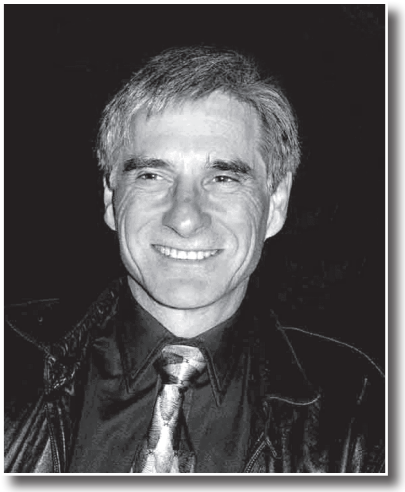
SCHEDULE OF EVENTS

Date	Time	Session	Pages	Chairs & Speakers	Place
Friday June 19	5:30 - 7:00 pm	Dinner			Foyer
	7:00 - 8:00 pm	**Session I: Newport Lecture**	ix	Patrick O'Farrell	Auditorium
	8:00 - 9:00 pm	Social Hour			
Saturday June 20	8:00 am	Breakfast			Foyer
	9:00 am - 12:00 pm	**Session II: Cell Cycle Progression I**	x	Chair: Fred Cross	Auditorium
	12:30 - 2:00 pm	Lunch			Foyer
	2:00 - 5:00 pm	**Session III: Cell Cycle Progression II**	xi	Chair: David Morgan	Auditorium
	5:30 - 7:00 pm	Dinner			Foyer
	7:00 - 10:00 pm	**Session IV: DNA Damage** and **Checkpoints**	xii	Chair: Wade Harper	Auditorium
Sunday June 21	8:00 am	Breakfast			Foyer
	9:00 am - 12:00 pm	**Session V: Mitosis and Chromosomes**	xiii	Chair: Sue Biggins	Auditorium
	12:30 - 2:00 pm	Lunch and Break			Foyer
	1:00 - 3:00 pm	Poster Session	xvii-xix		Foyer
	5:30 - 7:00 pm	Dinner			Foyer
	7:00 - 10:00 pm	**Session VI: S Phase and DNA Damage**	xiv	Chair: Anja Bielinsky	Auditorium
Monday June 22	8:00 am	Breakfast			Foyer
	9:00 am - 12:00 pm	**Session VII: Cancer and Differentiation I**	xv	Chair: Nick Dyson	Auditorium
	12:00 - 2:00 pm	Lunch			Foyer
	2:00 - 5:00 pm	**Session VIII: Cancer and Differentiation II**	xvi	Chair: Wei Jiang	Auditorium
	5:30 - 6:30 pm	Wine & Cheese Reception			Courtyard
	6:30 - 9:00 pm	Banquet			Foyer

Friday, June 19 - 7:00 pm

SESSION I: NEWPORT LECTURE



Patrick O'Farrell

Professor, Biochemistry and Biophysics
UCSF Helen Diller Family Comprehensive Cancer Center
University of California, San Francisco

Cycling Toward the Mid Blastula Transition

Abstract: page 1

Saturday, June 20 - 9:00 am

SESSION II: CELL CYCLE PROGRESSION I

Chair: Fred Cross

2 Ying Lu, Benjamin Drapkin and Frederick R. Cross
Cell Cycle Control by Phase-locking: Cyclin-dependent Kinase Oscillations Synchronize a Free-running Endocycle of Cdc14 Phosphatase Activity
The Rockefeller University

3 Jan M. Skotheim, Umut Eser, and Melody Fettig
Systems-level Organization of the Start Regulon at Cell Cycle Entry
Stanford University

4 Sofia Aligianni, Daniel H. Lackner, Gabriella Rustici, Brian T. Wilhelm, Samuel Marguerat, Steffi Klier, Alvis Brazma, Robert A. M. de Bruin, and Jürg Bähler
The Fission Yeast Homeodomain Protein Yox1p Associates with MBF to Restrict G1/S Cell-Cycle Transcription to G1 via Negative Feedback
University College London, UK

5 Karen Artiles, Stephanie Anastasia, Derek McCusker, and Douglas R. Kellogg
Regulation of G1 Cyclin Levels by the Rts1 Regulatory Subunit of Protein Phosphatase 2A
University of California, Santa Cruz

6 Stacy W. Blain, Melissa James, and Arpita Ray
Tyrosine Phosphorylation of p27Kip1 Serves as a Cyclin D-Cdk4/6 On/Off Switch
State University of New York

