SCIENTIFIC PROGRAM

26th Annual West Coast Chromatin and Chromosomes Conference

December 9-12, 2004
Asilomar Conference Grounds

Organizers
Mike Goldman     Jeff Hansen     Cynthia McMurray

On the web
http://online.sfsu.edu/~mgoldman/2004WCCCM.htm

Please ask for the location of the opening reception and all sessions when you check in at the Front Desk in the Asilomar Administration Building.

ALL SPEAKERS:

**Plan for a 15 minute presentation + 5 additional minutes for questions**

Please remember to bring a floppy disk (or other electronic media) with your abstract for publication in a special issue of BIOCHEMISTRY AND CELL BIOLOGY

Program Version 12/7/2004
Opening Social:

**Thursday, December 9, 2004: 4:30 pm – 6:00 pm**

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

**Thursday, December 9, 2004: 7:00 pm – 10:00 pm**

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 - 7:15 pm</td>
<td>Welcome!</td>
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<tr>
<td>7:15 -7:45 pm</td>
<td><em>Food for thought:</em></td>
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<td><strong>Anthony T. Annunziato</strong></td>
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<td>Boston College</td>
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<td>Split decision: What happens to nucleosomes during DNA replication?</td>
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<td>7:45–10:00 pm</td>
<td>REMODELING, HISTONE VARIANTS, AND MODIFICATIONS</td>
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<td>David Clark, Chairperson</td>
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David Clark  
National Institute of Child Health and Human Development  
The SWI/SNF and ISWI remodeling machines cooperate to remodel yeast *HIS3* chromatin

Sara S. Dirsherl  
University of Alaska, Anchorage  
Impaired eye development and cataract formation in Xenopus embryos lacking functional ISWI

Anita A. Thambirajah  
University of Victoria  
Structural characteristics of different chromatin states containing the histone variant H2A.Z

* -- 15 min break -- *
Katherine Dunn  
University of Manitoba/Manitoba Institute of Cell Biology  
Phosphorylation of histone H3 following stimulation of the Ras-MAPK pathway

Andra Li  
University of Victoria  
Mimicking phosphorylation of H2AX. Does the nucleosome bother?

Alan Underhill  
University of Alberta  
Dynamics of histone lysine methylation in mouse development

9:00-11:00 p.m. - Social

Friday, December 10, 2004: 9:00 am – 12:00 noon

NUCLEAR ENZYMES
John Denu, Chairperson

Christopher Berndsen  
University of Wisconsin, Madison  
Mechanistic studies of Esa1

Zhao-xia Chen  
Beckman Research Institute, City of Hope  
Characterization of the self-association of human de novo DNA methyltransferases, DNMT3A and DNMT3B

Robert Dutnall  
University of California, San Diego  
Making soluble histones in bacteria – and – how does Hat1 modify histone H4?

Olivera Grubisha  
University of Wisconsin, Madison  
Molecular mechanism of Sir2 histone/protein deacetylases

-- 15 min break --

Adam Garste  
University of Wisconsin, Madison  
Development of combinatorial acetylated, peptide libraries to probe HDAC substrate specificity

Jocelyn E. Krebs  
University of Alaska, Anchorage  
Histone modifications distinguish different pathways of DNA double strand break repair
John Tainer
The Scripps Research Institute
Chromatin and recombination – the Rad50 connection

Martin Toussaint
Universite de Sherbrooke, Canada
DNA repair of UV damage in yeast; effect of SIR2 deletion

Friday, December 10, 2004: 5:00 pm – 6:00 pm
Social

Friday, December 10, 2004: 7:00 pm – 10:00 pm

NUCLEAR STRUCTURE AND FUNCTION
Joel Gottesfeld, Chairperson

Harald Biessmann
University of California, Irvine
Heterochromatin at Drosophila telomeres

Antonio Conconi
Universite de Sherbrooke, Canada
UV-induced DNA lesions cause RNA polymerase I arrest and the deposition of nucleosomes on the active ribosomal genes in yeast

Charles D. Laird
University of Washington
Epigenetic methylation of DNA at the fragile X locus, FMR1: Insights from analyzing both strands of individual DNA molecules

Diane P. Genereux
University of Washington/Emory University
How are distinct epigenetic methylation patterns maintained during cell division?

