# THE DOSSIER

The Digest on Staff Scientists and Staff Clinicians: Information, Employment and Research

June 2012 Issue 9

## From the Editor





# Welcome to the June issue of The Dossier, a newsletter dedicated to the Staff Scientists and Staff Clinicians (SSSC) of the CCR!



This issue contains important messages from the Director's Office and a special article by Nancy H. Colburn, Ph.D. A summary of the 8th annual SSSC retreat is provided along with information about the upcoming SSSC Professional Development Day. We highlight the work of Aus-

tin Duffy, M.D. (SC), and his successful experience with the Blood Processing Core. We also announce the SSSCs selected as Grand Rounds speakers in the upcoming months. We hope to continue to provide relevant and pertinent information to aid in the success of SSSCs. Please send your contributions, suggestions and comments to budhua@mail.nih.gov.

> Anuradha Budhu, Ph.D. (SS) Editor-in-Chief Laboratory of Human Carcinogenesis



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# From the Office of the Director

### **Mentoring is a Key Component of Career Development**

Having a mentor is a vital part of everyone's career development and research productivity. Mentors can guide us, offer encouragement and advice, and help us find solutions to problems. A mentor can help prioritize, set goals, and determine what is needed for success in all fields. CCR has a wealth of seasoned scientists with a vast array of experience and knowledge to serve as exceptional mentors for our Staff Scientists and Staff Clinicians.

I encourage you to think about areas where you want to enhance your skills and information base, and seek out a mentor who meets your needs. Do you want to learn a new laboratory technique, learn management skills or about career options, increase your visibility in your field, need advice on work/life balance? Depending on your goals, you may benefit from having more than one mentor that can help you grow in different aspects professionally as well as personally. Mentoring relationships also provide networking opportunities and can lead to new research collaborations. Also, don't overlook the value of having a peer who is more accomplished or experienced be a mentor. Your peers can offer insight and advice from their previous experiences.

Mentors can be important assets in achieving your career goals; however, being a mentor is also a rewarding and growth-enhancing experience. Although new postdocs join CCR year round, a new class of college and high school trainees will join our ranks for a few weeks this summer. I encourage you take an active role in their training. As Staff Scientists and Staff Clinicians, you have a wide range of knowledge and skills that can help foster their future careers in science. You will not only help these young trainees acquire the skills needed to advance their careers, but as a mentor you also will gain valuable experience and develop skills in management, teaching, and coaching.

"Mentors can be important assets in achieving your career goals; however, being a mentor is also a rewarding and growth-enhancing experience."

CCR is consistently ranked among the top institutions in which to train, partly because of the proximity and exposure to scientists with a wide range of expertise. You, as Staff Scientists and Staff Clinicians play a key role in our success in training. CCR's leadership appreciates the time and effort you have invested in mentoring our next generation of cancer researchers. We also encourage you to take advantage of the opportunities available at CCR for you to be a mentee, as well as a mentor. Both roles are rewarding and contribute to career advancement.



**Robert Wiltrout, Ph.D.**Director. Center for Cancer Research



Please share this newsletter with your colleagues and visit the SSSC website at <a href="mailto:sssc.nci.nih.gov">sssc.nci.nih.gov</a>



# The 8th Annual SSSC Retreat (April 17, 2012)

The 8<sup>th</sup> Annual CCR and Division of Cancer Epidemiology and Genetics (DCEG) Staff Scientist and Staff Clinician Retreat was held on April 17, 2012, at the NIH Natcher Conference Center. This year's retreat had a record number of registrants (161) and posters (84) presented at two poster sessions. For the first time, CCR and DCEG Staff Scientists and Clinicians were joined by SAIC-Frederick Scientists.

Opening the agenda, retreat co-chair Dr. Nadya Tarasova highlighted the vital role of the NIH Intramural Program in improving the wellbeing of individuals suffering from disease and emphasized the importance of effective sharing of resources and collaborations in times of reduced budgets. In his opening remarks, Dr. Robert Hoover, Director of the Epidemiology and Biostatistics Program at the DCEG, discussed the essential and numerous roles Staff Scientists play in epidemiology research. CCR Deputy Director Dr. Ronald Gress shared important insights as to what makes a scientific career here at the NIH, both within our system and in the context of current challenges at the national level. Dr. Gress was encouraging through his awareness of what a Staff Scientist is called to do, and expressed the care and expectation of the CCR for us at the professional and individual level.

