

# Eukaryotic DNA Replication & Genome Maintenance

## Session 1 FROM STRUCTURE TO FUNCTION

WEDNESDAY 9/5/2007, 7:30 PM

L. Joshua-Tor

#	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
1	Joshua-Tor	Mechanism and DNA translocation in a replicative hexameric helicase	12
2	Nair	Structure and function of a full-length archaeal MCM homolog	12
3	Kanter	The Mcm4,6,7 subunits exhibit distinct and conserved biochemical properties	12
4	Schwacha	Reconstitution of MCM2-7 helicase activity—Involvement of a DNA loading "gate"	12
5	Ilves	Recombinant reconstitution of the <i>Drosophila</i> Cdc45-MCM-GINS (CMG) complex—Further studies on the DNA helicase	12
6	O'Donnell	Structure of a polymerase sliding clamp on DNA	12
7	Speck	The architecture of the DNA replication origin recognition complex in <i>S. cerevisiae</i>	12
8	Cunningham Dueber	Replication origin recognition and deformation by a heterodimeric archaeal Orc1 complex	12
9	Meinke	Structural and functional studies of the SV40 large T-antigen interactions with the origin	12
10	Pisani	Structure/function relationships of the <i>S. solfataricus</i> MCM complex—Nucleotide-induced motion of the $\beta$ -hairpins responsible for DNA binding/remodeling	12

## Session 2 ORIGIN SELECTION

THURSDAY 9/6/2007, 9:00 AM

B. Stillman

#	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
11	Habuchi	Single-molecule analysis reveals distribution of pre-replication complexes in <i>Xenopus</i> egg extracts	12
12	Houchens	Multiple ORC-DNA interactions occur at the fission yeast <i>Ars1</i> origin of DNA replication	12
13	Chen	Dynamic recruitment of Cdt1 by Orc6 during Mcm2-7 loading	12
14	Lutzmann	MCM9 is a new Cdt1-binding protein and is essential for the assembly of vertebrate pre-replication complexes	12
15	Yahyaoui	14-3-3 proteins are regulators of the initiation of DNA replication in budding yeast	12
16	Sclafani	Functional conservation of $\beta$ -hairpin DNA binding domains in Mcm helicases from yeast and archaea	12
17	Schepers	Interaction between HMGA1a and ORC creates site-specific replication origins	12
18	Fujita	Involvement of human ORC and TRF2 in pre-replication complex assembly at telomeres and telomere homeostasis	12
19	Norseen	RNA-dependent recruitment of the origin recognition complex (ORC) to OriP	12
20	Kapler	<i>Tetrahymena</i> ORC contains ribosomal RNA fragment that participates in ribosomal DNA origin recognition	12

<u>#</u>	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
21	MacNeill	MCM-GINS and MCM-MCM interactions on and off chromatin revealed by bimolecular fluorescence complementation in fission yeast	
22	Alabert	Single-molecule analysis of the interplay between homologous recombination and checkpoint proteins during a replication stress	
23	Anantha	Sequential and synergistic modification of human RPA by cyclin-dependent and DNA damage-activated kinases	
24	Elias	Initiation of HSV DNA replication—Mechanisms and evolutionary history	
25	Arora	DNA polymerase $\delta$ is involved in maintenance of chromosome dynamics during mitotic cell cycle	
26	Atanassova	The molecular machinery for mitochondrial DNA replication and human disease	
27	Gossen	Cell cycle dynamics of <i>Drosophila</i> ORC chromosome binding	
28	Bartos	Catalysis of strand annealing by replication protein A derives from its strand melting properties	
29	Usskilat	Human replication factor Cdc45—Localization and interactions during the cell cycle	
30	Bochman	Individual active sites within the MCM2-7 complex have evolved specialized functions	
31	Bonte-Savreux	Cdc7 protein is overexpressed in human tumors and its loss induces apoptosis in a subset of cancer cell lines but not normal cell lines	
32	Budd	Multiple nucleases and helicases participate in telomere maintenance and DSB repair	
33	Hasham	The role of X-ray cross complementing 2 ( <i>Xrcc2</i> ) and p53 in developing B-lymphocytes	
34	CADORET	Genome-wide mapping of DNA replication origins in the human genome	
35	Callegari	Postreplication gaps trigger the cell-cycle response to UV	
36	Ceschia	Role of Smc5/6 in maintaining genome stability in <i>S. cerevisiae</i>	
37	Chattopadhyay	Human Mcm10 regulates the catalytic subunit of DNA polymerase- $\alpha$ and prevents DNA damage during replication	
38	Chaudari	The effects of <i>cis</i> -acting sequences and <i>cds1</i> deletion on the replication timing of fission yeast telomere-associated sequences	
39	Cho	In vitro assembly of pre-replicative complex on oriP using recombinant human pre-RC proteins	
40	Choi	Reconstitution of a human ATR-mediated checkpoint response to damaged DNA	
41	Chon	Interactions of RNase with PCNA	
42	Chowdhury	Characterization of the c-Myc DNA unwinding element binding protein DUE-B	
43	Christensen	<i>Drosophila</i> MCM10 in heterochromatin dynamics and DNA replication	

