



## From the Editor's Desk

Welcome to the latest edition of the Fellows and Young Investigators Newsletter. In this issue, we welcome Brid Ryan as the new chair of the FYI Steering Committee and hear about her plans for the upcoming year as she extends an invitation to all trainees within the CCR to consider joining the Steering Committee. Continuing our focus on the training experience within CCR, this issue contains a wealth of useful information in a special section on how to get the most out of your fellowship by developing a good relationship with your mentor. We extend our congratulations to the winners of travel awards at the 10th Annual CCR-FYI Colloquium, including winners for poster and oral presentations and the outstanding post-doctoral fellow. In the career section, we profile 10 companies recently named as the best places to work in industry by *The Scientist*. In addition, we highlight a valuable service open to all NIH fellows in the form of the NIH Fellows Editorial Board, who will work with you to help produce the best quality scientific documents.

Editors:

Tim Chan, PhD  
Geraldine O'Connor, PhD  
Miranda Hanson, PhD

## TABLE OF CONTENTS

### CCR-FYI NEWS

Letter from the FYI Steering Committee Chair	2
Training and Mentoring - How to get the most from your fellowship	3

### Articles

Travel Award Winners at 10 <sup>th</sup> Annual Colloquium	4
The NIH Fellows Editorial Board – Editing and Training	6
Careers: Best Places to Work in Industry	8
CCR Fellows Make Strong Showing at Spring Research Festival	10
Publication Spotlight	11
Upcoming Events	12

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**Providing support for fellows at CCR**

CCR-FYI Association is supported by the CCR Office of the Director

# CCR-FYI News

## Letter from the FYI Steering Committee Chair

At this time every year, while most of us are suffering from the sweltering heat and humidity, the second issue of our quarterly newsletter is distributed. In it, the newly elected Chair of the CCR Fellows and Young Investigator's Steering Committee gets to briefly introduce themselves and to set out what it is that we do as a committee. And so it is that I write to you this year. I joined the committee in the fall of 2007, when I first came to NCI and I am based in Bethesda. Geraldine O'Connor is our current vice-chair and Katie Stagliano is our current secretary, both of whom are based in Frederick.

The CCR-FYI Steering Committee has been in existence for well over a decade and each year we strive to be a voice for young scientists within CCR. CCR-FYI is primarily made up of post-docs, but our committee sets out to represent all non-tenured scientists within CCR, including postbacs, graduate students, staff scientists, staff clinicians and technicians. In previous years we have also had a clinical fellow representative who served on the committee. For 2010-2011, we will have for the first time a graduate student representative and also a new subcommittee designed specifically to meet the needs of postbacs.

For those of you who are new to CCR, I will take a few moments to describe what it is that we do. Our committee and our focus is divided into three main parts. The first of these is the **Community Life Subcommittee**. These members are responsible for putting out this newsletter, help in the orientation of new fellows to CCR and organize quarterly social events for CCR fellows. In addition, we have representatives that are appointed as liaisons to the National Postdoctoral Association (NPA) (currently Raed Samara) and the NIH Fellows Committee (FelCom) (currently Orla Casey).

The **Scientific Subcommittee** has two main tasks. One of these is the organization of a

seminar series on both the Bethesda and Frederick campuses. In Frederick, Jim Gould organizes a post-doctoral seminar series that is run on alternating Wednesdays. The goal here is to give postdoctoral fellows within the Frederick campus the opportunity to present their data to their colleagues and PIs, while getting constructive feedback in the process. At present, this series is on a summer hiatus, but will resume in the fall. PASS, Presentation and Seminar Skills, is run in Bethesda and takes the form of a two-part training experience. This service is generously paid for by the CCR Office of the Director and is open to young CCR scientists at all locations. Initially, fellows sign up for a one-on-one tutoring session with Scott Morgan, an outstanding public speaking coach. The goal is to get individualized advice on how to prepare your slides and deliver your talk and message for a seminar, conference or job talk. Subsequently, fellows are given the opportunity to practice their talk in front of Scott and their peers where feedback is given. We have been running this series now for over a year and have had tremendous feedback from it, so I would urge you to keep an eye out for the advertisements.



Brid Ryan, PhD, MPH,  
2010-2011 FYI Steering  
Committee Chair

In addition to the seminar series, the Scientific Subcommittee is tasked with distributing a survey each year, the goal of which is to take a snap shot of trainee life within CCR. In previous years, we carried out the survey at our annual retreat. This year however, we are re-formatting the survey and will be sending it to all trainees and young investigators in CCR in September. The information from these surveys is very important and informative. It is presented at the annual PI Retreat to the NCI Office of the Director and PIs. We use this feedback to devise and plan strategies for how to improve and enhance aspects of our training and community life; therefore, I strongly encourage you to fill out this survey when it hits your email box this fall.

