

***SCIENTIFIC PROGRAM***

**28<sup>th</sup> Annual International  
Asilomar Chromatin & Chromosomes  
Conference**

**December 14-17, 2006  
Asilomar Conference Grounds  
Pacific Grove, CA**



**Organizers:**

**Mike Goldman, San Francisco State University  
Jeff Hansen, Colorado State University, Fort Collins  
Cynthia McMurray, Mayo Clinic**

## **Meeting Reminders:**

All meeting sessions, socials, refreshments will be in **Heather (North Woods)**.

**ALL SPEAKERS:** We have a very tight schedule this year. **PLEASE** plan your talks to be a **12 minute presentation** + **3 additional minutes** for questions

Please upload your talks as early as possible--by 5:30pm for evening sessions and by 10:30pm the night before morning sessions.

Soft drinks, beer, wine, and snacks will be served in the meeting room (Heather) by Asilomar personnel from **5-6 pm on Friday and Saturday nights**, and from **9-11 pm on Thursday-Saturday nights**.

Please request your Sunday Box Lunch by Friday NOON—sign-up list available in the meeting room

Please give Mike Goldman or Jim Davie an electronic copy of your abstract for publication in a special issue of BIOCHEMISTRY AND CELL BIOLOGY (or e-mail it to Mike Goldman immediately after the meeting)

### *Schedule of Talks*

#### **Opening Social:**

**Thursday, December 14, 2006: 4:30 pm – 6:00 pm**

Refreshments in Heather (North Woods)

**Thursday, December 14, 2006: 7:00 pm – 10:15 pm**

**7:00 - 7:15 pm**

Welcome!

**7:15–10:15 pm**

#### **HISTONE VARIANTS AND FUNCTION**

Steve Henikoff, Chairperson

Steve Henikoff

Fred Hutchison Cancer Center

"Epigenetic patterns generated by histone replacement"

Jianxun Han

University of Alberta

Dynamics of cryptic  $\gamma$ -H2AX foci

Michael Resch  
Colorado State University  
The influence of Cenp-A on Nucleosome Core Particle and Higher Order Chromatin Structure

Jakob H. Waterborg  
UMKC  
Phylogenesis of replication and replacement histone H3

**--20 min break --**

Anthony Annunziato  
Boston College  
Histone modifications before and after nucleosome assembly

Jeffrey J. Hayes  
University of Rochester  
Binding Affinity of a Core Histone Tail in Nucleosomes

Julia Schulze  
University of British Columbia  
Creation of H2A.Z containing chromatin neighborhoods by the SWR1-Com

Alice Wang  
University of British Columbia  
Rules of mechanism in H2A.Z deposition and its function

Karia Gendler  
University of Arizona  
ChromDB: A community chromatin database

**Refreshments available at end of evening session**

**Friday, December 15, 2006: 8:45 am – 12:15 pm**

**REPAIR, REPLICATION, AND CELL DIVISION**

Sergei Mirkin, Chairperson

Sergei Mirkin  
University of Illinois, Chicago  
Punctuation marks for DNA replication

Michael Freitag  
Oregon State University  
Centromeres of filamentous fungi

Ryan Heit  
Cross Cancer Institute  
Dynamics of histone modifications during kinetochore assembly and centromere formation

Toru Nakamura  
University of Illinois at Chicago  
Regulation of DNA damage signaling and repair by Crb2 and histone modifications in fission yeast

Stacey Hubbard  
San Francisco State University  
Mining breast cancer CGH data for patient prognosis prediction

**--20 min break--**

Maxim Frolov  
University Illinois at Chicago  
Genetic screen to identify novel factors that regulate the dE2F2/RBF repressor in vivo

Ari Akerstein  
San Francisco State University  
Modeling Repair: histone H2AX-induced RAD complex repair of double strand breaks

Andra Li  
Department of Biochemistry & Microbiology, University of Victoria  
When acetylation meets phosphorylation in double—stranded DNA repair

Xiangduo Kong  
University of California-Irvine  
The essential cohesin loading factor SCC2 is required for S/G2-specific cohesin recruitment to DNA damage sites in human cells

Shrividreya Srinivasan  
University of California-Santa Cruz  
Understanding the molecular mechanisms that maintain heritable states of gene expression.

Oya Yazgan  
University of Alaska- Anchorage  
Transcriptional regulation of copper homeostasis in *Saccharomyces cerevisiae*

**Pre-Dinner Social (Heather) 5:00 pm – 6:00 pm**  
**Dinner 6:00 pm – 7:00 pm**

**Friday, December 15, 2006: 7:00 pm – 10:30 pm**

**CHROMATIN TRANSCRIPTION AND MODIFICATION**

Jerry Workman, Chairperson

Jerry Workman  
Stowers Institute  
Protein Complexes that Modify Chromatin for Transcription Elongation

Christopher E. Berndsen  
University of Wisconsin-Madison  
Mechanism of nucleosome acetylation by the piccolo NuA4 HAT complex

Stuart Lindsay  
Arizona State University  
Can we map epigenetic markings at the molecular level?