-- 15 min break --

Joel Gottesfeld
The Scripps Research Institute
Blocking cancer proliferation by small molecule gene regulation

Nancy P. Thorogood
University of British Columbia
Characterization of XIST expression and localization in a human/mouse somatic cell hybrid system
Alexandra Weyrich  
Chinese Academy of Sciences  
Expression of human DNA-methylase Dnmt3b in the male germ line of Drosophila

Wolfgang Hennig  
Chinese Academy of Sciences  
A maternal-effect of dE2f1 mutation of *Drosophila melanogaster*

*9:00-11:00 p.m. - Social*

**Saturday, December 11, 2004: 8:45 am – 12:00 noon**

**NUCLEAR PROTEINS**  
Jocelyn E. Krebs, Chairperson

Alex Ball  
UC-Irvine  
Characterization of human condensin’s non-SMC components

Hui-Ching Kuo  
University of Alaska, Anchorage  
Spt10 and histone H2A cooperate to regulate copper homeostasis

Gareth Corry  
University of Alberta  
Examining the relationship between homeodomain DNA binding, chromatin interaction, and subnuclear localization

Adelina Prado  
Unidad de Biofisica CSIC-UPV/EHU  
The biological activity of nucleoplasmin: How many partners?

**--15 min break--**

Rocio Montes De Oca  
Johns Hopkins Medical School  
Selective binding of barrier – to – autointegration factor to core histone H3 and linker histone H1.1

Jamy Peng  
University of California, Berkeley  
Su(var)3-9 and HP1 regulate the 3-dimensional organization of rDNA

Ming Ye  
Cross Cancer Institute  
Effect of Ras expression on the dynamics of histone H1 binding to chromatin *in vivo*
Feixiong Zhang
Capital Normal University, Beijing
The transcription localization of RNA polymerase III is in or at the edge of the nucleolus

Saturday, December 11, 2004: 5:00 pm – 6:00 pm
Social

Saturday, December 11, 2004: 7:00 pm – 9:30 pm

CHROMATIN STRUCTURE
Juan Ausio, Chairperson

Ralph C. Bash
Arizona State University
Recognition imaging of chromatin structure

Stuart Lindsay
Arizona State University
AFM imaging of chromatin structure

Daniel LoVullo
Arizona State University
A FRET-based probe to monitor nucleosome conformational and sequence dependent features

--15 min break--

Nicholas Adkins
Marshall University
Potential links between cell differentiation in salivary glands and chromatin remodeling

Terace M. Fletcher
University of Miami School of Medicine
The role of DNA structure in telomere function

Jeff Hayes
University of Rochester
Inter-nucleosome and inter-fiber contacts by the H3 tail domain

Missag H. Parseghian
Peregrine Pharmaceuticals
Missag Parseghian’s model of H1 subtype distribution in chromatin: How well is it faring in light of recent observations?

9:00-11:00 p.m. - Social
SUNDAY BRUNCH
Cynthia McMurray, Chair

Sally Pasion
San Francisco State University
Fission yeast \textit{cdc24} replication mutant exhibits synthetic genetic interactions with checkpoint kinases the active ribosomal genes in yeast

Michael J. Hendzel
University of Alberta
The relationship between chromatin dynamics and the cytoskeleton

Caroline M. Kane
University of California, Berkeley
Factorology regulating the phosphatase that acts on RNA polymerase II

Guoliang Xu
Chinese Academy of Sciences
Chromatin targeting of DNA methyltransferases via the PWWP domain