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This year, thanks once again to generous support from the CCR Office of the Director, we plan on holding our Colloquium in spring of 2011. This event is the third main focus of our committee and is always a wonderful success. Geraldine O'Connor is tasked with chairing the **Colloquium Subcommittee** for this year, and do keep an eye out for the abstract call in the fall. In addition to it being an excellent forum for Fellows to present their work as oral and poster presentations, the annual Retreat is also a great networking opportunity.

Fellows from both the Bethesda and Frederick campuses sit on the Steering Committee. We meet on the last Thursday of every month for an hour, and teleconference between the two locations. Everyone is welcome to become a member of the steering committee, so feel free to get in touch if you have any questions or would like to join ([ryanb@mail.nih.gov](mailto:ryanb@mail.nih.gov)). Alternatively, our website is frequently updated with information relevant to trainee life in CCR, so be sure to check there also (<http://ccr.cancer.gov/careers/fellows/default.aspx>).

To finish, I would like to extend many thanks to those of you who have in the past been, or who currently are, members of the CCR-FYI Steering Committee. Our participation does take time away from other things, but I do think that the net benefit from our endeavors is an enhanced training experience for fellows within CCR. I would like to thank Jim Gould, Tim Chan, Jordan Irvin and all recent Chairs, Officers and members of the Steering Committee for passing a very well run and thriving committee to this current Chair. In addition, on behalf of the CCR-FYI Steering Committee, I would like to thank Dr Jonathan Wiest for his continuous support and guidance of this committee. My Irish blood doesn't cope well with the excesses of heat, humidity, lightening and earthquakes that this year is offering us. But as I adjust to these geological extremes, I would like to remind you all that the Steering Committee is open to anyone who wishes to join or have their voice heard. Our overarching goal is to create a better training experience for fellows within CCR.

And so at the risk of sounding a little clichéd, the bottom line is that we need you.

*Brid Ryan, PhD, MPH  
2010-2011 Steering Committee Chair*

## Training and Mentoring - How to get the most from your fellowship

### Attention CCR Fellows

Mentoring is a key element for a successful post-doctoral experience. This message details the resources that exist within CCR to help you receive the guidance that you need during your fellowship.

#### Who is my mentor and why is mentoring important?

A mentor is an advisor and your primary mentor is your PI. A successful mentoring relationship with your PI will aid achievement of goals, resulting in scientific and career advancement. There are four essential elements in successful mentorship which include:

- Setting expectations
- Communicating early and often
- Monitoring progress
- Ensuring visibility of the fellows so that maximum exposure in the scientific community is realized

#### What resources are available in CCR to aid mentoring?

To promote communication between fellows and their mentors, an **Individual Development Plan (IDP)** is completed upon arrival. This document details:

- Research goals
- Expectations of mentor
- Expectations of trainee
- Career plans and projected mentoring activities
- Expected timeframe for mentor/trainee communication
- Projected training and education
- Self-assessment of strengths and deficiencies
- Description of your training project

A compulsory **Training Plan Update** which includes sections on each of the above points is to

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be completed on a yearly basis prior to your fellowship renewal. The purpose of these documents is to stimulate a conversation between you and your mentor. It is recommended that you complete the sections of the Training Plan Update independently and then discuss the points together with your mentor. These documents are submitted with your renewal package and are reviewed by the CCR Office of Training and Education (OTE).

### How do I improve my mentoring experience?

Regularly discuss your expectations and progress with your mentor. Any questions or concerns you have should be raised immediately, without exception. Ensure time is allowed for completion of your Training Plan Update during the renewal process. Fellows are also encouraged to establish informal second mentor relationships to assist in career development, intellectual growth, or help with work-life balance.

### Is there extra help available?

The **CCR Office of Training and Education** (<http://ccr.cancer.gov/careers/OfficeEducation.aspx>) assists fellows and mentors with mentoring issues. This office also:

- 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 for career development

There is a collective responsibility to ensuring a successful post-doctoral fellowship. Therefore, fellows are also expected to be proactive and seek opportunities that will enhance their training. This can only be accomplished by establishing open and regular communication with your PI and mentors.