44	Crampton	A modular <i>ARS</i> element inhibits DNA replication through a <i>Sir2</i> -dependent mechanism
45	Cuvier	A topoisomerase II-dependent mechanism for the reprogramming of replicons at mitosis
46	Nieduszynski	Defining parameters of the chromosome replication system
47	Di Paola	Searching for a tumor-specific origin
48	Ding	Geminin depletion results in the preferential re-replication of heterochromatic sequences
49	Donti	Regulation of ORC1 during the vegetative cell cycle and development in <i>T. thermophila</i>
50	Drury	Factors contributing to the rapid evolution of licensing regulation in eukaryotic cells
51	Eichinger	Sequestration of aberrant DNA polymerase $\alpha$ in the cytoplasm suggest a quality control mechanism
52	Farina	Biochemical characterization of the human helicase ChIR1 and its interaction with the flap endonuclease FEN1
53	Fijalkowska	Dpb2p, a noncatalytic subunit of DNA polymerase $\epsilon$ contributes to the fidelity of DNA replication in <i>S. cerevisiae</i>
54	Fisher	An origin probability model for Cdk-cyclin regulation of the initiation of DNA replication
55	Allen	Mapping the nuclear Matrix Attachment Regions (MARS) from chromosome 4 of <i>A. thaliana</i> using microarray analysis
56	Foulk	<i>cis</i> -elements in the <i>Sciara</i> II/9A amplification origin
57	Francis	Cdc7/Dbf4 phosphorylation of Mcm2-7 is enhanced by pre-RC formation
58	Friedel	Role of the Sgs1-RPA interaction in stabilizing replication forks
59	Hyrien	Topoisomerase II inhibition by ICRF-193 slows down S-phase
60	Gardiner	An evolutionary conserved motif of non-coding Y RNAs is essential and sufficient for human chromosomal replication
61	Ge	Dormant origins are required for human cells to survive replicative stress
62	Gerhardt	A novel factor in initiation of DNA replication—Human DNA helicase B
63	Sedman	The role of recombination in mitochondrial DNA synthesis in yeast <i>C. albicans</i>
64	Givens	Late-replicating vs. early-replicating plasmid minichromosomes in <i>S. pombe</i> —Topological behavior, structure and composition
65	Gonzalez	Reptin is involved in the initiation of DNA replication in <i>Xenopus</i> egg extracts
66	Elias	Storage pools of proliferating cell nuclear antigen PCNA in the nucleus of the trypanosomatid <i>T. cruzi</i>
67	Han	Rtt109 acetylates histone H3 lysine 56 and functions in DNA replication
68	Harada	Genome-wide location analysis identifies transcriptional targets of p110 CDP/Cux involved in cell cycle progression
69	Haring	Domain contributions to cellular functions of human replication protein A
70	hassan zadeh	An insulator organizes early domain of replication

