NCI CENTER FOR CANCER RESEARCH

FELLOWS & YOUNG INVESTIGATORS NEWSLETTER

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From the Editor's Desk

Welcome to the SPRING edition of the Fellows and Young Investigators Newsletter. In this issue, we preview the upcoming 12th Annual CCR-FYI Colloquium being held at Natcher Conference Center in Bethesda March 26-27. A former CCR trainee and Steering Committee member, who will be featured in a workshop at the Colloquium, describes her experience transitioning from being a postdoc fellow to becoming a technical writer for a biotech company. We also highlight recent winners from the 8th Annual Graduate Student Research Symposium and recipients of the NCI Director's Innovation Award. Be sure to check out the Upcoming Events as springtime at NCI-CCR is packed full of seminars, festivals, and chances to present and possibly be rewarded for your research. Enjoy!

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IF YOU HAVE ANY COMMENTS, SUGGESTIONS OR WOULD LIKE TO CONTRIBUTE TO FUTURE NEWSLETTERS PLEASE EMAIL US AT ncic-crfyi@mail.nih.gov, or Miranda.Hanson@nih.gov

Providing support for fellows at CCR
CCR-FYI Association is supported by the CCR Office of the Director

CCR-FYI News

A wonderful time of the year at the 12th Annual CCR-FYI Colloquium

With the awards being doled out, with the high-profile speakers telling inspiring stories, and with happy hours in the bar, it will be a wonderful time of the year. No, this is not the holiday season yet. But it is the season of the annual CCR Fellows and Young Investigators Colloquium.

On March 26-27th, the CCR-FYI Steering Committee will present the 12th Annual Colloquium at the NIH main campus in Bethesda. The two-day event is packed with wide-ranging activities including thought-provoking scientific talks, career development workshops, and a career fair attended by big pharmas like Pfizer. Organized by and for the CCR trainees, including postdoctoral fellows, graduate students, and post baccalaureates, the colloquium provides attendees a variety of venues to network with fellow trainees, PIs and career workshop panelists, to showcase their research achievements, to gain insights of diverse career paths, and even to land a dream job, all in a friendly environment. In addition, Joanna Rudnick, an award-winning documentary filmmaker, will remind us how our research can have a profound impact on cancer patients through "In the Family", a film documenting cancer survivor stories.

For trainees looking for cutting-edge science, the colloquium offers an impressive list of keynote speakers. Dr. Jeffrey Schlom, Chief of the Laboratory of Tumor Immunology and Biology at the CCR, will present his exciting research in the design and development of recombinant vaccines. Dr. Natasha Caplen, head of the Gene Silencing Section in the CCR Genetics Branch, will address the annotation of cancer genome via RNAi screen. Rising from a visiting fellow to her current position, Dr. Caplen will undoubtedly inspire many trainees in their pursuit of research careers. Dr. Brigid Hogan of Duke University, a member of the National Academy of Sciences and the Institute of Medicine, will focus her talk on the essential role of stem cells in the development of the lung and its repair after injury. In addition to the keynote speakers, selected CCR trainees will present their own research through posters and oral presentations. If you are looking for collaborations and expertise in a particular field, this section can't be missed.

Career development workshops have always been one of the favorite events in the colloquium, and this year will be no exception. Panelists including industry veterans to early-career researchers will share their experiences in the day-to-day professional life, the job hunting, and the career transitions. And some of the speakers were even trained at the NIH as a postdoc before flourishing in their current careers, so you will readily relate to their experiences. Some popular topics include Business of Science, Careers in Science Writing, Careers in Academia and Grants Management, and Communicating Science. A newly designed workshop, Preclinical Research and Development, will feature panelists from the National Cancer Institute and the National Center for Advancing Translational Sciences to show the journey from basic science discovery to human therapy. Career development experts, such as Lori Conlan, Director of the NIH Office of Postdoctoral Services, and Linda Myers, Associate Ombudsman of the NIH Office of the Ombudsman, will show you how to make yourself marketable, and how to resolve conflicts in the labs and other

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workplaces. You will be amazed by the diversity of career paths that the panelists have taken, and you may be exposed to some career opportunities that you have never imagined.

If you are ready to make your next move, or you are just curious about what job opportunities are out there, you must attend the career fair. With an improving economy, many biotechnology companies are ramping up their hiring. The convenient campus location also draws more organizations to the career fair this year. Local companies and institutions such as Ariadne Genomics and the J Craig Venter Institute, and global conglomerates like Pfizer and Life Technologies have confirmed they will attend the career fair.