*CCR Office of the Director  
Robert Wilttrout, PhD  
Director*

*CCR Office of Training & Education  
Jonathan Wiest, PhD  
Director for Training and Education*

*CCR Fellows & Young Investigators  
Steering Committee*

## Articles

### Travel Award Winners at 10<sup>th</sup> Annual Colloquium

The 10<sup>th</sup> Annual Fellows and Young Investigators Colloquium this past March highlighted the research efforts of current CCR trainees through oral and poster presentations. Post-bacs, graduate students, and fellows presented their research in ten different categories at two poster sessions and ten sessions of oral presentations. From over 200 posters, and 50 talks, eight outstanding presenters were selected for \$1000 travel awards. The Outstanding Post-Doctoral Fellow of the Year, Dr. Gabriela Kramer-Marek, also earned a travel award for her accomplishments.

#### Poster Winners

*Dr. John Choy* was selected as a Travel Award Winner for his out-

standing presentation of a poster entitled, "Global Identification of Genes Haploinsufficient for Genomic Stability in *S. cerevisiae*." John has been a Research Fellow in the Genetics Branch with Dr. Munira Basrai for over three years. This was the first colloquium that he attended and he had this to say about his experience: "[I] thought the committee did an excellent job in balancing the science with career workshops. I felt that overall it was very well thought-out and executed." John is hoping to use his award to support his attendance at a systems biology meeting.

Dr. Guy Pilkington has been a Postdoctoral Fellow in the Vaccine Branch for a little over one year. He works with Dr.

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The 10th Annual CCR-FYI Colloquium was held in Hershey, PA from March 17-19, 2010.

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Barbara Felber, and presented a winning poster, "Analysis of the RNA transport element of the MusD murine LTR retrotransposon reveals functionally necessary tertiary interactions." He has already made good use of his travel award by attending the 2010 RNA Society meeting, which was held in Seattle. Regarding the FYI Colloquium in Hershey, Guy said the following, "I think the FYI-steering committee does a wonderful job. I certainly appreciate the amount of work they do behind the scenes to make our experience at the NCI a rewarding one. The 2010 colloquium was the second one I attended and I can honestly say that I found it to not only to be scientifically interesting, as well as useful for broadening my career options, but also a great networking opportunity. I highly recommend the FYI colloquium to all the new postdoctoral fellows at the NCI."

*Dr. Mathieu Metifiot* just finished his first year as a visiting fellow in the Laboratory of Molecular Pharmacology under Dr. Yves Pommier. His poster was selected as outstanding and was titled "Biochemical and Pharmacological Analyses of HIV-1 Integrase Flexible Loop Mutants." This was the first FYI colloquium he has attended and he found it "impressive".

*Dr. Salome Veiga* is a visiting fellow at the Chemical Biology Lab (Molecular Discovery Program) with Dr. Joel Schneider. She was been at NCI for less than one year, and was selected for her outstanding poster "Inherent Antibacterial Activity of Self-Assembling  $\alpha$ -Hairpin Peptide-Based Hydrogels". Dr. Veiga is planning to use her travel money for a conference sometime this year. She had a good experience at the 2010 CCR-FYI Colloquium. "The talks were really good and the workshops very useful. In my opinion, for such a big institute where people work in two different campuses, it is really important to have these types of events as a way to know our colleagues and their work."

**2010 Outstanding Poster and Oral Presenters** (From left to right) Guy Pilkington, Mathieu Metifiot, Salome Veiga, a colleague standing in for John Choy, Ambika Bumb, Monika Kaczmarek, Rafal Zielinski. Sandip Basu was absent.

## Oral Presentation Winners

*Dr. Ambika Bumb* just finished her first year as a post-doctoral fellow when she was selected for a travel award for her talk, "Multi-Modal Superparamagnetic Nanoprobe: Harnessing Magnetic, Nuclear, and Optical Power for Diagnostic Imaging Applications". Ambika works in the lab of Dr. Martin Brechbiel in the Radiation Oncology Branch, Radioimmune & Inorganic Chemistry Section. Ambika is planning on using her award to attend the World Molecular Imaging Congress meeting in September. Ambika hopes to attend future CCR-FYI Colloquiums and had a good experience this year commenting, "I was very impressed with how smoothly the [event] ran. The Steering Committee did a great job showcasing the caliber and diversity of work being done by post-docs at NCI."

