



DEPARTMENT OF HEALTH & HUMAN SERVICES

National Institutes of Health
National Cancer Institute
Center for Cancer Research

Welcome to the Seventh Annual CCR-FYI Retreat:

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 Seventh Annual CCR-FYI Retreat. The Annual CCR-FYI Retreat is sponsored by the CCR Office of Training and Education, but it is organized *by* NCI junior investigators *for* NCI junior investigators. The meeting continues to represent a unique event, bringing together more than 400 like-minded individuals who are all forging their scientific identities and careers here at NCI.

We have continued to build on the successes of previous retreats, and this year we have four internationally renowned keynote speakers and the second postdoctoral keynote lecture. There are 6 career development workshops, 35 oral presentations, and 125 posters. We hope you will take advantage of the opportunity to meet with the directors, keynote speakers, and workshop panelists during the "mentored" meals. Moreover, our career fair offers the opportunity to receive professional resume critiquing and to network with 20 participating organizations. As always, there are eight travel awards for outstanding oral and poster presentations. All this and an ocean-front view!

Over the last year, the CCR-FYI Association has continued its quest to support junior NCI scientists. We have participated in new fellows' orientation, created a Seminar Series, and begun the Networking Brunch. We continue to run the "guide doc" support program, providing answers to all those delicate questions. You can read about these and a lot more in the CCR-FYI newsletter, as long as you have signed up for the CCR postdoc listserv; all you have to do is e-mail CCR-POSTDOCS@list.nih.gov and say you want to join. We continue to work closely with sister organizations, including Felcom, Visiting Fellows Committee, NIH Women Scientist Advisory Committee, and the National Postdoctoral Association, to enrich the scientific careers of junior investigators.

The CCR-FYI Association belongs to you. Not only is your input welcome, it is needed; therefore, please complete the anonymous survey at the close of the retreat. You can also make an impact by joining the steering committee and becoming involved with organizing the next retreat; we are just an e-mail away: ncicrfyi@mail.nih.gov. The success of the CCR-FYI Association, retreat, and mission are strongly dependent on your involvement, suggestions, and contributions. Information regarding the association can be found online at <http://ccr.ncifcrf.gov/careers/fellows/default.asp>. We would like to thank Dr. Robert Wiltout and the staff from his office, especially Dr. Jonathan Wiest, for their continued support of the retreat and our association. On behalf of all members of the CCR-FYI Association, we hope you have a fantastic time.

Girish Patel, M.B.B.S., M.R.C.P., M.D.
Vice-Chair
Arti Santhanam, Ph.D.
Chair
Fellows and Young Investigators Association
Center for Cancer Research
National Cancer Institute

Veronica Hall, Ph.D.
Veronique Pascal, Pharm.D., Ph.D.
Gillian Whittaker, Ph.D.
Retreat Sub-Committee Co-Chairs

NCI CCR Fellows and Young Investigators Retreat 2007

PROGRAM

Tuesday, February 27, 2007

- 2:00 p.m. **Registration, Resume Critique, and Mentored Dinner Sign-up**
(Grand Ballroom—First Floor Foyer)
- Poster Session I Setup** *(Crystal Ballroom II)*
- 3:30 p.m. **Plenary Session I** *(Crystal Ballroom I)*
- Opening Remarks and CCR-FYI Overview**
Arti Santhanam, Ph.D., Chair, CCR-FYI Steering Committee
- Update on the National Postdoctoral Association**
Alyson Reed, Ph.D., National Postdoctoral Association
- Felcom Overview**
Heidi Erickson, Ph.D., NCI
- 4:15 p.m. **NCI's Administrative Resource Centers**
Patrick Miller, ARC Manager, CCR, NCI
Moderator: Girish Patel, M.B.B.S., M.R.C.P., M.D.
- 4:30 p.m. **CCR Office of the Director Address/Open Forum**
Robert Wiltrout, Ph.D., Director, CCR, NCI
Lee Helman, M.D., Ph.D., Acting Scientific Director for Clinical Research, CCR, NCI
Moderators: Arti Santhanam, Ph.D., and Veronica Hall, Ph.D.
- 5:15 p.m. **Postdoctoral Keynote Speaker: "Lessons Learned from Molecular Profiling
of Hepatocellular Carcinoma"**
Anuradha Budhu, Ph.D., Laboratory of Human Carcinogenesis, CCR, NCI
Moderators: Elena Ambrosino, Ph.D., and Kwang Suh, Ph.D.
- 6:15 p.m. **Mentored and General Dinner** *(Grand Ballroom—First Floor)*
- 7:30 p.m. **Keynote Speaker I: "Cancer Stem Cells: A New Paradigm in Cancer Research"**
Max Wicha, M.D., University of Michigan Comprehensive Cancer Center
Moderators: Veronica Hall, Ph.D., and Stephen Maher, Ph.D.
- 8:30 p.m. **Poster Session I** *(Crystal Ballroom II)*
Molecular and Cell Biology I
Pharmacology, Chemistry, and Virology
Carcinogenesis, Cancer Models, Epidemiology, and Cancer Prevention
Signal Transduction and Gene Transcription
Genomics, Proteomics, and Bioinformatics
- Informal Mixer** *(Conference Rooms 1–3)*
Mentored Meal Sign-up *(Registration Desk)*

