



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health
National Cancer Institute
Center for Cancer Research

Dear Fellows and Young Investigators:

On behalf of the National Cancer Institute, Center for Cancer Research, Fellows and Young Investigators (CCR-FYI) Association, it is our great pleasure to welcome you to the Sixth Annual CCR-FYI Retreat. We hope that you will enjoy the scientific presentations by renowned keynote speakers, benefit from the tremendous workshops that have been assembled, and learn more about the exciting research being done at the CCR through the poster and oral presentations of your colleagues. This is a great opportunity to meet other NCI fellows, forge friendships, and share scientific ideas. We also hope you will take advantage of the mealtimes to have informal discussions with the keynote speakers and workshop hosts.

The CCR-FYI is your postdoctoral association. Not only is your input welcome, it is needed. You can make an impact by joining the steering committee and becoming involved with the organization of the next retreat. In order to ensure that the 2006 CCR-FYI retreat is successful, we have incorporated your suggestions from the 2005 retreat survey. We encourage your comments on ways to make CCR an even better place to be a CCR fellow. Your answers to the retreat and the NCI surveys are heard by the administration. The success of the CCR-FYI Association, retreat, and mission are strongly dependent on your involvement, suggestions, and contributions to the CCR-FYI Association. We would like to thank Dr. Robert Wiltrout and the staff from his office, especially Dr. Jonathan Wiest, for their tremendous support of the retreat and our association.

This year, your CCR postdoctoral association, in continuation of its commitment to recognize the scientific contributions of fellows, will for the first time honor a postdoctoral fellow during the CCR-FYI retreat. This outstanding fellow's research will be highlighted in a keynote presentation. To provide more opportunities for fellows to be involved with the organization and logistics of a scientific retreat, outstanding fellows nominated by their Principal Investigators have been invited to co-chair and judge oral and poster presentations. We are also delighted to announce that eight travel awards will be bestowed on fellows who deliver outstanding oral or poster presentations. Finally, we would like to remind you that the CCR-FYI is your postdoctoral association and its success reflects the volunteer efforts of members such as yourself. The CCR-FYI Association depends on your input, so I encourage you to get involved. Send your comments to nciccrfyi@mail.nih.gov. Information regarding the CCR-FYI Association can be found online at <http://ccr.ncifcrf.gov/careers/fellows/default.asp>.

Susan Lindtner, Ph.D.
Chair
Fellows and Young Investigators Association
Center for Cancer Research
National Cancer Institute

Maja Bumke, Ph.D.
Arti Santhanam, Ph. D.
Tamaro Hudson, Ph.D.
Jennifer Shen, Ph.D.
Retreat Sub-Committee Co-Chairs

CCR Fellows and Young Investigators Retreat 2006

PROGRAM

Tuesday, February 28, 2006

- 2:00 p.m. **Registration** (*Crystal Ballroom Foyer*) and **Poster Session I Setup** (*Crystal Ballroom Hall 2*)
- 3:30 p.m. **Plenary Session I** (*Crystal Ballroom Hall 1*)
- Opening Remarks and CCR-FYI Overview**
 Kevin Chang, Ph.D., Vice-Chair, CCR-FYI Steering Committee
- Update on the National Postdoctoral Association (NPA)**
 Alyson Reed, Ph.D., National Postdoctoral Association
- Felcom Overview**
 Heidi Erickson, Ph.D., National Cancer Institute
- 4:15 p.m. **Keynote Speaker: CCR Office of the Director Address/Open Forum**
 Robert Wiltrout, Ph.D., Director, Center for Cancer Research, NCI
 Jeffrey Strathern, Ph.D., Deputy Director, Gene Regulation and Chromosome Biology Laboratory, CCR
 Moderators: Melissa Maderia, Ph.D., and Kwang Suh, Ph.D.
- 5:15 p.m. **Keynote Presentation by a Postdoctoral Fellow: "Inhibition of Human Papillomaviruses"**
 Christopher Buck, Ph.D., Laboratory of Cellular Oncology, CCR
 Moderators: Martin Guimond, Ph.D., and Jennifer Shen, Ph.D.
- 6:15 p.m. **Dinner** (*Grand Ballroom—First Floor*)
- 7:30 p.m. **Poster Session I** (*Crystal Ballroom Hall 2*)
 Pharmacology, Chemistry, and Virology
 Carcinogenesis, Cancer Models, Epidemiology, and Cancer Prevention
 Signal Transduction and Gene Transcription
- Career Fair** (check folders for a list of representative companies and recruiters)
- 9:00 p.m. **Informal Mixer** (*Conference Rooms 1–3*)
 Mentored Lunch Sign-up (*Registration Desk*)