71	Haworth	Degradation of Cdc17 in the absence of Mcm10 is dependent on Ubc4
72	Melendy	The PV E1 DNA helicase is an integral component of a leading strand DNA replication complex
73	Huang	Pinpointing the interactions of DNA polymerase $\alpha$ -primase with helicase in initiation of SV40 DNA replication
74	Humphreys	The role of replication protein A 32-kD subunit phosphorylation in vivo
75	Hwang	Knockdown of human MCM10 exhibits delayed and incomplete chromosome replication followed by G2 phase arrest
76	Lygerou	Silencing the DNA replication inhibitor Geminin promotes senescence
77	Jain	Recombination execution checkpoint—A novel checkpoint during DNA double strand break repair
78	Kadaja	Mechanism of genomic instability of the cells infected with the high risk HPVs
79	Kan	A group of general replicators and replication origins distributed throughout the human genome
80	KANAI	DmGEN shows a flap endonuclease activity, cleaving the blocked-flap structure and model replication fork
81	Kaykov	Spatial organization of DNA replication in fission yeast
82	Keaton	Differential susceptibility of S and M phase cyclin/Cdk complexes to inhibitory tyrosine phosphorylation in yeast
83	Kim	Developmentally regulated usage of amplification origins in <i>Drosophila</i> follicle cell amplicons
84	Klinge	An iron-sulfur domain of the eukaryotic primase is essential for RNA primer synthesis
85	Kochaniak	A single-molecule study of the unwinding mechanism of the eukaryotic replicative MCM2-7 helicase
86	Ishimi	Molecular dissection of human MCM2 protein
87	Koren	Regulatory determinants of DNA replication timing
88	Falkenberg Gustafsson	Structure-function relationship between the mitochondrial twinkle helicase and the bacteriophage T7 gene 4 protein
89	Koshiyama	SUMOylation of meiosis-specific RecA-homolog Lim15/Dmc1 in <i>C. cinereus</i>
90	Kubota	Identification of functional domains in TdIF1 and its inhibitory mechanism for TdT activity
91	Kundu	Cdc6 inhibits the initiation of DNA replication by modulating Cdc7-dependent hyperphosphorylation of Mcm4
92	Kuriyama	Effects of DNA polymerase $\alpha$ poison dehydroaltenuin on the fission yeast <i>S. pombe</i>
93	Marheineke	Stochastic temporal program of replication origin firing in <i>Xenopus</i> egg extracts
94	Lam	Investigating the establishment of bi-directional DNA helicases at asymmetric origins of replication in <i>S. cerevisiae</i>
95	Langston	A switch from highly processive synthesis to rapid dissociation upon completing a DNA fragment makes yeast polymerase $\delta$ well suited for lagging strand replication

96	Lemaitre	Mitotic reprogramming of the genome for DNA replication
97	Lee	Approaches to analyzing and utilizing early and late replicating DNA and mapping DNA replication origins in plants
98	Leman	Timeless and Tipin form a mammalian replication fork protection complex and are involved in sister chromatid cohesion
99	Li	The requirement of Sld3 for the assembly of replication initiation proteins onto pre-RC in budding yeast
100	Liachko	Inter-species functional analysis reveals novel origins of replication
101	Ligasova	3D analysis of early replication domains in HeLa cells
102	Lin	<i>Drosophila Cui4</i> functions in pre-replication complex formation during gene amplification in follicle cells
103	Liu	Genomic instability of spinocerebellar ataxia type 10 (ATTCT) $\cdot$ (AGAAT) repeats is associated with abnormal replication origin activity in human cells
104	Liu	Adjacent residues in the conserved E1 initiator $\beta$ -hairpin define different roles of the $\beta$ -hairpin in template melting, helicase loading and DNA helicase activity
105	Lucas	Role of DNA replication dynamics and chromatin structure in the induction of common fragile sites
106	Luche	Disrupting MCM4 function in <i>S. pombe</i> —Implications in cell physiology, checkpoint signaling and genomic perturbation
107	Lygerou	A stochastic hybrid model for DNA replication—Novel insight into the random gap problem

