitates DNA Replication Initiation*

**Joseph L. Stodola**, Washington University School of Medicine, USA  
*Kinetic Analysis of Lagging Strand Replication and Okazaki Fragment Maturation*

Following Session is for [Genomic Instability and DNA Repair \(Z1\)](#)

14:30–16:30

## Workshop 2: Genome Instability and DNA Repair II

[Sweeney Ballroom A-B](#)

\* **Michael P. Sheetz**, Mechanobiology Institute, National University of Singapore, Singapore

**Katharina Schlacher**, MD Anderson Cancer Center, USA  
*Epigenetics-Enabled MRE11 Replication Restart by p53 Promotes Replication Pathway Homeostasis to Suppress Opportunistic Transcription Reprogramming*

**Kristijan Ramadan**, University of Oxford, UK  
*SPRTN Is a Novel Mammalian Protease with the Central Role in DNA Replication-Coupled DNA-Protein Crosslink Repair*

**Jason Sheltzer**, Cold Spring Harbor Laboratory, USA  
*Single-Chromosome Aneuploidy Commonly Functions as a Tumor Suppressor but Can Drive Genome Evolution*

**Manuel Stucki**, University of Zurich, Switzerland  
*TOPBP1 Cooperate with TCOF1/Treacle in the Nucleolar Response to DNA Double-Strand Breaks*

**Maria Teresa Teixeira**, CNRS - UMR 8226, France  
*Telomere Replication in the Absence of Telomerase: Failure, Repair and Adaptation*

**Johannes van den Boom**, University of Duisburg-Essen, Germany  
*The AAA-ATPase VCP/p97 Extracts Sterically Trapped Ku70/80 Rings from DNA in Double-Strand Break Repair*

**Catherine H. Freudenreich**, Tufts University, USA  
*Cytosine Deamination Mediates R-Loop Dependent CAG Repeat Fragility and Instability*

**Muwen Kong**, University of Pittsburgh, USA  
*Auto-PARYlation Switches PARP1 Search Mechanism from Three-Dimensional Diffusion to Anomalous One-Dimensional Sliding*

16:30–17:00

## Coffee Available

[Sweeney Ballroom Foyer](#)

17:00–18:45

## Finishing Recombination

[Sweeney Ballroom C-E](#)

[Registered attendees](#) can view abstracts starting on 03/02/2017  
 Homology search, strand exchange, dealing with DNA joint molecules.

\* **Maria Jasin**, Memorial Sloan Kettering Cancer Center, USA

**Stephen C. Kowalczykowski**, University of California, Davis, USA  
*Molecular Functions and Single Molecule Studies of BRCA1, BRCA2, and RAD51 Paralogs*

**Petr Cejka**, University of Zurich, Switzerland  
*Processing of DNA Double-Strand Breaks for Repair by Homologous Recombination*

**Ralph Scully**, Beth Israel Deaconess Medical Center, USA  
*Short Talk: Microhomology-Mediated Tandem Duplications form at Tus/Ter-Stalled Replication Forks in BRCA1 Mutant Cells*

**Stephen C. West**, Francis Crick Institute, UK  
*Unresolved Recombination Intermediates as a Source of DNA Breaks and Chromosome Aberration*

Following Session is for [Genomic Instability and DNA Repair \(Z1\)](#)

17:00–18:45

### Telomeres and Centromeres

[Registered attendees](#) can view abstracts starting on 03/02/2017

[Sweeney Ballroom A-B](#)

\* **Maria Teresa Teixeira**, CNRS - UMR 8226, France

**Titia de Lange**, Rockefeller University, USA  
*How Shelterin Solves the Telomere End-Protection Problem*

**Kerry S. Bloom**, University of North Carolina at Chapel Hill, USA  
*The Molecular Basis for the Centromere Spring*

**Nausica Arnoult**, The Salk Institute for Biological Studies, USA  
*Short Talk: Regulation of DNA Repair Pathway Choice in S/G2 by the NHEJ Inhibitor CYREN*

**Julia Promisel Cooper**, NCI, National Institutes of Health, USA  
*Telomeric Control of Kinetochore Assembly and Nuclear Envelope Breakdown*

18:45–19:00

### Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

[Sweeney Ballroom C-E](#)

[Registered attendees](#) can view abstracts starting on 03/02/2017

Following Session is for [Genomic Instability and DNA Repair \(Z1\)](#)

18:45–19:00

### Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

[Registered attendees](#) can view abstracts starting on 03/02/2017

[Sweeney Ballroom A-B](#)

19:00–20:00

### Social Hour with Lite Bites

No registration fees are used to fund alcohol served at this function.

[Sweeney F, Main Level Breakouts](#)

20:00–23:00

### Entertainment

Entertainment is not subsidized by conference registration fees nor any U.S. federal government grants. Funding for this expense is provided by other revenue sources.

[Sweeney F](#)

FRIDAY, APRIL 7

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### Departure

\*Session Chair †Invited, not yet responded.

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