7 Bradley J. S. C. Olson, Jill Meisenhelder, Michael Oberholzer, Tony Hunter, and James G. Umen
Insights into the Retinoblastoma (RB) Tumor Suppressor Pathway Derived from Proteomics and Phosphopeptide Mapping in the Unicellular Model Organism *Chlamydomonas reinhardtii*
Salk Institute for Biological Studies

8 Weimin Li, Shuhei Kotoshiba, Cyril Berthet, Mary Beth Hilton, and Philipp Kaldis
Rb/Cdk2/Cdk4 Triple Mutant Mice Elicit a New Mechanism for Regulation of the G1/S Transition
Institute of Molecular and Cell Biology (IMCB), Singapore

9 Derek McCusker, Anne Royou, and Douglas R. Kellogg
Cdk1-dependent Membrane Dynamics
University of California, Santa Cruz

Saturday, June 20 - 2:00 pm

SESSION III: CELL CYCLE PROGRESSION II

Chair: David Morgan

10 Liam J. Holt, Brian B. Tuch, Judit Villén, Alexander D. Johnson, Steven P. Gygi, and David O. Morgan

Global Analysis of Cdk1 Substrate Phosphorylation Sites Provides Insights into Evolution

University of California, San Francisco

11 YingMeei Tan, Dahui Sun, Kathleen Klotz, Martin Widschwendner, and Charles Spruck

PP2A Antagonizes SCF^{Fbxw7}-mediated Degradation of Cyclin E and Contributes to its Dysregulation in Tumorigenesis

Sidney Kimmel Cancer Center

12 Gustavo J. Gutierrez and Ze'ev A. Ronai

JNK and Cdh1 Form a Novel Regulatory Feedback Loop Involved in Cell Cycle Control

Burnham Institute for Medical Research

13 Courtney G. Havens and Johannes C. Walter

The $CRL4^{Cdt2}$ Degron: A New Twist on Ubiquitin-mediated Proteolysis

Harvard Medical School

14 Pumin Zhang and Min Li

APC-Cdh1, A New Regulator of Cellular Senescence

Baylor College of Medicine

15 Maho Niwa, Anna Babour, Alicia Bicknell, and Joel Tourtellotte

ER Stress Surveillance Response Monitors Inheritance of Functional ER in the Daughter Cell in Yeast

University of California, San Diego

16 Meifan Amy Chen, Gustavo Gutierrez, and Ze'ev A. Ronai

Ufd1 Mediate Cell Cycle Response to ER Stress

University of California, San Diego

Saturday, June 20 - 7:00 pm

SESSION IV: DNA DAMAGE AND CHECKPOINTS
Chair: Wade Harper

17 Jennifer Svendsen, Agata Smogorzewska, Mathew E. Sowa, Brenda O'Connell, Steven P. Gygi, Stephen J. Elledge, and J. Wade Harper
The SLX4/BTBD12 Complex: A Toolkit for DNA Repair
Harvard Medical School

18 Gerald E. Dodson, R. Scott Williams, Oliver Limbo, Yoshiki Yamada, Jessica S. Williams, Grant Guenther, Scott Classen, J. N. Mark Glover, Hiroshi Iwasaki, John A. Tainer, and Paul Russell
Nbs1 is an Extended Flexible Arm Binding Ctp1 and Mre11-Rad50 to Coordinate dsDNA Break Processing
The Scripps Research Institute

19 Zhongsheng You, Linda Shi, Quan Zhu, Inder M. Verma, Michael W. Berns, and Tony Hunter
The Tumor Suppressor CtIP Integrates the DNA Damage Checkpoint, DNA Repair, and the Cell Cycle
Washington University School of Medicine

20 Rati Fotedar, Jinho Lee, Jin Ah Kim, Valerie Barbier, and Arun Fotedar
DNA Damage Triggers $p21^{WAF1}$ DNA Dependent Emi1 Down-regulation that Maintains G2 Arrest
Sidney Kimmel Cancer Center

21 Sheng-hong Chen, Claudio Ponte de Albuquerque, and Huilin Zhou
Proteomic Characterization of Kinase-Substrate Network in the DNA Damage Response
University of California, San Diego

22 Aaron Aslanian, John R. Yates III, and Tony Hunter
Quantitative Mass Spectrometry Reveals Targets of the Cytotoxic Response to DNA Damage
Salk Institute for Biological Studies