*Dr. Rafal Zielinski* is a visiting fellow from Poland at the Radiation Oncology Branch. He has been working under the supervision of Dr. Jacek Capala since 2007. His winning oral presentation at Hershey was "Affitoxin – A novel approach to HER2-targeted Therapy." He plans to use his travel award to attend the 33<sup>rd</sup> Annual San Antonio Breast Cancer Symposium which will take place in December 2010. The Hershey Colloquium was his second CCR colloquium, and he had this to say about it: "Both scientific and social aspects were on very high level. Besides, I love this sweet location."

*Dr. Sandip Basu* recently completed his fourth year as a visiting fellow at NCI in the Eukaryotic Transcription Regulation Section, Laboratory of Cancer Prevention. His PI is Dr. Peter Johnson. His winning oral presentation was titled



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“The 3’ Untranslated Region (UTR) Suppresses Oncogenic Ras-Induced Post-Translational Activation of the C/EBP $\beta$  Protein”. He’ll be using his travel award to support his attendance at a conference later this year. Sandip thought the Hershey Colloquium was a success and said that he wished he had attended previous colloquiums as well.

*Dr. Monika Kaczmarek* is a post-doctoral fellow in the Laboratory of Cancer Prevention with Dr. Sandra Ruscetti. Her outstanding oral presentation was “Anti-cancer activity of the NO prodrug JS-K and the role of its arylating ring”. She will use her travel award to attend a conference later this year.

### Outstanding Post-Doc

The outstanding post-doctoral fellow of the year for 2010 was *Dr. Gabriela Kramer-Marek*. Dr. Kramer-Marek earned her Ph.D. in Medical Physics from Silesian University, Poland in 2005. The following year, she joined The Molecular Targeting Section of Radiation Oncology Branch as a Visiting Fellow. With Dr. Jacek Capala as her mentor, Gabriela has been working on the development and characterization of molecular probes for *in vivo* detection and quantification of tumor-specific markers. In particular, her efforts resulted in a new means for non-invasive assessment of HER2 expression in breast cancers using PET imaging with <sup>18</sup>F-labeled, HER2-specific Affibody molecules. Dr. Kramer-Marek’s work published in the European Journal of Nuclear Medicine and Molecular Imaging was awarded the 2008 Annual

**2010 Outstanding Post-Doc of the Year** Gabriela Kramer-Marek, PhD, Radiation Oncology Branch, NCI.



European Association of Nuclear Medicine Springer Prize for the Best Basic Science Paper. In addition, her recent report showing that Affibody molecules could be used to monitor possible changes in HER2 expression in response to therapeutic intervention was a subject of an Invited Opinion (editorial) in the Journal of Nuclear Medicine, press releases by NIH and Society for Nuclear Medicine, and was featured in the October 2009 issue of RSNA News. She is also a co-inventor on a US Patent Application “Radiolabeled Affibody Molecules” filed in February 2008. Currently, Dr. Kramer-Marek focuses on application of multimodal molecular imaging for detection and characterization of HER2 expression in breast cancer metastasis.

*Submitted by  
Katie Stagliano, MS  
2010 Colloquium Co-chair  
Laboratory of Molecular Immunoregulation*

## The NIH Fellows Editorial Board – Editing and Training

Did you know there is a free, fast, and fully confidential editing service available to NIH and FDA fellows? The NIH Fellows Editorial Board (FEB) was founded with the support of National Cancer Institute in 2002. Since then, volunteers have edited more than 500 scientific documents including manuscripts, grant applications, and book chapters. The FEB serves two distinct purposes: one is to edit documents for grammar, form, and clarity. The other is to enable the FEB members

to gain experience in editing which improves their own writing skills and is often used as a ‘test run’ for a career change from bench to management and administration.

*“I was completely impressed with the quality of the comments and suggestions. The review absolutely surpassed my expectations and I think that my manuscript is orders of magnitude better for having sent it in to the FEB.”*

*Anonymous*

The editors reflect the broad range of science pursued at the NIH. However, manuscripts are not assigned to editors based on their scientific expertise. Instead, editors volunteer for manuscripts which allows for some flexibility in workload

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(Continued from page 6)

distribution. While all editors are asked to read and participate in the discussion of the document, one associate editor and three primary editors take the lead and compile two reports. The electronic report (e-report) contains a summary of editorial comments. The second report, the soft copy, is based on a PDF of the manuscript and contains direct editorial changes.

A major goal of the FEB is to offer authors strategies for self correction rather than re-writing manuscripts for them. Therefore, the reports are specifically tailored for each document and do not 'fix' the manuscript - instead, examples are pointed out and general suggestions are given but it is up to the authors to make any changes. Scientific merit is not discussed; however, the FEB reserves the right not to edit manuscripts that are fully or partially plagiarized.