**Session 4 REPLISOME ASSEMBLY**

THURSDAY 9/6/2007, 7:30 PM

K. Labib

<u>#</u>	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
108	Labib	Regulating the progression of eukaryotic DNA replication forks	12
109	Jha	MCM10 and And-1/Ctf4 recruit DNA polymerase $\alpha$ to chromatin for initiation of DNA replication	12
110	Okorokov	Hexameric ring structure of human Mcm10 DNA replication factor	12
111	Araki	CDK-dependent initiation of chromosomal DNA replication in budding yeast	12
112	Zegerman	Sld3 integrates kinase signaling for origin firing in budding yeast	12
113	Masai	Regulation of establishment and stable maintenance of replication forks by Cdc7 kinase	12
114	Mendez	Functional and structural characterization of the human GINS complex	12
115	Krude	Non-coding Y RNAs are required for the establishment but not for the elongation, of mammalian chromosomal DNA replication forks	12
116	Fox	Genome-wide analyses of ORC affinity and function at its target loci in <i>S. cerevisiae</i>	12
117	Alexandrow	Replicons in mammalian cells contain multiple pre-replication complexes that are targeted by limiting amounts of Cdc45	12

**Session 5 CELL CYCLE REGULATION AND CONNECTIONS**

FRIDAY 9/7/2007, 9:00 AM

J. Blow

<u>#</u>	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
118	Blow	Replication initiation can be decoupled from the replication timing programmed by modulating CDK levels	12
119	Ode	Geminin binds ORC-Cdc6-Cdt1 complex on chromatin and stably turns off the licensing activity depending on ATP hydrolysis	12
120	Calvi	Checkpoint responses to re-replication stress in a developmental context	12
121	Afshar	Loss of DNA replication control induces gene amplification	12
122	Hemerly	Orc1 controls centriole and centrosome copy number in human cells	12
123	Takahashi	Coupling of chromosome cohesion to the initiation of DNA replication via Cdc7	12
124	Weinreich	Cdc7-Dbf4 inhibits Polo kinase during the normal cell cycle and following microtubule disruption	12
125	Chesnokov	Multiple functions of Orc6 protein in <i>Drosophila</i>	12
126	Duncker	Characterization of Orc6 function in <i>S. cerevisiae</i>	12
127	Noguchi	RFC <sup>Ctf18</sup> and the replication fork protection complex define the separate pathways required for replication fork stabilization and sister chromatid cohesion	12

**Session 6 POSTER SESSION II**

FRIDAY 9/7/2007, 2:00 PM

<u>#</u>	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
128	Ma	A novel role for the yeast pol32 subunit of DNA polymerase $\delta$ in base excision repair	
129	Marchetti	In vivo and in vitro interactions of a homeotic protein with members of the human pre-replicative complex	
130	Maric Antoinat	X-shaped post-replicative joint DNA molecules contain ribonucleotides	
131	Mason	Phosphorylation induced conformational changes regulate replication protein A	
132	Masuda	Dynamic properties of human replication factors in the elongation of DNA replication	
133	Mazurek	Screen for proteins with novel essential roles in human DNA replication	
134	Meng	Human Pol $\delta$ 3 exhibits properties consistent with its formation as an adaptive response to DNA damage that contributes to genome maintenance	
135	Mesner	Human DNA replication initiation regions identified by agarose trapped replication intermediates—Comparisons/validations with 2D-gel, nascent strand abundance and ELF-H assays	
136	Minca	<i>RAD5</i> mediates the recombination-dependent replicative bypass of DNA damage	
137	Mizuno	Cell cycle-dependent chromatin association, phosphorylation, and degradation of mouse Orc1	
138	Moore	Yeast 2-hybrid analysis of <i>S. pombe</i> Mcm10 interactions	