Wednesday, March 1, 2006

- 7:00 a.m. **Continental Breakfast** (*Crystal Ballroom Foyer*)
 Registration Open
- 8:00 a.m. **Plenary Session II** (*Crystal Ballroom Hall 1*)
- Keynote Speaker: "Mind-Body Approaches: Research Priorities and Perspectives for Cancer Survivorship"**
 Michael Irwin, M.D., University of California, Los Angeles
 Moderators: Heidi Erickson, Ph.D., and Maja Bumke, Ph.D.
- 9:00 a.m. **Break**

9:15 a.m.

Concurrent Workshops I

- 1. Career Development** (*Crystal Ballroom Hall 1*)
Cem Elbi, M.D., Ph.D., Merck Research Laboratories
Barbara Vonderhaar, Ph.D., National Cancer Institute
Garth Fowler, Ph.D., ScienceCareers.org/Science's Next Wave
Mark Edwards, NIH Work/Life Center
Moderators: Girish Patel, M.D., and Joseph Manimala, Ph.D.
- 2. Grant Writing** (*Conference Rooms 4–6*)
“Training and Career Development Award Opportunities at NCI”
David Eckstein, Ph.D., Cancer Training Branch, NCI
“Peer Review of NIH Grant Applications”
Robert E. Bird, Ph.D., Resources and Training Review Branch, NCI
Moderators: Haiqing Li, M.D., Ph.D., and Melissa Maderia, Ph.D.

10:30 a.m.

Concurrent Workshops II

- 1. Setting up a Laboratory** (*Crystal Ballroom Hall 1*)
Jerry M. Boss, Ph.D., Emory University School of Medicine
Melinda Merchant, M.D., Ph.D., Memorial Sloan-Kettering Cancer Center
Moderators: Nicole LaRonde-LeBlanc, Ph.D., and Swati Choksi, Ph.D.
- 2. Entrepreneurial Skills and Opportunities** (*Conference Rooms 4–6*)
John Holaday, Ph.D., Montgomery Pacific Group and EntreMed Founder
Shira Kramer, Ph.D., President, Sterilex Corporation
Tania Fernandez, Ph.D., Analyst, Burrill and Company
Moderators: Val Bliskovsky, Ph.D., and Kevin Chang, Ph.D.

12:00 p.m.

Mentored and General Lunch (*Grand Ballroom-First Floor*)
Oral Presentation 1 Setup

12:30 p.m.

Luncheon Keynote Speaker: “The Future of Cancer Drug Discovery”
John Niederhuber, M.D., Deputy Director for Translational and Clinical Sciences, NCI
Moderators: Melissa Maderia, Ph.D., and Arti Santhanam, Ph.D.

1:45 p.m.

Plenary Session III (*Crystal Ballroom Hall 1*)

Keynote Speaker: “Mouse Tales and Cancer”

Jeffrey E. Green, M.D., Laboratory of Cell Regulation and Carcinogenesis, CCR, NCI
Moderators: Swati Choksi, Ph.D., and Tamaro Hudson, Ph.D., M.P.H.

2:45 p.m.

Break

3:00 p.m.

Concurrent Oral Presentations I

- 1. Pharmacology, Chemistry, and Virology** (*Conference Room 1*)
Moderators: Howard Young, Ph.D., and Dina Sigano, Ph.D.

Maria Comin, Laboratory of Medicinal Chemistry
Exploring the Herpes Thymidine Kinase Landscape with Conformationally Locked Nucleosides

Philip Lorenzi, Laboratory of Molecular Pharmacology
Asparagine Synthetase as a Biomarker for L-Asparaginase Activity in Ovarian Cancer

Kentaro Takada, Molecular Targets Development Program
New Members of the Chondropsin Class of V-ATPase Inhibitory Marine Macrolides

Andrew Jobson, Laboratory of Molecular Pharmacology
Identification and Characterization of Putative Chk2 Inhibitors

Kyeongeun Lee, HIV Drug Resistance Program
HIV-1 Cell Killing Blocked by Pre-mRNA Factor CPSF6

2. **Carcinogenesis, Cancer Models, Epidemiology, and Cancer Prevention I**
(Conference Rooms 4-6)

Moderators: *Glenn Merlino, Ph.D., and Oliver Sordet, Ph.D.*

Praveen Arany, Laboratory of Cell Regulation and Carcinogenesis
Smad3 Deficiency Alters Key Structural Elements of the Extracellular Matrix
and Mechanotransduction of Wound Closure