Currently, the FEB has 38 active and six consulting members from CC, NCI, NEI, NHLBI, NIA, NIAID, NICHD, NIDA, NIDCR, NIDDK, NIEHS, NINDS, and FDA. The weekly meetings are held by videoconference, joining members from the Bethesda campus, Frederick, North Carolina, Baltimore, Rockville, and Phoenix. Former FEB members have advanced to new positions with publishers such as Elsevier or the Journal of the National Cancer Institute, with broadcasting media such as PBS, while others work in industry, at FDA, Johns Hopkins, or other NIH ICs in research as well as in administrative positions.

If you are interested in the FEB, check out the website at <http://ccr.cancer.gov/careers/feb/> or contact the senior editor Christine Uhlenhaut at [ncieditors@mail.nih.gov](mailto:ncieditors@mail.nih.gov).

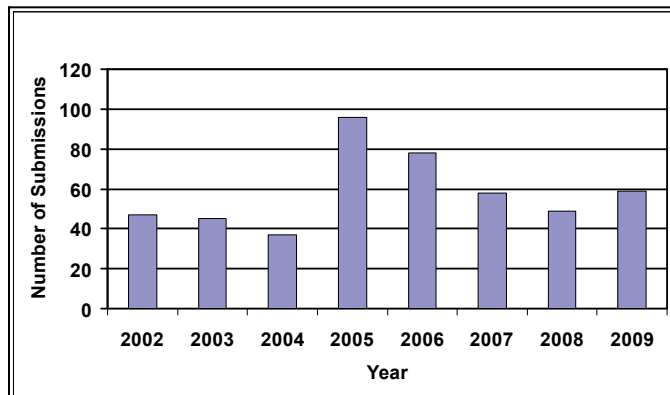


Figure 1: The number of submissions per year to the FEB since its inception in 2002.

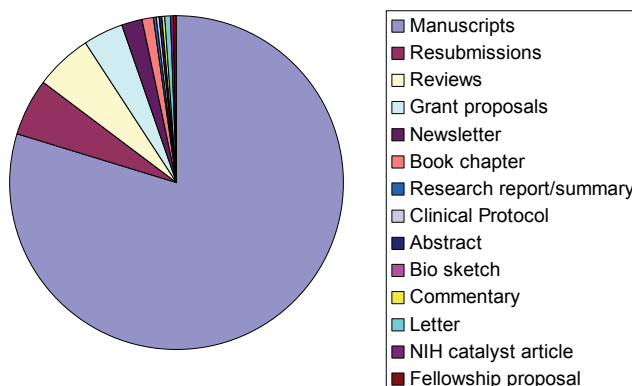


Figure 2: Cross section of the types of documents submitted to the FEB.

Submitted by:  
Christine Uhlenhaut, PhD  
Senior Editor, NIH FEB,  
Division of Viral Products, FDA/CBER

**Are you interested in getting the next issue of our newsletter?  
Want to stay up to date with trainee-related events within CCR?**

**Sign up for the CCR-POSTDOCs listserv**

**All you have to do is email [listserv@list.nih.gov](mailto:listserv@list.nih.gov) and type in "subscribe ccr-postdocs" in the body of the message**

## Careers: Best Places to Work in Industry

Each year, the life sciences magazine *The Scientist* ranks the best places to work in industry according to a web-based survey. For 2010, the top 10 institutions that are most applicable to NCI researchers are highlighted below.

**1) New England BioLabs** (Ipswich, MA): NEB, located north of Boston, is a small company comprised of 175 research/development employees with subsidiaries and distributors in 34 countries. It is one of the top producers and suppliers worldwide of reagents for the life sciences industry. NEB was one of the premier companies to generate restriction enzymes on a commercial scale and offers a wide selection of recombinant and native enzymes for genomic research. Additionally, NEB is expanding its products to include areas of drug discovery and proteomics. Basic research focuses on Molecular Biology and Parasitology, which is managed by senior scientists. NEB's scientists are consistently published in high-impact journals. Presently, over 630 papers have been published and many patents have been received. There are opportunities for collaborations outside of the lab, as well as lecturing at conferences and academic institutions. NEB provides its full-time employees with a benefits package including vacation, continuing education, disability, health and wellness, life insurance, and retirement planning. In 2009, there were 10 new research/development hires. There are currently 7 job openings.