This year's keynote speaker, MedImmune Executive Vice President, Research and Development, Dr. Bahija Jallal, presented an insightful talk entitled, "Innovation in Cancer Research." She highlighted the needs and ways of unlocking the potential of industry-academic collaboration in cancer research and drew her vision of key challenges in oncology and ways of overcoming them. Matthew Zachary, radio talk show host, recording artist and Founder/CEO of I'm too Young For This! Cancer Foundation, captivated the retreat audience with a very emotional presentation entitled "Stupid Cancer: The Young Adult Experience."

Four highly interactive topic lunches were dedicated to the most "hot" topics of Staff Scientists and Staff Clinicians' everyday life. The participants discussed: how technology transfer aids scientific discovery at NCI through a series of case studies, what works and what does not work in the assembly of multidisciplinary groups of Staff Scientists and Staff Clinicians, how to survive in times of budget cuts, an overview and update on the quadrennial review process of Staff Scien-



Dr. Bahija Jallal, 2012 SSSC retreat keynote speaker

-tists in CCR and DCEG. At management workshops, participants learned about the creation of motivating environments and identifying key strategies to use for transitioning to a manager.

Delivering closing remarks, CCR Director, Dr. Robert Wiltrout, presented a fascinating analysis of scientific achievements at the CCR in recent years. He also analyzed the role of Staff Scientists and Staff Clinicians in collaborations, mentoring, and team science at CCR and discussed the current budget issues.

Poster travel awards this year were sponsored by the CCR Office of Training and Education and SAIC-Frederick. The winners were selected in four categories by a Judging Committee of distinguished scientists. Drs. Josip Blonder and Xiaoying Ye of the Laboratory of Proteomics and Analytical Technologies, Advanced Technology Program, SAIC-Frederick, Inc., were co-winners of the best poster presentation in Technology Development category. Josip's poster was entitled: "Profiling Ewing's Sarcoma Molecular Phenotype using Concurrent LC-MS Profiling of Tissue, Blood and a Corresponding Cell Line: A Method Development" and Xiaoying's presentation was entitled: "A Method Development for Comparative Proteomic Profiling of Human Breast Cell Lines Exposed to the Phytoestrogen Genistein." Dr. Juraj Bies from Laboratory of Cellular Oncology, NCI--Bethesda won the best poster award in Basic Research category for the work entitled: "The Tumor Suppressor p15Ink4b Regulates Differentiation and Maturation of Conventional Dendritic Cells." Dr. Sean Davis (Genetics Branch, CCR, NCI-Bethesda) won an award in the



# The 8th Annual SSSC Retreat (Con't)

Epidemiology and Bioinformatics session for : "Bioconductor: Open Source Tool for the Analysis and Comprehension of Genomic Data." Dr. Patricia Day (Laboratory of Cellular Oncology, CCR, NCI-Bethesda) was the winner in Translational/Clinical Research category with a poster entitled: "An HPV in vitro neutralization assay that recapitulates the in vivo process of infection provides a sensitive measure of L2 infection-inhibiting antibodies." Each winner received a \$1500 travel award to attend scientific meetings of their choice.

The retreat continues to bring together Staff Scientists and Staff Clinicians, and provides the opportunity for them to share their advances in research, find collaborators, discuss and learn about science management issues and career development. The annual event plays an important role in improving

communications between research groups, promoting productive collaborations and strengthening the NCI community.



Nadya Tarasova, Ph.D. (SS) and Sergey Tarasov, Ph.D. (SS) 2012 SSSC Retreat Co-Chairs





# The SSSC Professional Development Corner

# SAVE THE DATE: The Second Biennial NCI SSSC Professional Development Day

September 13, 2012, Natcher Building (Bldg. 45)

The SSSC Professional Development Committee is proud to announce the Second Biennial NCI SSSC Professional Development Day to be held in the Natcher Building on September 13, 2012. The first Professional Development Day was organized in 2010 and was a great success with over 100 participants. This year's program will be organized around four topics:

- 1 Grants available to SSSC (DOs and DON'Ts)
- 2 Technology Transfer and Licenses
- 3 Leadership
- 4 Networking with SSSC Alumni

Please join us for this unique professional development opportunity. Detailed information will be provided soon.