139	Mordes	Regulation of the checkpoint kinase ATR by TopBP1
140	Morohashi	SCF <sup>Dia2</sup> associates with replisome progression complexes during S phase
141	Myers	Triplex-forming polypurine•polypyrimidine sequences generate an orientation-dependent replication fork barrier in vivo
142	Navadgi	The Ddc1 checkpoint clamp subunit activates Mec1 kinase during the DNA damage checkpoint
143	Petrenko	E1A activates Rb-E2F1 and protects genomic integrity
144	Nozawa	Comprehensive proteomic analyses of human heterochromatin protein 1 (HP1) interacting factors
145	Watanabe-Oda	DNA replication timing of human chromosome 5q23/31 region
146	Alter	Integrative analysis of genome-scale expression data from yeast cell cycle time courses under different oxidative stress conditions
147	Overmeer	RFC is involved in DNA repair and replication in vivo
148	PAI	Analysis of GINS function in the fission yeast cell cycle
149	Petrenko	Genome stabilization defines a role of E2F1 in p53-independent tumor suppression
150	Chong	Helicase activity of the human minichromosome maintenance complex
151	PATEL	Changes in origin selection associated with changes in replication timing in the Vh region of the murine Igh locus
152	Perkins	A role for TopBP1 in recruitment of DNA polymerase $\alpha$ to chromatin during replication restart after damage and during replication of SV40 minichromosomes
153	Pinder	The telomere-maintenance kinase Bud32 is required for inheritance of the yeast 2 $\mu$ m plasmid
154	Poveda	The Rrt101 cullin promotes replication fork progression and recovery in budding yeast
155	Rampakakis	Ku80 is critical for origin firing and cyclin/Cdk cycle (G1/S) progression
156	Roberts	The recruitment of Rtt107 to chromatin requires DNA damage and the Rtt109 acetyltransferase
157	Ruike	Proliferating cell nuclear antigen and Rad2/Rad1/Hus1 (9-1-1) interact with XPG-like endonuclease (GEN) in <i>D. melanogaster</i>
158	SAKSOUK	Conserved molecular interactions within all MYST/ING HAT complexes in eukaryotes
159	Frappier	An alternative form of the human MCM replicative helicase complex containing MCM-BP is essential for genome integrity
160	Sandoval Oporto	Tif1 is a regulator of the intra S-phase checkpoint and is essential for micronuclear genomic stability in tetrahymena
161	Shultz	Genomic and molecular analyses of the core DNA replication machinery in plants
162	Conti	The intra-S-phase checkpoint affects both DNA replication initiation and elongation—Single-cell and -DNA fiber analyses
163	Obuse	Identification and characterization of novel human ORC binding proteins

164	Sercombe	Cyclin A/CDK2 cooperates with Ciz1 to initiate DNA replication in vitro and regulates the interaction between Ciz1 and Cdc6
165	Pascuzzi	Evidence for a DNA replication origin in the rDNA operon of <i>Arabidopsis</i> by analysis of short nascent DNA strands
166	Shah	Contribution of hPMS2 to replication fidelity through microsatellite sequences
167	Sheu	Identification and characterization of substrates for the essential S phase kinase DDK during cell proliferation
168	Shimada	Ino80 chromatin remodeling complex promotes the restart of DNA replication
169	Shiomi	Cell cycle regulated proteolysis of Cdt1 and p21 by SCF <sup>Skp2</sup> and Cul4-DDB1 <sup>Cdt2</sup> ubiquitin ligases
170	Siddiqui	Regulated assembly—Disassembly of the human origin recognition complex
171	Sidorova	Microchannel-assisted replication track analysis in the study of replication stress response in human cells
172	Simmons	Topoisomerase I stimulates polymerase $\alpha$ /primase to synthesize long stretches of SV40 DNA
173	Smith-Roe	The human replication fork protection complex
174	Snyder	Phosphorylation of ATR-interacting protein on Ser239 mediates an interaction with breast-ovarian cancer susceptibility 1 and checkpoint function
175	Sokka	TopBP1 interacts physically with tumor suppressor protein p53
176	Stewart	Coordination of successive movements by replication protein A, DNA2 and flap endonuclease 1 in Okazaki fragment maturation
177	Stone	A mutator allele of yeast DNA polymerase $\zeta$
178	Sugimoto	Identification of novel human Cdt1-binding proteins by a proteomics approach—Proteolytic regulation by APC/C <sup>Cdh1</sup>
179	Sundaram	Cross-talks between MAPK activity and cell cycle progression during genotoxic stress in <i>S. pombe</i>
180	Koepp	Dynamics of Dia2 association with replication proteins
181	Sweet	Analysis of Cdk1 and Cdc7 protein kinase substrates in budding yeast DNA replication
182	Tabancay, Jr.	The <i>S. pombe</i> Pob3/Spt16 complex is essential and interacts with DNA replication proteins
183	Tanaka	<i>Xenopus</i> Ctf4 homolog, AND-1, is required for proper establishment of sister chromatid cohesion
184	Tanaka	Cell cycle specific expression of Sld2 is important for the initiation of DNA replication
185	Tanaka	The Sld7-Sld3 complex important for chromosomal DNA replication
186	Thomae	HMGA1a-ORC interaction creates origins of replication
187	Tittel-Elmer	The Mre11 complex and S-phase—Maintaining the replisome during fork stalling
188	Van	Regulation of primer synthesis and its role in checkpoint activation