Xiaoyi Teng, Laboratory of Cellular Carcinogenesis and Tumor Promotion
PEP005, a Drug in Clinical Trials for the Treatment of Skin Cancer, Alters Actin
Filament Organization and Induces Cell Death in Mouse Tumor Keratinocytes

Connie Matthews, Laboratory of Cancer Prevention
Prevention of Human Papillomavirus (HPV) E7-Driven Tumorigenesis by
Dominant-Negative AP-1 (TAM67): Cox-2, OPN, and Hmga2 Are Important Targets

Paul Sirajuddin, Laboratory of Cellular Carcinogenesis and Tumor Promotion
Semi-Quantitation of Polycyclic Aromatic Hydrocarbon (PAH)-DNA Adducts in
Human Placenta by Immunohistochemistry (IHC) and the Automated Cellular Imaging
System (ACIS)

Christina Stuelten, Laboratory of Cell Regulation and Carcinogenesis
Effect of Wounding on Tumor Growth and Metastasis

3. **Signal Transduction and Gene Transcription (Conference Room 3)**

Moderators: *Phillip Dennis, M.D., Ph.D., and Frank Comer Ph.D.*

Juhong Liu, Laboratory of Pathology
The FUSE/FBP/FIR/TFIIH System Is a Molecular Machine that Programs a
Pulse of *c-myc* Expression

Jianjian Zhu, Laboratory of Pathology
Temporal Requirement of Sonic Hedgehog Expression for Specifying Digit Identity

Jui Pandhare, Laboratory of Comparative Carcinogenesis
A Potential Role for the Redox Enzyme Proline Oxidase in mTOR-AMPK
Signaling Pathway

Jan Markus, Laboratory of Cellular Oncology
CBF β -SMMHC Transcriptionally Represses Tumor Suppressor p15INK4B in Acute
Myeloid Leukemias with inv(16)

Gillian Whittaker, Laboratory of Experimental Immunology
A Novel System for the Study of DAP12 Signaling in the Myeloid Compartment

4. **Molecular and Cell Biology I (Crystal Ballroom Hall 1)**

Moderators: *Jeffrey Strathern, Ph.D., and Cyril Berthet, Ph.D.*

Sanita Bharti, Laboratory of Cellular Oncology
ASAP1 Affects the Formation and Function of Invadopodia

Jeff Isenberg, Laboratory of Pathology

Thrombospondin-1 Inhibits Endothelial Cell Responses to Nitric Oxide in a cGMP-Dependent Manner

Hu-Liang Jia, Laboratory of Human Carcinogenesis

Gene Expression Profiling Reveals Potential Biomarkers of Human Hepatocellular Carcinoma Including Those with Negative Alpha-Fetoprotein and Smaller Tumors

Yifeng Jia, Laboratory of Pathology

The Role of CD151 Phosphorylation in Integrin $\alpha 3\beta 1$ -Mediated Human Breast Cancer Metastasis

Yin Liu, Experimental Immunology Branch

PKC-Delta's Independence of Activation Loop Phosphorylation: Structural Basis and Limitations of *In Vivo* Function

4:45 p.m. **Plenary Session IV** (*Crystal Ballroom Hall 1*)

Keynote Speaker: Nanotechnology

Mauro Ferrari, Ph.D., Ohio State University

Moderators: Arti Santhanam, Ph.D., and Joseph Manimala, Ph.D.

5:45 p.m. **Dinner** (*Grand Ballroom-First Floor*)

6:45 p.m. **Poster Session II** (*Crystal Ballroom Hall 1*)

**Molecular and Cell Biology
Genomics, Proteomics, Bioinformatics
Clinical and Translational Research
Immunology and Genetics**

Career Fair (check folders for a list of representative companies and recruiters)

Thursday, March 2, 2006

7:00 a.m. **Continental Breakfast** (*Crystal Ballroom Foyer*)
Registration Open

8:00 a.m. **Plenary Session V** (*Crystal Ballroom Hall 1*)

Keynote Speaker: "Anti-Vascular Therapy of Cancer Metastasis"

Cheryl Hunt Baker, Ph.D., Cancer Research Institute

Moderators: Jennifer Shen, Ph.D., and Heidi Erickson, Ph.D.

9:00 a.m. **Break**

9:15 a.m.

Concurrent Oral Presentation II

5. Molecular and Cell Biology II (Crystal Ballroom Hall 1)

Moderators: Philipp Kaldis, Ph.D., and Jennifer Shen, Ph.D.