The colloquium, open to all CCR members, is generously funded by the Office of Training and Education and the Office of the Director at the CCR. In order to maximize the benefit of attending the colloquium, you are strongly encouraged to research the agenda and abstract book prior to the colloquium. For more information, please visit web.ncifcrf.gov/events/CCRfellows2012/default.asp.
You may not find "marshmallows for toasting", but you will talk about science, career and life under the blossoming cherry trees. We hope you will enjoy the wonderful time of the year!

Submitted by:
Jianfei (Jeffrey) Zhao, PhD
Gene Regulation Section
Laboratory of Metabolism

Former FYI-SC Member Begins Her Career as a Technical Writer

Former NCI-CCR postdoc and FYI Steering Committee member Allison Bierly recently began her career as a technical writer at Qiagen (Frederick, MD). In the following interview, Allison provides details of her experience transitioning from a CCR trainee to her current position at Qiagen.

Dr. Allison Bierly, Technical Writer for Qiagen

CCR Trainee/ FYI-SC Member

How long did you serve on the SC?
I joined the SC almost immediately; an officemate told me about it and invited me to a meeting, and I wanted to get involved. I was on the committee for about a year and a half total, which was also the length of my postdoc.

Committees served?
Two months in, I joined the Newsletter and the Retreat committees. For the retreat, I worked on publicity and the survivorship seminar.

Did serving on the SC help in developing/ strengthening skills that are used in your current position?
Serving on the SC absolutely helped. I was able to hone my writing skills working on the newsletter, and my experience on the Colloquium committee helped tremendously with learning to work in groups to accomplish long-term goals, which is a big part of what I do now.

While at NCI, what did you do to make yourself more attractive to potential employers?
I wrote a lot. I edited a lot. I joined the SC newsletter, and answered a call from Lori Conlan for writers for the NIH Career Symposium. When I met Lori, she recommended writing for Harrison Wein at NIH Research Matters, which turned out to be incredibly fruitful as well as entertaining. I also

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joined the Fellows Editorial Board, which I'd learned about from the SC orientation on my first day at NCI, and eventually became an Associate Editor. I learned various things from these experiences-using different styles for different audiences, handling deadlines effectively, working within word limit constraints, writing concisely, giving helpful editorial comments, and more. NCI offers tremendous opportunities for self-improvement in this field.

What was the job search like that led to acquiring this position?
In general, I cast a wide net. I knew I wanted to be a writer, but I tried not to take too rigid a view of what that might look like. So I applied to the government, companies, nonprofits, pretty much everyone who was looking for a writer. I also went to job fairs and even submitted my resume to job banks, just in case. I'd gone on a few interviews prior to this one, 2 through direct online submission of my resume, and 1 through the resume bank. I think all of those tools are useful in their own way; I'd advise taking advantage of any opening you can find to get your resume in the right hands.

Technical writer at Qiagen
What is a typical day like?
I work normal business hours, no weekends. There are usually a few meetings per week, but my time is generally spent writing and editing pieces, or communicating with others in the organization about revisions and new assignments. At any given time, I'll usually have a list of tasks in the double digits that I'm working on; there is always something to keep me busy.

What is the best/worst aspect of the position?
The best aspect is that I get to write all the time, about all sorts of topics. I was narrowly focused on immunology as a PhD student and postdoc; as a writer, I get to explore a whole world of biology that I never really delved into during my research days. It's awesome. The worst aspect, and I use that term loosely because I really adore my job, is probably trying to keep up with the workload; I like to finish off pieces as quickly and efficiently as possible, but there's always more to do, so sometimes it can pile up a bit.

What is your ultimate career goal?
I love where I am right now! QIAGEN is a terrific company, and technical writing has been very fulfilling so far. My focus right now is to own my position as much as possible; to be as proficient and effective as I can be. In general, I plan to be in scientific/technical writing and editing for the rest of my career; there is nothing that fulfills me the way writing does, and I'm truly passionate about the need for effective communication in the sciences.

If you would like to learn more about scientific/technical writing, or have questions for Allison, she will be at the "Careers in Science Writing" workshop at the FYI Colloquium on March 26.