23 Masahiro Hitomi and Dennis W. Stacey
ATM Functions to Suppress Cyclin D1 Levels in Cultured Neurons
The Lerner Institute, Cleveland Clinic

Sunday, June 21 - 9:00 am

SESSION V: MITOSIS AND CHROMOSOMES

Chair: Sue Biggins

24 Sue Biggins, Bungo Akiyoshi, Ben Pinsky, and Christian Nelson
Protein Phosphatase I Silences the Spindle Checkpoint
Fred Hutchinson Cancer Research Center

25 Kevin T. Vaughan
A Primary Role for Cytoplasmic Dynein in the Spindle Assembly Checkpoint rather than Chromosome Movement
University of Notre Dame

26 Anne Royou
BubR1 and Polo Coated DNA Tethers Facilitate the Poleward Segregation of Acentric Chromosomes
University of California, Santa Cruz

27 Susanne Behlke-Steinert, Leila Touat-Todeschini, Dimitrios A. Skoufias, and Robert L. Margolis
SMC5 and the SUMO Ligase MMS21 are Required for Chromosome Cohesion and Mitotic Progression
Sidney Kimmel Cancer Center

28 Andrew J. Holland, Yumi Kim, Weijie Lan, and Don W. Cleveland
Phosphorylation of CENP-E by Aurora Kinase Promotes the Congression of Polar Chromosomes
University of California, San Diego

29 Wei Chun Au, Richard Baker, Charlie Boone, John Choy, Prashant K. Mishra, David Rawson, Yoshimitsu Takahashi, and Munira A. Basrai
Molecular Mechanisms Regulating Localization of Centromeric Histone H3 Variant Cse4p and Kinetochore Function
National Cancer Institute, National Institutes of Health

30 Samantha G. Zeitlin, Norman M. Baker, Brian R. Chapados, Evi Soutoglou, Jean Y. J. Wang, Michael W. Berns, and Don W. Cleveland
Rapid Chromatin Remodeling at Double-strand Breaks Deposits Centromeric Histone CENP-A to Promote DNA Repair
University of California, San Diego

31 Ying Lu and Frederick R. Cross
Cell Cycle Control by Entrainment of Sub-oscillators by a Master Cyclin-Cdk Oscillator: Regulation of an Intrinsic Cdc14-release Endocycle
The Rockefeller University

Sunday, June 21 - 7:00 pm

SESSION VI: S PHASE AND DNA DAMAGE

Chairs: Anja Bielinsky

32 Sapna Das-Bradoo, Hai Dang Nguyen, Robin Ricke, Justin C. Haworth, and Anja-Katrin Bielinsky

DNA Damage Recognition During Lagging Strand Synthesis

University of Minnesota

33 Nicole A. Najor and George S. Brush

DNA Re-replication During Meiosis

Wayne State University

34 Joon Lee and William G. Dunphy

Activation of TopBP1 by the Rad9-Hus1-Rad1 Checkpoint Clamp on Stalled Replication Forks Depends Upon Rad17

California Institute of Technology

35 Sapna Das-Bradoo, Hai Dang Nguyen, Robin M. Ricke, Justin C. Haworth, and Anja-Katrin Bielinsky

Defects in DNA ligase I Trigger PCNA Ubiquitination at Lysine 107

University of Minnesota

36 Teresa Davoli, Eros Lazzerini Denchi, and Titia de Lange

Endoreduplication Induced by Dysfunctional Telomeres: a Response to Persistent DNA Damage Relevant to Aneuploidy in Cancer

The Rockefeller University

37 V. Liberal, H-S. Martinsson Ahlzén, J. Scorah, and S. I. Reed

Cks Protein Overexpression in Cancer Overrides the Intra-S-phase Checkpoint

The Scripps Research Institute

38 Michael Dacre, Yufeng Zhai, and Gerard Manning

The Evolution of Metazoan Cell Cycle and Growth Control Explored Through the Kinomes of Early Metazoans and Their Unicellular Relatives

Salk Institute for Biological Studies

Monday, June 22 - 9:00 am

SESSION VII: CANCER AND DIFFERENTIATION I

Chair: Nick Dyson

39 Michelle Longworth, Anabel Herr, Jun-Yuan Ji, Margarete Heck, and Nicholas Dyson

Physical and Functional Interactions between RBF1 and the Condensin II Protein dCAP-D3