Christophe Marchand, Ph.D. (SS) Laboratory of Molecular Pharmacology





# The PI Corner

Section Editor: Caterina Bianco, M.D., Ph.D. (AS)



Over the years I have served in several capacities that interface with CCR Scientists. Staff These include the Promotion Review Panel that reviews Staff Scientists at the outset, the Quad Review committee that assesses their work at fouryear intervals thereafter, the Women Scientists Advisors, and as Chief of the Laboratory of Cancer Pre-

vention since 2003. I have worked with my own lab's Staff Scientist since 2000, Matthew Young, and with a number of other Staff Scientists who have made themselves valuable. What are some of the noteworthy features of a valuable staff scientist? An important one is to further the Specific Aims of the PI's Projects. This calls for having an eye on the big picture goals at the same time as doing what it takes to make the experiments work, both one's own and those of the postdoctoral fellows and technical staff in the lab. Another valuable feature is to make connections to other labs in the Laboratory or Branch as well as to collaborators outside the PI lab, both intramural

"Sometimes the collaborative projects call for the Staff Scientist to take leadership responsibility. The Staff Scientist who is ready to step up to the plate and assume a project manager role can be a real asset."

and extramural. These connections with collaborators often call for being a team player on an interdisciplinary team. Sometimes the collaborative projects call for the Staff Scientist to take leadership responsibility. The Staff Scientist who is ready to step up to the plate and assume a project manager role can be a real asset. The connections within the Lab or Branch can involve delegated responsibility for organizing the Lab's schedule of postdoc talks or journal clubs. They can involve contributing to brainstorming sessions and critical thinking in the PI meetings that lead to writing site visit proposals. Of course a critical feature of a valuable Staff Scientist/Clinician is to take substantive responsibility as corresponding author, first author or contributing author for getting manuscripts to move through the steps leading to in press status, particularly after the first author has left the lab.

> Nancy H. Colburn, Ph.D. Head, Gene Regulation Section Chief, Laboratory of Cancer Prevention





# **The Core Corner**

Section Editor: Anne Gegonne, Ph.D. (SS)

# A Phase I Study of AZD6244 in Combination with Cetuximab in Refractory Solid Tumors (Protocol-11C0075)

The Medical Oncology Branch (MOB) and Affiliates conduct clinical research to develop novel therapeutic research strategies for the treatment of cancer and to test those strategies by conducting clinical research in medical oncology across a spectrum of diseases and disease mechanisms. Dr. Austin Duffy, a Staff Clinician within the MOB, specializes in the treatment of gastrointestinal cancers. One of his studies is a collaborative effort between the NCI and the Univer-

sity of Wisconsin evaluating AZD6244 – a potent inhibitor of mitogen-activated protein kinase 1/2 (MEK1/2) – in combination with cetuximab – a monoclonal antibody directed against the epidermal growth factor receptor (EGFR) and an approved therapy for colorectal cancer. In recent years it has been well established that the presence of a KRAS mutation predicts absolute clinical resistance to cetuximab in patients with metastatic colorectal cancer. For the 35-



40% of patients with KRAS-mutant colorectal cancer, anti-EGFR therapy is not a treatment option. Resistance in this setting appears to be due to activation of signaling cascades which lie downstream of the EGFR receptor, the RAF/MEK/ERK pathway being prominent amongst these. The RAF/MEK/ERK pathway is one of the major conduits controlling cellular behavior and in the majority of cancers, at least part of this pathway is aberrant or hyper-activated. Preclinical studies in both KRAS-mutant colorectal and pancreatico-biliary cancer have demonstrated that MEK inhibition can reverse EGFR-resistance.

The current trial is a phase 1 dose escalation study of AZD6244 in combination with fixed-dose cetuximab with an expanded cohort in KRAS mutated metastatic colorectal cancer. While the immediate aim of this study is to establish a safe and maximally tolerated dose for the combination of these two agents, our underlying hypothesis is that EGFR inhibition by cetuximab would be augmented in patients with KRAS mutations if activation of the RAF/MEK/ERK cascade were to be inhibited by MEK inhibition. The secondary objectives of the trial involves extensive correlate studies to evaluate the pharmacokinetics of the treatment combination of AZD6244 with cetuximab and to assess the inhibition of the RAF/MEK/ERK pathway in peripheral blood mononuclear cells secondary to treatment with AZD6244. The collection and processing of all biological specimens related to this protocol are performed by the Blood Processing Core (BPC) headed by Dr. William D. Figg, Senior Scientist and Head of the Molecular Pharmacology Section within the MOB.