Wednesday, February 28, 2007

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

8:00 a.m. **Plenary Session II** (*Crystal Ballroom I*)

Keynote Speaker II: "Conversations between Tissues and T Cells"

Polly Matzinger, Ph.D., Laboratory of Cellular and Molecular Immunology, NIAID
Moderators: Martin Guimond, Ph.D., and Swati Choksi, Ph.D.

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

9:15 a.m. **Concurrent Workshops I**

1. **How to Succeed in Science** (*Crystal Ballroom I*)

"Science Careers at the National Cancer Institute"

Nancy Colburn, Ph.D., Laboratory of Cancer Prevention, CCR, NCI

"How to Succeed at an Academic Institution"

Robert A. Schlegel, Ph.D., Pennsylvania State University

Moderators: Gillian Whittaker, Ph.D., and Jordan Irvin, Ph.D.

2. **Science Careers for the 21st Century** (*Conference Rooms 4-6*)

Howard Gadlin, Ph.D., Center for Cooperative Resolution, NIH Office of the Ombudsman

Nicole Mahoney, Ph.D., Office of Technology Development, NIAID

Rosanne Hurwitz, J.D., M.P.H., Ethics Office, NIH

R. Alan Mufson, Ph.D., Cancer Immunology/Hematology Branch, DCB, NCI

Moderators: Veronica Hall, Ph.D., and Stephen Maher, Ph.D.

10:30 a.m. **Concurrent Oral Presentations I**

1. **Pharmacology, Virology, and Chemistry** (*Conference Room 1*)

Moderators: Elena Ambrosino, Ph.D., and M. Margaret Pratt, Ph.D.

Anna Maria Calcagno, Laboratory of Cell Biology

ABCG2: A Molecular Target During Early Stages of Multidrug Resistance Development in Breast Cancer Cells

Himanshu Garg, Nanobiology Program

Mutational Analysis of HIV-1 gp41-Mediated Apoptosis and Its Correlation with Fusion/Hemifusion

Sahar Javanmard, Laboratory of Comparative Carcinogenesis

Synthesis of Potential Tumor-Specific Chemotherapy Adjuvants: *O*⁶-Benzyl-2'-Deoxyguanosine and *O*⁶-[(4-hydroxymethyl)benzyl]guanine Folic Acid Conjugates

Vladimir Majerciak, HIV and AIDS Malignancy Branch

KSHV ORF57 Functions as a Splicing Factor in Promoting Viral RNA Splicing *In Vivo*

Andrew Jobson, Laboratory of Molecular Pharmacology

Identification and Characterization of Putative Chk2 Inhibitors

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

Moderators: Tamaro Hudson, Ph.D., M.P.H., and Haiqing Li, M.D., Ph.D.

Jennifer Shen, Surgery Branch

Pancreatic Inactivation of Multiple Endocrine Neoplasia Type 1 (*Men1*) Gene Leads to Multistage Tumorigenesis and Vascular Alterations

Sergey Kuznetsov, Mouse Cancer Genetics Program

Functional Analysis of *BRCA2* Mutations Using an ES Cell-Based System

Padmakumar Velayuthan, Mouse Cancer Genetics Program

Is p53 a Master Repressor of Cell Cycle?

Dina Raafat, Laboratory of Cancer Biology and Genetics

Nitric Oxide-Regulated Nuclear Translocation of the Intracellular Chloride Channel CLIC4

Jian Huang, Laboratory of Molecular Immunoregulation

Transactivation of the Epidermal Growth Factor by Formylpeptide Receptor FPR in Glioblastoma Cells

3. **Molecular and Cell Biology I (Crystal Ballroom I)**

Moderators: Michael Rosu-Myles, Ph.D., and Veronica Hall, Ph.D.