Craig Mizzen  
University of Illinois  
Regulation of H4-K20 Methylation and H1 phosphorylation

Marcelina Párrizas  
IDIBAPS  
The histone code of adipogenesis

**--20 min break--**

Sharon Torigoe  
Scripps College  
Alternative forms of a histone deacetylase

Kevin M. Arnold  
University of Wisconsin-Madison  
Characterizing the specificity of Esa1 for the H4 core domain

Russell Darst  
University of California, San Diego  
Six5p promotes transcriptional silencing and is required for robust growth in the absence of Sir2p

Mark Tini  
University of Western Ontario  
SUMO-1 dependent regulation of Thymine DNA Glycosylase alters subnuclear localization and CBP/p300 recruitment

Maria Aristizabal  
University of British Columbia  
Functional interactions of RNA POL II phosphatase (FCP1) with chromatin remodeling factors and mediator subunits

Maria Araceli Ortiz  
University of California-Santa Cruz  
Genetic Identification of Histone H3 Residues with a Role in Transcription Elongation

**Refreshments available at end of evening session**

**Saturday, December 16, 2006: 8:45 am – 12:15 pm**

**CHROMATIN REMODELING AND STRUCTURE**

Craig Peterson, Chairperson

Craig Peterson  
University of Massachusetts, Worcester  
Functional organization of the SWI/SNF remodeling complex

Ivy McDaniel  
The Claremont Colleges  
Genetic Studies of the CHD1 Chromatin Remodeling Factor

Jay Chodaparambil  
Colorado State University  
Importance of the nucleosomal surface in chromatin compaction

Sheena McGowan  
Monash University, Australia  
The role of the nuclear cysteine proteinase inhibitor, MENT, in higher order chromatin condensation and nuclear processes

Giorgia Siriaco  
University of California-Santa Cruz  
Global Role of Chromatin Remodelers in Maintenance of Higher Order Chromatin Storage

**--20 min break--**

Pu-Yeh Kan  
University of Rochester  
Inter-array Histone tail interactions in higher order chromatin structures

Sheri Denslow  
NIEHS  
Mi-2/NuRD complex and gene regulation

Sreepurna Malakar  
University of Alaska-Anchorage  
Multiple ISWI complexes required for eye and neural development

Tiffani K. Quan  
University of California-Santa Cruz  
Examining the interactions between chromatin remodeling enzyme CHd1 and transcribed chromatin

Adam Hall  
Marshall University School of Medicine  
Rapid Analysis of Chromatin Conformation by QAGE

Zhiguo Zhang  
Mayo Clinic  
A novel histone methyltransferase regulates genome stability

**Pre-Dinner Social (Heather) 5:00 pm – 6:00 pm**  
**Dinner 6:00 pm – 7:00 pm**

**Saturday, December 16, 2006: 7:00 pm – 10:30 pm**

**DNA AND CHROMATIN BINDING PROTEINS**

Akira Yasui, Chairperson

Akira Yasui  
Tohoku University  
In situ analysis of DNA damage responses in human cells

Jose Maria Eirin Lopez  
University of Victoria  
Evolution and revolutions of nuclear chaperones in chromatin remodeling: the nucleophosmin/nucleoplasmin family

Ilene Pedroso  
University of Miami Miller School of Medicine  
Structural Diversity of Telomeric DNA

Emily Wiley  
Claremont Colleges  
Reversible condensation of chromatin requires a class I histone deacetylase

LiYun Lin  
Biodesign Institute (SMB) ASU  
Development of aptamers for recognition imaging

**-- 15 min break --**

Nicholas Adkins  
Marshall University  
Sir3's DNA binding properties

Rainer K. Brachmann  
University of California-Irvine  
ADA proteins and their roles in beta-catenin activation

Zachary Lewis  
University of Oregon  
A genetic selection for DNA methylation mutants in *Neurospora crassa*

Archana Dhasarathy  
National Institute of Environmental Health Sciences (NIEHS/NIH)  
Estrogen receptor alpha: moving at a snail's pace

Wolfgang Henning  
Chinese Academy of Sciences  
RNAi induced epigenetic effects of the *Drosophila* dE2F1 transcription factor

LeAnn Howe  
University of British Columbia  
PHD fingers as methyl histone binding modules.

**Refreshments available at end of evening session**

**Sunday, December 17, 2006: 9:00 am – 12:00 pm**

**GENOME FUNCTION**  
**David Clark, Chair**

David J. Clark  
LMGR/NICHD/NIH  
Activation of yeast HIS3 results in Gcn4p-dependent, SWI/SNF-dependent mobilization of nucleosomes over the entire gene

Terace Fletcher  
University of Miami  
The role of TRF2 in telomere structure

Michael J. Hendzel  
University of Alberta  
Acetylation and Proline Isomerisation in the regulation of Histone H1 Binding in Living Cells

Jocelyn E. Krebs  
University of Alaska-Anchorage  
Patterns of H2A phosphorylation in response to cell stress and DNA damage

**--20 min break--**

John A. Tainer  
The Scripps Research Institute  
Chromatin remodeling for DNA repair

Sally Pasion  
San Francisco State University  
Genetic interaction between fission yeast replication protein Cdc24 and the checkpoint kinase Cds1

John Denu  
University of Wisconsin-Madison  
A combinatorial histone tail library to explore the histone code

Jim Davie  
University of Manitoba  
TBD