Massachusetts General Hospital Cancer Center

40 Brandon N. Nicolay and Maxim V. Frolov

Maintenance of Differentiation and Terminal Cell Cycle Exit are Defined by Crosstalk Between the RBF and Hippo Pathways

University of Illinois at Chicago

41 Renee D. Read and John B. Thomas

Manipulating *Drosophila* Glia and Glial Progenitor Cells to Model Human Brain Cancer

Salk Institute for Biological Studies

42 Jie Zhang, Huifang Li, and Karl Herrup

Is Cdk5 a Cell Cycle Kinase? Cdk5 Suppresses the Neuronal Cell Cycle Re-entry

Rutgers, The State University of New Jersey

43 Rossana C. Soletti, Helena L. Borges, Lars Eckmann, and Jean Y. J. Wang

Role of RB in Inflammation-Associated Colonic Carcinogenesis

University of California San Diego

44 Henrique C. De Paoli, Michael S. Brito, Andrea C. Quiapim, Simone P. Teixeira, Gustavo H. Goldman, Marcelo C. Dornelas, Yunde Zhao, and Maria Helena S. Goldman

SCI1 is a Component of the Nuclear Signal Transduction Pathway Engaging Cell Division/Differentiation Control and Auxin Signaling in Upper Pistil

University of São Paulo, Brazil

45 Maralice Conacci-Sorrell, Celine Ngouenet, and Robert N. Eisenman

A Cytoplasmic Form of Myc is Involved in Cytoskeletal Organization and Differentiation

Fred Hutchinson Cancer Research Center

46 Roddy O'Sullivan, Stefan Kubicek, Stuart L. Schreiber, and Jan Karlseder

Telomere Driven Epigenetic Reprogramming During Cellular Aging

Salk Institute for Biological Studies

Monday, June 22 - 2:00 pm

SESSION VIII: CANCER AND DIFFERENTIATION II

Chair: Wei Jiang

47 Eric Lau1, Gary G. Chiang, Robert T. Abraham, and Wei Jiang
Divergent S-phase Checkpoint Activation Arising from Pre-replicative Complex Deficiency Controls Cell Survival
The Burnham Institute for Medical Research

48 Gary S. Shapiro and Steven F. Dowdy
Hypo-Phosphorylated pRB Regulates DNA Damage Checkpoints While Unphosphorylated pRB Promotes Differentiation
University of California, San Diego

49 Shuhui Lim, V. C. Padmakumar, Eiman Aleem, Cyril Berthet, Mary Beth Hilton, and Philipp Kaldis
Cdk2 and Cdk4 Activities are Dispensable for Tumorigenesis Caused by the Loss of p53
Institute of Molecular and Cell Biology (IMCB), Singapore

50 Dongping Liu, Hoseok Song, and Yang Xu
A Common Gain of Function of p53 Cancer Mutants in Inducing Genetic Instability
University of California, San Diego

51 Yang Xu and Olga Gaidarenko
Transcription Activity is Required for p53-dependent Tumor Suppression
University of California, San Diego

52 Mark Wade, Rose Rodewald, and Geoffrey M. Wahl
The MdmX N Terminus Regulates MdmX Stability and p53 Activity
Salk Institute for Biological Studies

POSTER SESSION

Sunday, June 21

55 Jennifer L. Apger and Tim W. Christensen
Interaction Analysis of *Drosophila* Mcm10
East Carolina University

56 Keya Bandyopadhyay and Ruth A. Gjerset
p14ARF Enhances Topoisomerase I-mediated DNA Damage in Response to the S-phase-specific Anti-cancer Drug Camptothecin
Torrey Pines Institute for Molecular Studies

57 Keith Booher, Bryan Bell, Da-Wei Lin, Tarek Najdi, Todd Johnson, Eric Mjolsness, Craig Walsh, and Peter Kaiser
Cancer Cell Methionine Dependency
University of California, Irvine

58 Farid Menaa, Howard Brickner, Anil Munshi, Rati Fotedar, and Arun Fotedar
A Novel Role of the Large Subunit of the RF-C Complex in DNA Damage Induced Signaling
Sidney Kimmel Cancer Center

59 Jin Ah Kim, Jinho Lee, Robert L. Margolis, and Rati Fotedar
SP600125 Suppresses Cdk1 and Induces Endoreplication Directly from G2 Phase, Independent of JNK Inhibition
Sidney Kimmel Cancer Center