189	van Deursen	Replisome progression complexes coupled the MCM helicase to DNA polymerase $\alpha$ at replication forks
190	Voineagu	Long inverted repeats stall replication fork progression in primate cells, yeast and bacteria
191	Waga	EBNA1 regulates ORC binding to <i>oriP</i> plasmids in vitro
192	Walters	The role of multiple MCMs in <i>M. maripaludis</i>
193	Chow	HPV E7 destabilizes p130 to enable viral DNA amplification in G2 phase in differentiated keratinocytes, as revealed by a novel method to produce high titers of infectious virus
194	Warren	Structural basis for DNA binding by Mcm10
195	Wiltrout	The regulation of <i>S. cerevisiae</i> Rev1 protein levels through proteasomal degradation and the effects on mutagenic translesion synthesis
196	Winter	Analysis of the role of the Mcm7-Rb interaction in DNA replication and tumorigenesis
197	Wong	The role of Cdt1 in pre-RC formation involves modulation of chromatin accessibility by a histone deacetylase and a histone acetyltransferase
198	Wood	MCPH1 is a proximal factor in the DNA damage response
199	Wu	Regulation of origin usage during S phase
200	Page	A novel mouse lung cancer model based on ribonucleotide reductase overexpression
201	Yabuuchi	DDK promotes origin loading of Sld3 for replication machinery formation in fission yeast
202	Kong	The Sap1 protein is required to lead Cdc18 protein to chromatin in the fission yeast <i>S. pombe</i>
203	Yang	The risk of spontaneous and damage-induced mutagenesis is amplified in long single-strand DNA formed during repair of a double-strand break
204	Yoshida	Cdk phosphorylation -dependent interaction of human Cdc6 with ATM/ATR checkpoint kinases
205	Zhang	Identification of the ring finger protein RNF8 as an E3 ligase that polyubiquitinates the p12 subunit of human DNA polymerase $\delta$
206	zhang	Role of human DNA polymerase $\alpha$ in maintenance of chromosome stability

**Special Session: NIH REVIEW AND FUNDING OF REPLICATION GRANTS**

FRIDAY 9/7/2007, 4:30 PM

**Session 7 DAMAGE AND REPLICATION STRESS RESPONSES**

FRIDAY 9/7/2007, 7:30 PM

O. Aparicio			
<b>#</b>	<b>Iname</b>	<b>Title</b>	<b><u>Talk Length</u></b>
207	Aparicio	Rad53 deactivation is required for replication fork restart in <i>S. cerevisiae</i>	12
208	Feng	Why do <i>rad53</i> checkpoint deficient yeast mutants die in hydroxyurea?	12
209	Cook	Chk1 and p53 are required for cell cycle arrest in response to insufficient pre-replication complexes	12
210	Bell	A pre-RC checkpoint coordinates origin licensing with cell-cycle progression	12
211	Bielinsky	Defects in Okazaki fragment processing trigger a lagging strand checkpoint in mid-S phase and PCNA ubiquitination	12