Michael Rosu-Myles, Laboratory of Cellular Oncology
p15Ink4b Regulates Erythroid-Myeloid Cell Fate Determination

Jessica Cassavaugh, Pediatric Oncology Branch
Ezrin, the Cytoskeleton Linker Protein Coordinates Cap-Dependent Translation During Metastasis

Christine Horak, Laboratory of Molecular Pharmacology
Nm23-H1 Mediates Metastasis Suppression through the Receptors Edg2 and c-Met in MDA-MB-435 Cells

Amy McKee, Pediatric Oncology Branch
Trk B: Invasion, Metastasis, and Angiogenesis in Neuroblastoma

Atsushi Terunuma, Dermatology Branch
A Novel *In Vivo* Competitive Repopulation Assay Demonstrates that "Side Population" Keratinocytes Resembling Hematopoietic SP Stem Cells Do Not Exhibit Stem Cell Behavior

6. Genomics, Proteomics, and Bioinformatics; and Clinical and Translational Research Combined (Conference Room 1)

Moderators: Jeff Gildersleeve, Ph.D., and Joseph Manimala, Ph.D.

Philip Martin, Comparative Molecular Pathology Unit
Gene Expression Profiling in a Temporally Regulated Conditional Cardiac-Specific H-Ras-v12 Model of Hypertrophic Cardiomyopathy

Gerhard S. Munding, Surgery Branch
Comparative Quantitative Analysis for Proteomic Profiling Using Reverse Phase Protein Microarrays

Ai-Min Hui, Neuro-Oncology Branch
Targeting NF- κ B in Gliomas: Translation from Bench to Bedside

Alison Rager, Pediatric Oncology Branch
Rapid Immune Reconstitution and Complete Donor Chimerism after Non-Myeloablative Allogeneic Peripheral Blood Stem Cell Transplantation (NMSCT) in Pediatric Patients (pts) with Malignancy

Jean-Philippe Therrien, Dermatology Branch
Development of a Genetically Modified Human Skin Equivalent to Deliver Therapeutic Proteins Systemically

7. **Immunology and Genetics (Conference Room 3)**

Moderators: Dimiter Dimitrov, Ph.D., and Elena Ambrosino, Ph.D.

Benyam Asefa, Laboratory of Molecular Immunoregulation

Regulation of T-Cell Homeostasis: Investigating the Possible Interaction between the IL-7 and TCR Signaling Pathways

Cristina Bergamaschi, Vaccine Branch

Modulation of SIV Antigens by Generating Fusion Protein with Lysosomal-Associated Membrane Protein-1 (LAMP-1)

David Grindler, Pediatric Oncology Branch

Elevated IL-7 During Lymphopenia Does Not Result from Increased Production of the Cytokine by the Stroma Cells

Sarah Herby, Pediatric Oncology Branch

Mild GVHD Impairs Vaccine Responses in an Allogeneic Bone Marrow Transplant Setting

Trina Stewart, Laboratory of Tumor Immunology and Biology

Tumor-Induced Down-Regulation of Interferon Consensus Sequence Binding Protein (ICSBP) in CD11b⁺Gr1⁺ Myeloid Suppressor Cells May Underlie a Mechanism for Their Aberrant Expansion and Function

8. **Carcinogenesis, Cancer Models, Epidemiology, and Cancer Prevention II**

(Conference Rooms 4-6)

Moderators: Jeffrey Green, M.D., and M. Margaret Pratt, Ph.D.

Tamaro Hudson, Laboratory of Cell Regulation and Carcinogenesis

Alternate Chemopreventive Mechanisms of Action of Resveratrol and Muscadine Grape Skin Extract in Prostate Cancer

Stacey DaCosta Byfield, Laboratory of Cell Regulation and Carcinogenesis

Dissecting the Role of Smad2 and Smad3 Signaling in Tumorigenesis

Dalit Barkan, Laboratory of Cell Regulation and Carcinogenesis

Extracellular Matrix: A Gatekeeper in the Transition from Dormancy to Metastasis

David Mack, Mammary Biology and Tumorigenesis Laboratory

Gene Expression Profiling Suggests Tumorigenic Mechanisms of Truncated Int6/eIF3e in Mammary Alveolar Hyperplasias and Tumors

Xuezhong Yang, Pediatric Oncology Branch

Novel Tumor Suppressor Gene, hCas, Inhibits Neuroblastoma Tumorigenicity

10:45 a.m.

Break