Submitted by:
Miranda Hanson, PhD
Laboratory of Molecular Immunoregulation
Cancer and Inflammation Program

To all CCR trainees

Did you know that the *CCR Office of Training & Education*:

- **Assists trainees and mentors with mentoring issues.**
- **Assists in submitting applications for various funding mechanisms.**
- **Provides opportunities for expanding collaborative interactions.**
- **Assists trainees in the transition to different career paths.**
- **Provides numerous courses**
- **And much more!**

CCR Office of Training & Education
Jonathan S. Wiest, PhD
Director for Training and Education
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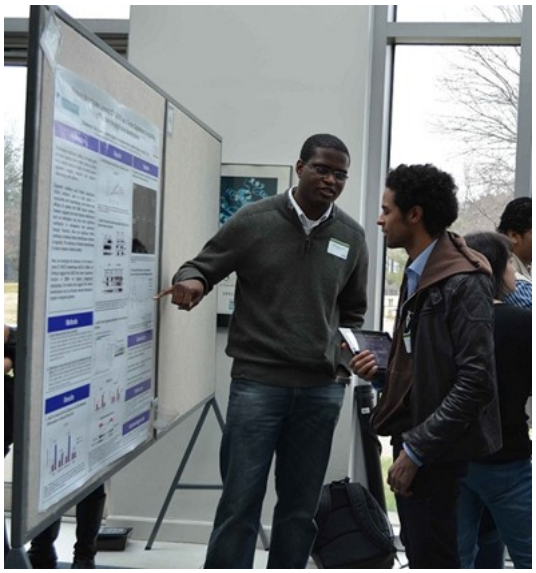
Articles

NIH Celebrates Graduate Students at the 8th Annual Graduate Student Research Symposium

Graduate students from across NIH gathered on January 11, 2012 to share their research through posters and oral presentations at the 8th Annual Graduate Student Research Symposium. The theme this year was "The Faces of Tomorrow's Science". The Symposium not only provided a venue for students to showcase their research, but was also an opportunity to celebrate outstanding students and mentors.

The symposium opened with welcoming remarks by Dr. Sharon Milgram, Director of the Office of Intramural Training and Education (OITE). Nobel Laureate, Harold Varmus MD, gave the opening address in which he touched on highlights from his own career and discussed his vision for the future of graduate science education. Dr. Varmus is the current Director of the National Cancer Institute and the former Director of the NIH, as well as one of the original founders of the Graduate Partnership Program (GPP). The GPP currently serves more than 500 graduate students from over 100 universities conducting research at NIH.



Chibawanye Ene (left) explains his research to Jermaine Ross. *Photo courtesy of Shawn Mullen*

Keynote speaker, Dr. Paolo Sassone-Corsi, presents his work on "Epigenetics, Metabolism and the Circadian Clock". *Photo courtesy of Bill Branson*

Four graduate students were selected to present their research orally. Jessica Keffer from Georgetown University conducts her research at NIDDK. She described her thesis research which focuses on the inhibition of FtsZ by an antibacterial compound. Jason Chang Yi works at NHLBI and his home institution is University of North Carolina at Chapel Hill. His work examines receptor cluster dynamics at the immunological synapse in T cells. Feng-Yen Li is enrolled at University of California, San Francisco and works at NIAID. Feng-Yen presented studies showing that loss of magnesium transport leads to a novel human immunodeficiency. Jaime Ross is from the Karolinska Institutet and conducts research at NIDA. Jaime's research focuses on the ability of natural substances to counteract aging phenotypes.

The keynote address was given by Paolo Sassone-Corsi, PhD, Director of the Center for Epigenetics and Metabolism at the School of Medicine of the University of California at Irvine. His talk examined the interaction of epigenetics, metabolism and the circadian clock. His take-home message was that all metabolic pathways are circadian in nature.

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A graduation ceremony was held to honor students who had recently completed their degree requirements with more than 30 students graduating this year. Twelve outstanding graduate students received $1000 Travel Awards for their research (see side bar). These winners were selected from more than 120 poster presentations. Posters were judged by postdoctoral fellows and staff scientists who volunteered their time to support the graduate student community. Funding for the travel awards was provided through the generous support of OITE. Refreshments and lunch at the Symposium were provided by the Foundation for Advanced Education in the Sciences.