60 Stacy L. Harvey, German Enciso, Noah E. Dephoure, Steven P. Gygi, Jeremy Gunawardena, and Douglas R. Kellogg
The Wee1 Kinase and Protein Phosphatase 2A Modulate Cdk1 Activity During Early Mitosis
University of California, Santa Cruz

61 Choel Kim, Susan Taylor, Darren Casteel, Eric Smith-Nguyen, Banumathi Sankaran, Glen Spraggon, Eric Hampton, and Renate Pilz
The First Crystal Structure of Cyclic GMP-dependent Protein Kinase Iβ Dimerization/Docking Domain Reveals Molecular Details of Isoform-specific Anchoring
Baylor College of Medicine

POSTER SESSION

Sunday, June 21

62 Yubing Li, Bradley J. S. C. Olson, Garrett Anderson, and James G. Umen
Convergent Evolution of a Novel Cyclin Dependent Kinase in *Chlamydomonas* that Mediates Cell Size Checkpoint Control Through Phosphorylation of the RB Homolog, MAT3
Salk Institute for Biological Studies

63 Cristina Lopez-Paz, Yubing Li, Garrett Anderson, and James G.Umen
Insights into the Mechanism of Cell Size Checkpoint Control from a Novel Mutant that is Disrupted for a Cell Cycle Regulated hnRNP-like Protein in *Chlamydomonas*
Salk Institute for Biological Studies

64 Cara L. Lunn and Joseph J. Baldassare
Regulation of CDK2 Chromatin Association and Activation by ERK-Dependent CDC6 Expression
Saint Louis University

65 Mark Burkard, John Maciejowski, Veronica Rodriguez-Bravo, Michael Repka, Drew M. Lowery, Karl R. Clauser, Chao Zhang, Kevan M. Shokat, Steven A. Carr, Michael B. Yaffe, and Prasad V. Jallepalli
Plk1 Self-organization and Priming Phosphorylation of HsCYK-4
Memorial Sloan-Kettering Cancer Center

66 Fabienne Hans, Dimitrios A. Skoufias, Stefan Dimitrov, and Robert L. Margolis
Molecular Distinctions Between Mammalian Aurora A and B: A Single Residue Change Transforms Aurora A into Correctly Localized and Functional Aurora B
Sidney Kimmel Cancer Center

67 Ruben Petreaca and Susan Forsburg
A Unique Role for the Histone Acetyltransferase Mst1 in Double Strand Break Repair
University of Southern California

68 E. Josué Ruiz, Marçal Vilar, and Angel R. Nebreda
Inactivation Mechanism of the CDK1/cyclin B Inhibitory Kinase Myt1 During G2/M Progression in Oocytes
CNIO (Spanish National Cancer Center), Spain

POSTER SESSION

Sunday, June 21

69 Sergio Ruiz and Juan Carlos Izpisua-Belmonte
Role of the Retinoblastoma Pathway in the Proliferation, Pluripotency, and Differentiation of Human Embryonic Stem Cells
Salk Institute for Biological Studies

70 Yunyuan V. Wang, Mathias Leblanc, Mark Wade, Aart G. Jochemsen, and Geoffrey M. Wahl
Increased Radio-resistance and Accelerated B-cell Lymphomas in Mice with Mdmx Mutations that Prevent Modifications by DNA Damage-activated Kinases
Salk Institute for Biological Studies

71 Stacey E. Wirt, Adam S. Adler, Bethany E. Schaffer, James M. Weimann, Hannes Vogel, Howard Y. Chang, Alex Meissner, and Julien Sage
Cell Cycle Exit and Terminal Differentiation Independent of the Rb Gene Family During Embryonic Development
Stanford Medical School

72 Yifeng Xia and Inder M. Verma
CDC5L Phosphorylation by IKK1 Facilitates DNA Damage Induced ATM Activation and G2/M Checkpoint
Salk Institute for Biological Studies

73 Weizhen Ye and Stacy W. Blain
Homocysteine-dependent Cell Cycle Reactivation in Post-mitotic Cortical Neurons Induces Apoptosis and Regulates the DNA Damage Response
State University of New York

74 James Matthew Zones, Su-Chiung Fang, and James G. Umen
Target Identification of the Retinoblastoma Tumor Suppressor Pathway in *Chlamydomonas reinhardtii*
Salk Institute for Biological Studies