(Source: NEB)

**2) Wyatt Technology Corporation** (Santa Barbara, CA): WTC is a small company consisting of 28 research/development employees. The focus of the company includes research, development, and distribution of absolute macromolecular characterization techniques and their instrumentation. Presently, WTC has developed refractometers, instruments that measure the multi-angle light scattering qualities of macromolecules in solution, and instruments for airborne aerosol monitoring and biodefense. Several major contracts from the U.S Army Bioengineering Medical Re-

search & Development Laboratory, the U.S. Army Armament Munitions and Chemical Command, and the Office of Naval Research have been awarded to WTC. In 2009, the company published over 500 peer-reviewed journal articles and books detailing novel research developments. WTC employees receive a complete benefit package including company paid health, dental and life insurance, holidays, combined vacation and sick leave, and disability. In 2009, there were 3 new research/development hires. There is currently 1 job opening.

**3) Infinity Pharmaceuticals** (Cambridge, MA): Infinity is a small company made up of 139 research/development employees. The company's focus is small molecule drug discovery for treatment of cancer and related conditions. Their areas of research include cancer biology, medicinal chemistry, and clinical/translational medicine. In 2009, their fourth internally-discovered molecule entered the clinic for treatment of neuropathic and inflammatory pain. Employees are offered a competitive benefit package including health/dental/life insurance, contingent compensation, paid vacation/holidays, stock options, tuition reimbursement, and discounted services, such as auto and home insurance. In 2009, there were 31 new research/development hires. There are currently 4 job openings.

**4) Otsuka Maryland Medicinal Laboratories** (Rockville, MD): OMML is a small company made up of 46 research/development employees. It is a subsidiary of Otsuka America, Inc (OAI). The company performs basic research to better support clinical studies conducted by Otsuka Pharmaceutical Development and Commercialization, Inc., and Otsuka America Pharmaceutical, Inc. In addition, it is involved in drug discovery with [Otsuka Pharmaceutical Co., Ltd.](#) in Japan. The areas of research include cardiology, cell therapy, molecular research and technology, neuroscience, phosphodiesterase, and thrombosis. Employees are offered medical/dental/vision

(Continued on page 9)



(Continued from page 8)

plans, life insurance, compensation programs, disability, paid vacation/sick leave, and education reimbursement. In 2009, there was 1 new research/development hire. Job openings can be searched for on Otsuka's website.

**5) PTC Therapeutics** (South Plainfield, NJ): PTC is a small company comprised of 150 research/development employees. It is a pharmaceutical company with the goal of discovering, developing, and distributing orally administered, small-molecule drugs that target post-transcriptional control processes. Current clinical and preclinical product candidates of PTC are targeted towards genetic disorders, oncology, and infectious diseases. Notably, PTC completed the first clinical trial of its drug candidate ataluren for treating Duchenne/Becker muscular dystrophy. Full-time employees are offered health insurance, income protection, flexible spending accounts, paid vacation, and tuition reimbursement. In 2009, there were 28 new research/development hires. The company lists job postings on various websites, while specific positions are usually sought by professional recruiters.

**6) Integrated DNA Technologies** (Coralville, IA): IDT is a small company made up of 43 research/development employees. It is the leading supplier of custom oligonucleotides with over 77,000 customers worldwide. Significant developments made by IDT include expanding its Prime-Time qPCR Assay product line, developing and unveiling its synthetic gene ordering tool, and increasing sales in Europe by 50%. The company offers its employees a benefit package including health/dental/vision/life insurance, disability, and medical and dependent care flexible spending. In 2009, there were 2 new research/development hires. There are currently 19 job openings.

**7) Abbott Laboratories** (Abbott Park, IL): Abbott Laboratories is a large company with over 9,000 employees. The focus of this global healthcare company is on discovering new medicines and new technologies for the better management of

health. Their products include nutritional products, medical devices, pharmaceutical therapies, and laboratory diagnostics. Abbott is ranked as one of the top companies in the world for excellence in the workplace according to *Barron's*, *Business Week*, *Dow Jones Sustainability Index*, *Forbes*, *Fortune*, and *Fortune 500*. The company offers its employees a benefits package including employee and retiree medical coverage, health and wellness programs, commuter benefits, and childcare. In 2009, there were 500 new research/development hires. There is currently 1 featured research position listed on Abbott's website.