Luciann Cuenca, Laboratory of Cell Biology

The Catalytic Cycle of ATP Hydrolysis by P-glycoprotein (ABCB1): Role of a Conserved H-Loop Subdomain in Nucleotide-Binding Domains

Martin Mendoza, Pediatric Oncology Branch

Defining the Ezrin and Chloride Intracellular Channel 4 Interaction in Metastasis

Jill Paterson, Laboratory of Cell Biology

Distinct Molecular Weight Forms of ABCB6 Localize to Specific Cellular Membranes

Evi Soutoglou, Laboratory of Receptor Biology and Gene Expression

Positional Stability of Single Double-Strand Breaks in Living Mammalian Cells

Xiaohong Wang, HIV and AIDS Malignancy Branch

MicroRNAs in Cervical Cancer and Cervical Cancer-Derived Cell Lines and Their Possible Roles in Regulating HPV Gene Expression

4. **Signal Transduction and Gene Transcription and Genomics, Proteomics, and Bioinformatics Combined (Conference Room 3)**

Moderators: Stephen Maher, Ph.D., and Swati Choksi, Ph.D.

Yolanda Dale, Laboratory of Metabolism

Calpain Mediates the Dioxin-Induced Activation and Down-Regulation of the Aryl Hydrocarbon Receptor

Rebecca Ohman, Laboratory of Cancer Biology and Genetics

PKC α Mediates the Proinflammatory Response of Keratinocytes to TNF α

Jui Pandhare, Laboratory of Comparative Carcinogenesis

The Importance of Proline Metabolism Under Conditions of Nutrient Stress

Vladimir Valera, Laboratory of Pathology
Protein Expression Profiling and Its Correlation with the Malignant Phenotype
in Inherited and Sporadic Renal Cell Carcinomas

Francesca Scrimieri, Genetics Branch
Genomic and Expression Profiling in Osteosarcoma

- 12:00 p.m. **Mentored and General Lunch** (*Grand Ballroom—First Floor*)
- 1:15 p.m. **Keynote Speaker III: “Molecular Crosstalks Between Tumor and Surrounding Cells Mark Cancer Progression”** (*Crystal Ballroom I*)
Stuart H. Yuspa, M.D., Laboratory of Cancer Biology and Genetics, CCR, NCI
Moderators: M. Margaret Pratt, Ph.D., and Kwang Suh, Ph.D.
- 2:30 p.m. **Break**
- 2:45 p.m. **Concurrent Workshops II**
1. **Insights into Publishing in Top Journals** (*Crystal Ballroom I*)
- “Behind-the-Scenes Look at the Editorial Process at *Molecular Cell*”**
 Feng Chen, Ph.D., Molecular Cell Magazine
- “Publishing in *Science Magazine*”**
 Laura Zahn, Ph.D., Science Magazine
 Moderators: Arti Santhanam, Ph.D., and Swati Choksi, Ph.D.
2. **Interview Techniques and Resume Critique** (*Conference Rooms 4–6*)
- “Sharpening Your Job Interview Skills”**
 Barrett Whitener, M.A., Premier Public Speaking, Inc.
- “Preparing a Marketing CV/Resume to Land Interviews”**
 Stephen R. Gallison, Professional Outplacement Assistance Center of Maryland
 Moderators: Stephen Maher, Ph.D., and Haiqing Li, M.D., Ph.D.
- 4:00 p.m. **Professional Resume Critique** (*Conference Rooms 4–6 by appointment*)
Stephen R. Gallison, Professional Outplacement Assistance Center of Maryland
- 4:00 p.m. **Poster Session II** (*Crystal Ballroom II*)
 Molecular and Cell Biology II
 Immunology and Genetics
 Clinical and Translational Research
 Cancer Research Technology
- 5:45 p.m. **General and Mentored Dinner** (*Grand Ballroom—First Floor*)
- 6:45 p.m. **Career Fair** (*Conference Rooms 1–3*)
 Mentored Lunch Sign-up (*Registration Desk*)
- 9:00 p.m. **Adjourn**

Thursday, March 1, 2007

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

8:00 a.m. **Keynote Speaker IV: "From Immune Deficiency to Immune Therapy"** (*Crystal Ballroom I*)
Steven M. Holland, M.D., *Laboratory of Clinical Infectious Diseases, NIAID*
Moderators: Michael Rosu-Myles, Ph.D., and Véronique Pascal,
Pharm.D., Ph.D.

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

9:15 a.m. **Concurrent Oral Presentations II**

5. **Molecular and Cell Biology II** (*Crystal Ballroom I*)
Moderators: Jennifer Shen, Ph.D., and Gonzalo de la Rosa, Ph.D.