The BPC provides laboratory support for intramural clinical studies and functions as a human biospecimen repository. In addition to laboratory services, the core serves as a resource for clinicians seeking advice on study design including specimen collection and storage methods as well as all protocol-associated study worksheets related to data and sample collection. The BPC provides services related to sample processing, barcoding, and storage of pharmacokinetic (PK) and pharmacodynamic (PD) biospecimens for all trials. Specifically for this trial, the BPC processed all samples according to protocol-specific guidelines and batch shipped the PK and PD samples to the coordinating center of this study at the University of Wiscon-

sin for measurement of AZD6244 and cetuximab levels and ERK1/ERK2 phosphorylation analysis, respectively. We eagerly await the results of this ongoing trial.

The BPC has been in existence for almost 20 years. It was originally created to serve the blood processing needs of PIs within the Cancer Pharmacology Branch but over the last 7 years has expanded to assist all CCR investigators from the initial stages of protocol design onwards. The Core resides within the Clinical Pharmacology Program, Office of the Clinical Director, which is also overseen by Dr. Figg. Kathy Compton (SAIC) is the Operational Manager of the BPC. The group processes and catalogs approximately 19,000 research aliquots per year. Staff members are certified to ship biological materials and routinely transfer samples to collaborating institutions. During 2011, the Core collected samples for 70 different protocols, representing 23 PIs from 9 NCI branches.





Austin Duffy, M.D. (SC), Medical Oncology Branch and William D. Figg, Pharm. D., Senior Investigator, Clinical Pharmacology Program, Office of the Clinical Director





# **SSSC to Present CCR Grand Rounds**

In recognition of the high quality science that many SSSCs are doing and their contribution to progressing CCR's mission, the CCR Senior Staff plans to reserve lecture slots each year for SSSCs to speak at the CCR Grand Rounds. This new opportunity will provide an avenue for SSSCs to increase their visibility at CCR and to inform the scientific community about their research. CCR Principal Investigators will nominate SSSC speakers.

CCR Grand Rounds is a weekly lecture series addressing current research in clinical and molecular oncology and HIV/AIDS. Speakers include leading national and international extramural and intramural researchers and clinicians, CCR scientists, and oncology nurses who are invited to present the yearly Oncology Nursing CCR Grand Rounds.

The lectures are held on Fridays at noon in Lipsett Amphitheater and help the NIH community stay informed about advances in oncology and HIV/AIDS research. In addition, physicians can receive continuing medical education (CME) credits for attending the live lectures.

#### 2012 SSSC Grand Rounds Speakers:



November 16, 2012
Paola Scaffidi, Ph.D. (SS)
Cell Biology of Genomes Group,
Laboratory of Receptor Biology and Gene Expression



January 4, 2013
Hisataka Kobayashi, M.D., Ph.D. (AS)
Head, Synthetic and Radio Chemistry
Molecular Imaging Program



**February 22, 2013**Arthur L. Shaffer III, Ph.D. (SS)
Molecular Biology of Lymphoid Malignancies Section
Metabolism Branch

For more information about the lecture series, visit CCR Grand Rounds and Eminent Lectures.

**CCR Office of The Director** 





## Congratulations!

Join us in congratulating Caterina Bianco, M.D., Ph.D. (AS) on her new position as a Scientific Review Officer at the NCI Division of Extramural Activities



#### **Attend**

SSSC Ice Cream Social June 7, 2012, 2-3pm

Bldg 37, Bethesda campus, North entrance In case of poor weather: Bldg 37, Rm. 2041



## **Looking for Editorial Experience?**

The Dossier is looking for SS or SC to participate as Section Editors. If interested, please contact Anuradha Budhu at <a href="mailto:budhua@mail.nih.gov">budhua@mail.nih.gov</a>







# We need your input! Send your articles or suggestions with subject title "The Dossier" to <a href="mailto:budhua@mail.nih.gov">budhua@mail.nih.gov</a>

This newsletter is an avenue for you to express your ideas and thoughts regarding being a Staff Scientist or Staff Clinician at CCR and to make pertinent announcements.

Your contribution is very important to the success of The Dossier. Please send us your commentary, announcements and suggestions for topics/subject manner and we will do our utmost to include your material in upcoming issues.

## Join one of these SSSC Committees

Professional Development: Contact Christophe Marchand, Ph.D.

Communications: SSSC Website: Contact Sharon Moore, Ph.D.

The Dossier: Contact Anuradha Budhu, Ph.D.

SSSC Retreat: Contacts: Rimas Orentas, Ph.D.

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