**8) GeneDx** (Gaithersburg, MD): GeneDx is a small company made up of 16 research/development employees. It is a wholly owned subsidiary of BioReference Laboratories, which is the third largest publicly traded clinical laboratory in the United States. The company focuses on genetic testing for rare hereditary disorders, with its primary goal of making clinical testing available to patients with rare genetic conditions and to their families. The majority of their tests include full gene analysis by DNA sequencing. They have successfully developed comprehensive genetic tests for identifying the cause of severe cardiac disorders. GeneDx offers its employees benefits including medical insurance, retirement, as well as professional development and growth opportunities. In 2009, there were 10 new research/development hires. There are currently 5 job openings.

**9) Alnylam Pharmaceuticals** (Cambridge, MA): Alnylam is a small company containing 147 research/development employees. The focus of the company is on developing therapeutics with RNA interference (RNAi) technology. Two prominent studies by Alnylam scientists, both published in *Nature*, demonstrated the ability to deliver RNAi therapeutics in mice and non-human primates, achieving a desired therapeutic effect. In addition, the company showed for the first time that RNAi works in humans in a randomized, double-blind, placebo-controlled human clinical trial. Benefits for employees include medical/dental/life insurance, disability, paid vacation/

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(Source: IDT)

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sick leave, tuition reimbursement, transportation program, and discounted gym membership. In 2009, there were 21 new research/development hires. There are currently 3 job openings.

**10) Dynport Vaccine Company** (Frederick, MD): DVC is a small company made up of 65 research/development employees. It primarily manages product development programs for U.S. government agencies, and serves as a consult to biotechnology and pharmaceutical companies. The company focuses on vaccines and therapies to protect against emerging infectious diseases, including both biological and chemical warfare agents, as well as seasonal and pandemic influ-

enza. Benefits offered to employees include health/dental/vision/life insurance, disability, flexible spending accounts, paid vacation/sick leave, and employee discounts. In 2009, there were 15 new research/development hires. There are currently 5 job openings.

To view the other companies and categories listed in the 2010 survey, check out the website <http://www.the-scientist.com/bptw/industry/> for more information.

Submitted by:  
Miranda Hanson, PhD  
Laboratory of Molecular Immunoregulation

## CCR Fellows Make Strong Showing at Spring Research Festival

Researchers and the public alike were invited to the 14<sup>th</sup> annual Spring Research Festival on May 5<sup>th</sup> and 6<sup>th</sup>, 2010. Presented jointly by NCI-Frederick and the National Interagency Confederation for Biological Research, the festival is designed to inform the public and students about the research being conducted at Fort Detrick. Attractions included poster and oral presentations from fellows, students and staff, as well as booths from biomedical product vendors and informational exhibits about health, safety and various research and professional development resources.

Several CCR fellows were recognized at the festival for producing high-quality research and effective presentations. Post-doctoral fellows Rasmi Thomas, Stephanie Watkins and Suhwan Chang and student researcher Jessica Van Schaick received travel awards for delivering the best oral presentations at Postdoc/Postbac Symposium on May 3<sup>rd</sup>. Dr. Thomas's presentation was entitled, "Effect of HLA-C Expression Levels on HIV Pathogenesis." Dr. Watkins discussed how "Foxo3a Programs Tumor-Associated Dendritic Cells to Become Tolerogenic in Human and Murine Prostate Cancer", and Dr. Chang spoke about "Epigenetic control of miR-155 by tumor suppres-

sor BRCA1 and its impact on tumorigenesis." Van Schaick presented her work entitled "Identifying Modifier Genes of MPNSTs in the Nf1;p53cis Mouse Model of Neurofibromatosis Type 1."

Twenty-seven CCR researchers also won awards for outstanding posters at the Festival, including Jim Sawitzke, Sujatha Gowda, Kajal Biswas, Kuppusamy Balamurugan, Suhwan Chang, Ravindra Chalamalasetty, Rieko Ajima, Matthew Anderson, Ziqiang Zhu, Anil Shanker, Jacob Minang, Cristina Bergamaschi, Brunda Ganneru, Qun Jiang, Jun Wang, Neeraj Sharma, Taejin Kim, Medhanit Bahta, Amichai Yavlovich, Christopher Campbell, Ashish Singh, Raymond Briñas, Jessica Van Schaick, Bjorg Gudmundsdottir, Stephen Lavanier, Joanna Yeh and Brandon Smith. Presentation of awards for poster winners will be forthcoming.

Congratulations to all fellows who received awards in recognition of their commitment to research excellence!