The 2012 Graduate Student Research Symposium not only highlighted the "faces of tomorrow's science" here at NIH by celebrating graduate students, but also acknowledged the important role that mentors play in supporting and guiding students. Three graduate student advisors were recognized as "Outstanding Mentors": Dr. Richard Chadwick, NIDCD, nominated by Katherine Szarama; Dr. Qing Lan, NCI-DCEG, nominated by Christopher Kim; and Dr. Gisela Storz, NICHD, nominated by Maureen Thomason and Xuefeng Yin.

Acknowledgements: Special thanks to Philip Wang and Alexis Boyd for help with gathering pictures and materials for this article.

Submitted by:
Katie Roth Stagliano, MS
Laboratory of Molecular Immunoregulation
Cancer and Inflammation Program

RECIPIENTS OF THE 2012 NIH GRADUATE STUDENT RESEARCH AWARDS

Biochemistry/Genetics/Cell & Molecular Biology:

Deborah Y. Kwon (NINDS/Brown University), advised by Kenneth Fischbeck

Chibawanye I. Ene (NCI/Cambridge University), advised by Howard Fine

Darpan Medhi (NCI/The University of Sheffield) , advised by Michael Lichten

Bioinformatics/Structural Biology:

Madhav Sukumaran (NICHD/Cambridge University), advised by Chris McBain

Shile Zhang (NCI/Boston University), advised by Javed Khan

Immunology:

Fatima Nawaz (NIAID/New York University), advised by James Arthos and Anthony Fauci

David G. Kugler (NIAID/Johns Hopkins University), advised by Alan Sher

Feng-Yen Li (NIAID/University of California, San Francisco), advised by Michael Lenardo

Neuroscience/Physiology:

Mark N. Ziats (NIAID/Cambridge University), advised by Owen Rennert

Vania Y. Cao (NIMH/Brown University), advised by Kuan Wang

New Proposals:

Bethtrice Thompson (NCI/Howard University), advised by Lyuba Varticovski

Irene S. Tan (NCI/Johns Hopkins University), advised by Kumaran Ramamurthi

2012 NCI Director's Intramural Innovation Award Winners Announced

The winners of this year's NCI Director's Intramural Innovation Awards were highlighted at the 2012 NCI Intramural Scientific Investigators Retreat which took place on January 12th. NCI director Dr. Harold Varmus presented two Principle Investigator Awards along with sixteen Career Development Awards to CRTA Fellows, Visiting Fellows, Research Fellows and Staff Scientists within the Center for Cancer Research (CCR).

Dr Harold Varmus (right) presents the 2012 NCI Director's Intramural Innovation PI award to Dr Udayan Guha (left) and Dr Christina Annunziata (center) at the PI retreat. *Photo courtesy of Ernie Branson*

The Innovation Award aims to support high-risk, highly innovative approaches in the field of cancer research, as well as the development of pioneering technologies. Proposals are accepted from members of both the CCR and Division of Cancer Epidemiology and Genetics (DCEG). The Principle Investigator Award is supported to an upper limit of $50,000 and is aimed at senior Staff Scientists, Staff Clinicians, tenure track, and recently tenured PIs. The Career Development Award has an upper limit of $10,000. Fellows are encouraged to submit a project that is a based on their main project, so that the basic framework and support is in place, but also to explore original avenues that might otherwise be considered too high risk.

Dr Harold Varmus is pictured with some of the recipients of the Career Development Award recipients. *Photo courtesy of Ernie Branson*

Initial calls are made for a Letter of Intent (LOI), which includes both the outline of the research proposal and a Statement of Innovation, which focuses on the original and high risk aspects of the project, as well as the potential impact to the field and payoff in term of technological or intellectual property development. Full applications include a detailed research plan, budget, and applicant CV. Keep an eye out for the initial calls for application for the next round (2013), which will be made in Summer 2012.