Nabila Rasool, Laboratory of Pathology
Secretory Leukocyte Protease Inhibitor (SLPI) Contributes to Proliferation and Tumorigenicity of Ovarian Cancer Cells *In Vivo*, Independent of Its Protease-Inhibitory Function

Chung-Pu Wu, Laboratory of Cell Biology
The P-Glycoprotein (ABCB1)-Specific Cytotoxic Thiosemicarbazone, NSC73306, Is a Potent Modulator of the Multidrug Resistance-Linked ABCG2 Transporter

Ming Ji, Cancer and Developmental Biology Laboratory
Inhibitor of DNA Binding 2 Regulates B Lymphopoiesis and Erythropoiesis via Interaction with Different Target Proteins

Brian Booth, Mammary Biology and Tumorigenesis Laboratory
Evidence for a Tumorigenic Multipotent Cell in ErbB2 Mammary Carcinomas

Anjali Joshi, HIV Drug Resistance Program
Modulation of HIV Production by the Golgi-Localized Gamma Ear-Containing Arf-Binding (GGA) Proteins

6. **Immunology and Genetics** (*Conference Rooms 4-6*)
Moderators: Martin Guimond, Ph.D., and Swati Choksi, Ph.D.

Hongchuan Li, Laboratory of Experimental Immunology
Genetic Control of Variegated KIR Gene Expression: Polymorphisms of the Bidirectional KIR3DL1 Promoter Are Associated with Distinct Frequencies of Gene Expression

Anat Ohali, Vaccine Branch
Anti-CD40-Mediated Expansion of High-Avidity Antigen-Specific CD8 Memory Cells Is IL-15 Dependent

Poonam Tewary, Laboratory Molecular Immunoregulation
High-Mobility Group Box-1 (HMGB1) Protein Induces the Migration and Activation of Human Dendritic Cells and Acts as an Alarmin

Changqing Yuan, Laboratory of Cell and Developmental Signaling
The Functions of *Bwa* Gene in *Drosophila*

Elena Ambrosino, Vaccine Branch
Counter-Regulation of Type I and Type II NKT Cells in Tumor Immunity

7. **Clinical and Translational Research and Cancer Research Technology Combined** (*Conference Room 1*)
Moderators: Haiqing Li, M.D., Ph.D., and Heidi Erickson, Ph.D.

Laura Johnson, Surgery Branch
Gene Transfer of Tumor-Reactive T-Cell Receptors Confers both High Avidity and Tumor Reactivity to Non-Reactive PBMC and TIL

Gabriela Kramer-Marek, Radiation Oncology Branch
Molecular Probe for *In Vivo* Monitoring of HER2 Expression by PET

Anil Shanker, Laboratory of Experimental Immunology
Therapeutic Benefit of Combining Proteasome Inhibition with TRAIL Receptor Agonist Antibody to Promote Tumor Cell Apoptosis

Jason Cheng, Radiation Oncology Branch
Monte Carlo Dosimetry Study for 6 MV Photon Beam Using Reduce Phase Space Method

Scott Martin, Genetics Branch
Applications of RNAi Screens in the Study of Cancer-Associated Processes

10:45 a.m. **Break**

11:15 a.m. **Concurrent Workshops III**

1. **Science Communication** (*Crystal Ballroom 1*)

“Speaking about Science”
Barrett Whitener, M.A., Premier Public Speaking, Inc.

“Writing about Science”
Maggie Meitzler, TechBooks Professional Publishing Group
Moderators: Gillian Whittaker, Ph.D., and Girish Patel, M.B.B.S., M.R.C.P., M.D.

2. **Core Facilities and Support Services at NCI** (*Conference Rooms 4–6*)

“Opening Remarks from the Director”
Timothy Harris, Ph.D., Director, Research Technology Program, SAIC-Frederick, Inc.

- **“Science and Technology Partnerships”**
David Goldstein, Ph.D., Office of Science and Technology Partnerships, OD, CCR, NCI
- **“Learning to Express and Purify Mammalian Proteins”**
James Hartley, Ph.D., Protein Expression Laboratory, Research Technology Program, SAIC-Frederick, Inc.
- **“An Insider’s Look at the Protein Chemistry: Molecular Interactions R Us”**
Robert Fisher, Ph.D., Protein Chemistry Laboratory, Research Technology Program, SAIC-Frederick, Inc.

- **“Targeted and Discovery-Driven Proteomics within the Laboratory of Proteomics and Analytical Technologies”**
Timothy Veenstra, Ph.D., Laboratory of Proteomics and Analytical Technologies, Research Technology Program, SAIC-Frederick, Inc.
- **“Development of Novel Microarray Platforms”**
David Munroe, Ph.D., Laboratory of Molecular Technology, Research Technology Program, SAIC-Frederick, Inc.
Moderators: Kwang Suh, Ph.D., and Jordan Irvin, Ph.D.

12:30 p.m. **Mentored and General Lunch with Travel Awards** (*Grand Ballroom—First Floor*)

1:45 p.m. **Questionnaire and Closing Comments from the Retreat Committee**

2:00 p.m. **Adjourn**