Submitted by:  
Allison Bierly, PhD  
Laboratory of Experimental Immunology



Image taken from <http://web.ncifcrf.gov/events/springfest/2010/highlight.aspx>

## Publication Spotlight

In this issue of the FYI Newsletter, we feature a **Science Signaling** research article {Sci. Signal. 3, ra48 (2010); PMID: 20571128} published on June 25, 2010 by **Dr. Øyvind Dahle**, a CCR Research Fellow in the Laboratory of Protein Dynamics and Signaling, under the guidance of Dr. Michael Kuehn. The article focuses on understanding the fundamental question of how stable epigenetic effects on gene expression can last across generations, with a focus on the removal of the H3 K27 trimethyl epigenetic mark by Jmjd3, a histone demethylating enzyme.

Epigenetics (the study of stable heritable changes in phenotypes or gene expression caused by non-genetic factors and mechanisms other than in the DNA sequence) is a widely studied branch of science that can help us elucidate the intricate mechanisms of spatial and temporal gene regulation across generations. One of the major epigenetic regulation mechanisms involves the modification of chromatin structure caused by chemical changes in histone tails (structural proteins bound to DNA) that affect the recruitment of co-regulators as well as transcription factors. Methylation of histone tails is one such modification that can result in either transcriptional activation or repression depending on the residue that gets methylated. Moreover, recently, enzymes called histone demethylases have recently been identified that can reverse this modification, adding another layer of complexity to the epigenetic regula-

tion of genes. It is an intriguing quest to determine how a balance between histone methylation and demethylation maintains these epigenetic marks that are altered based on specific cues. The featured study adds a complex mechanism of interaction between a repressor (Polycomb), a signaling pathway (Nodal-Smads2/3) and the epigenetic processes (demethylation by Jmjd3) in the regulation of target gene expression.

In particular, Dr. Dahle's work demonstrates that the Nodal-Smads2/3 developmental signaling pathway controls recruitment of H3 K27 trimethyl (H3K27me3) demethylase Jmjd3 to specific target genes, which in turn results in the removal of H3K27me3 deposited by the epigenetic repressor Polycomb and the subsequent activation of gene expression. The article provides further evidence that in the absence of Polycomb, Nodal-Smads2/3 targets are expressed independent of signaling, demonstrating the importance of epigenetic control. This novel finding provides a mechanism for how histone methylation can stably maintain gene expression, yet remain responsive to a specific extra-cellular signal.

*Submitted by:  
Chhavi Chauhan, PhD  
Mouse Cancer Genetics Program*

### 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 **Brid Ryan** ([ryanb@mail.nih.gov](mailto:ryanb@mail.nih.gov)) or **Christy Tomlinson** ([tomlinsoncc@mail.nih.gov](mailto:tomlinsoncc@mail.nih.gov)). Available slots will be filled on a first come – first served basis.

## Upcoming Events

- 11<sup>th</sup> Annual Fellows and Young Investigators Colloquium (Dates: TBA)  
Stay tuned for announcements
- International Opportunities Expo—September 17<sup>th</sup>, 2010, Bldg. 45 Natcher Conference Center  
For more information: <http://felcom.od.nih.gov/subcommittee/vfc/index.aspx>
- National Postdoc Appreciation Week—September 20<sup>th</sup>-24<sup>th</sup>, 2010  
Postdoc Appreciation Day—September 24, 2010
- NIH Research Festival: October 5<sup>th</sup>-8<sup>th</sup>, 2010,  
For more information website:<http://researchfestival.nih.gov/>
- NCI-Frederick Postdoc Seminar Series  
Starts up again in September, watch email for announcements on time and location

### Interested in joining the FYI Steering Committee?

Check it out by attending one of our monthly video-conference meetings on the last Thursday of each month

**Where:**            **Bethesda: Bldg 40, Rm 1201/1203**  
                         **Frederick: Bldg 549, Conference Room A**

**Time:**            **11:00 AM– 12PM**

### Are you **LinkedIn** with the CCR FYI?

Check it out at <http://www.linkedin.com/groups?qid=2495548>

If you are not on LinkedIn, you will have to create an account, which takes no more than five minutes

The Fellows and Young Investigators (FYI) Association was organized by non-tenured and non-tenure-track MDs, PhDs, or the equivalent, and pre-doctoral intramural scientists. It enhances the intramural training program, fosters communication among fellows and the CCR community, and serves as a liaison to administration programs that affect the training experience by:

- Organizing and promoting educational activities such as training courses and seminars
- Identifying potential employment opportunities in traditional and nontraditional career paths
- Helping orient new trainees
- Facilitating communication among members

**The purpose of this group is to professionally link current and previous NCI fellows.**