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Principal Investigator Award Recipients

Christina M. Annunziata, M.D., Ph.D., Medical Oncology Branch and Affiliates
Development of NSC676914 as an Ovarian Cancer-Directed NF-Kappa B Inhibitor
Udayan Guha, M.B.B.S., Ph.D., Medical Oncology Branch and Affiliates
In vivo Imaging and Quantitative Phosphoproteomics to Study Responsiveness to EGFR-Targeted Treatments

Career Development Award Recipients

Aijuan Qu, M.D., Ph.D., Laboratory of Metabolism
Metabolomics and Magnetic Resonance Spectroscopic Imaging to Investigate Hepatic Tumorigenesis
Francis A. Flomerfelt, Ph.D., Experimental Transplantation and Immunology Branch
Identification of Tbata Inhibitors to Develop New Therapies to Improve Thymus Function in Cancer
Joseph J. Mitala, Ph.D., , Metabolism Branch
Electrochemical-Based Detection of Peptide-Protein Interactions
Thomas W. Miller, Ph.D., Laboratory of Pathology
Novel Small Molecule CD47-based Drugs as Radioprotectants for Cancer Therapy
Paola Scaffidi, Ph.D., Laboratory of Receptor Biology and Gene Expression
Novel Tools to Study Human Cancer Stem Cells in Intact Tumors
Wen-Jian Qian, Ph.D., Chemical Biology Laboratory
Development of First-in-Class Biovailable Polo-Like Kinase Polo-Box Domain-Binding Antagonists
Wanping Xu, M.D., Ph.D., Urologic Oncology Branch
Assessing the Role of the Tumor Suppressor Numb in the Development of Renal Cancers
Brunilde Gril, Ph.D., Laboratory of Molecular Pharmacology
Transdisciplinary Approach to Study a Mechanistic Role of Stress in Breast Cancer Progression
Ranabir Das, Ph.D., Structural Biology Laboratory
Real-Time Kinetic Studies of Ubiquitylation Using Ultra-Fast NMR
Romina S. Goldszmid, Ph.D., Laboratory of Experimental Immunology
Role of Commensal Flora in the Development of Cancer-Associated Cachexia and Risk in Obesity
C. Andrew Stewart, Ph.D., Laboratory of Experimental Immunology
Biological Relevance of Antibiotic Treatment to Poor-Outcome Chemotherapy in Immunogenic Cancer
M. Raza Zaidi, Ph.D., Pravin Mishra, M.S., Laboratory of Cancer Biology and Genetics
Identifying Novel Mechanisms of Melanoma Metastasis by Embryonic Melanoblast Transcriptome Analysis
Feng Zhu, Ph.D., Laboratory of Experimental Immunology
IKKalpha Targets miRNA Biogenesis in Preventing Skin Inflammation and Tumorigenesis
Palak R. Parekh, Ph.D., Laboratory of Molecular Pharmacology
Hypothermia: To Improve the Efficacy/Tolerance of Chemotherapy
Thomas R. Geiger, Ph.D., Laboratory of Cancer Biology and Genetics
The Host Genetics of Breast Tumor Infiltration and Metastasis
Cindy Chang, Ph.D., Metabolism Branch, CCR
Bacterial Infection and the Risk of Cancer in a Population-Based Cohort

Submitted by:
Geraldine O'Connor, PhD
Laboratory of Experimental Immunology
Cancer and Inflammation Program

Upcoming Events

12th Annual CCR-FYI Colloquium

- March 26-27, Natcher Conference Center, NIH-Bethesda

NCI-Frederick Postdoc Seminar Series

- Every other Wednesday, watch email for details. Free pizza and soda are provided.
- If you are interested in presenting as a speaker, please contact Linda Brubaker (brubakerld@mail.nih.gov)

FARE 2013 Abstract Submission open until March 22

NCI-Frederick and Fort Detrick Spring Research Festival

- May 9-10
- Registration open until April 11

The **NCI App for Fellows** is now available for both Android and Apple phones! Search for "NCI Fellows".

Opportunities to Practice Talks for Conferences, Seminars & Job Interviews

The **PASS (Presentation and Seminar Skills)** series has teamed up with Scott Morgan to provide CCR scientists with an hour-long session of one-on-one tutoring. During this session, you will go through your presentation with Scott, where he will provide feedback on style, content, delivery of message, etc. A week or two later, you will then have the opportunity to present your talk in front of your colleagues and to receive constructive feedback. Scott will also attend and provide additional feedback following the presentation. Scott has over 15 years of valuable experience in science communication and has recently co-authored a book, 'Speaking about Science'.

We will work with you and Scott to arrange a suitable time and schedule. This is a wonderful opportunity for anyone who wishes to improve his/her presentation skills either for a meeting presentation or job talk.

If you are interested in taking advantage of this opportunity or have additional questions, please contact either **Bríd Ryan (ryanb@mail.nih.gov).** Available slots will be filled on a first come – first served basis.