212	Bower	Role of BRCA1 and BARD1 in the human decatenation G2 checkpoint	12
213	Baxter	Interference with DNA replication termination, not DNA de-catenation, triggers cell cycle arrest following inhibition of topoisomerase II activity in budding yeast	12
214	Delacroix	The 9-1-1 complex recruits TopBP1 to activate ATR and Chk1	12
215	Smogorzewska	Characterization of FANCI, a novel component of the Fanconi Anemia pathway	12
216	Howlett	Functional interactions between FANCD2 and PCNA via a conserved PCNA-interaction motif	12

**Session 8 CHROMATIN INTERACTIONS AND DEVELOPMENTAL CONTROL** SATURDAY 9/8/2007, 9:00 AM

G. Almouzni

#	Iname	Title	Talk Length
217	Almouzni	Chromatin assembly factors and the challenges of DNA replication and repair	12
218	Li	Sir1 and Asf1 mediate the inheritance of transcriptional silencing in budding yeast	12
219	Zhang	A novel role for histone chaperones CAF-1 and Rtt106 in heterochromatin silencing	12
220	Formosa	FACT makes nucleosomal DNA accessible without disassembling or translocating histone octamers	12
221	Gilbert	Regulation of replication timing during differentiation of mouse embryonic stem cells	12
222	Orr-Weaver	Identification of a <i>Drosophila</i> replication origin developmentally controlled by transcription	12
223	Andreeva	The SUUR protein affects late-replicating chromatin domains in <i>D. melanogaster</i>	12
224	Gerbi	Specification of a metazoan origin of replication	12
225	Michael	Molecular genetic analysis of checkpoint silencing and trans-lesion synthesis in early <i>C. elegans</i> embryos	12
226	Cayrou	Reprogramming DNA replication origins in development and differentiation	12

**Session 9 ORIGIN IDENTIFICATION AND REPLICATION TIMING** SATURDAY 9/8/2007, 2:00 PM

A. Donaldson

#	Iname	Title	Talk Length
227	Donaldson	Ku affects telomere replication time independent of histone tail acetylation	12
228	Hayashi	Regulation of chromosome DNA replication in fission yeast—Swi6-dependent early replication of heterochromatin	12
229	Ramanathan	Effects of chromatin modifying proteins on replication timing	12
230	DeNapoli	Genomic characterization of the <i>Drosophila</i> replication program	12
231	Schwaiger	Defining dynamic replication timing and its link with chromatin and transcription in <i>Drosophila</i> cells	12
232	Prasanth	Organized Orc1 patterning in 1 anticipates spatiotemporal dynamics of DNA replication in S phase	12
233	Karnani	Temporal patterns and origins of replication defined by human genome tiling arrays	12
234	Hamlin	Type-casting mammalian origins of replication	12

235	Aladjem	Dynamic modulation of replication timing by replicator sequences and chromatin modifiers	12
236	Schildkraut	The regulation of replication initiation in mouse and human embryonic stem cell	12

**Session 10 FORK FUNCTION DURING REPLICATION AND REPAIR**

SUNDAY 9/9/2007, 9:00 AM

M. Foiani

<u>#</u>	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
237	Foiani	Physiological and pathological topological transitions at replication forks	12
238	Pasero	Topoisomerase I prevents genomic instability at fragile sites by coordinating replication and transcription	12
239	Pursell	Yeast DNA polymerase $\epsilon$ participates in leading strand DNA replication	12
240	Haber	Budding yeast Pol32 is required for break induced replication but not gene conversion	12
241	Li	Modeling breast cancer in yeast	12
242	Raschle	Biochemical mechanism of replication-coupled DNA interstrand cross-link repair	12
243	Burgers	A ubiquitin-binding motif in the translesion DNA polymerase Rev1 mediates its essential functional interactions with ubiquitinated PCNA in response to DNA damage	12
244	Tsurimoto	Functional interaction of clamp loader complexes with DNA polymerase $\epsilon$	12
245	Bambara	Pif1 directs flaps toward the two-nuclease pathway for primer removal during eukaryotic Okazaki fragment maturation	12
246	Lou	Mrc1—A possible coordinator at replication forks	12