

# The NICHD Connection

*December 2012*

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## Former Fellow Follow-up with Dr. Emily King

The *NICHD Connection* is excited to reconnect with Dr. Emily King, former NICHD postdoctoral fellow (and one of the founders of this newsletter). Emily worked in the lab of Dr. Robert Bonner, head of the Section of Medical Biophysics in the Laboratory of Integrative and Medical Biophysics, from September 2009 to February 2011. Read below to learn about her recent experiences on a fellowship in Germany!



*Dr. Emily King*

***Please describe your recent opportunity abroad. What does the opportunity entail?***

The Alexander von Humboldt Foundation offers postdoctoral fellowships for foreign researchers in any field to do research for up to 2 years with up to two different research groups in Germany. Fellows (and their spouses) are also given the opportunity to take 4 months of intensive German classes for free before the postdoc position starts.

***How did you find this particular fellowship?***

The German professor with whom I am currently working suggested that I apply for the fellowship. Furthermore, a biochemist in the office next to mine in Building 9 had been a Humboldt Fellow before he came to NIH and had a fantastic experience.

***Please describe the application process. Did it take a long time?***

The required application materials include a research statement focusing specifically on the research to be done in Germany, letters of recommendation, letters from the head(s) of the research group(s) that you plan to work with, copies of your dissertation, copies of three of your published papers, a publication list, and an abbreviated CV. Your application materials are first vetted with people in your research field before being forwarded to the selection committee. The selection committee only meets three times a year. There is a timeline which explains the process on the

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## Letter from the Editor

A career in research involves a lot of preparation. We prepare proposals, experiments, manuscripts, powerpoints, and posters for meetings, just to name a few of the daily tasks of a scientist. But what about long-term preparation? What can we do to prepare for those next steps in our scientific careers?

**In the “Interesting Opportunity” column,** Carla Lopez steps the reader through a unique shadowing experience in the weekly Genetics Clinic. In her description, Carla touches on a notable point: these opportunities help young trainees prepare to navigate the complexities of patient-doctor interactions.

Across the Atlantic Ocean, **former NICHD fellow Dr. Emily King** discusses how a fellowship abroad prepared her to network with research teams around the world while expanding her research focus. She now plans to apply for tenure-track positions back in the

United States with her newfound skill set.

Dr. Yvette Pittman rounds out this issue with a **detailed recap of Scott Morgan’s workshop on interview preparation.** A few simple guidelines will help prospective applicants make a good impression on target employers.

As proof that all of your preparations—both short and long-term—pay off, check out the healthy list of NICHD fellow accomplishments on **page 8 in our “Year in Review.”** And as always, don’t forget to note the December **announcements** and **events!**

Until next year!

Your Editor in Chief,  
Shana R. Spindler

Questions, comments, announcements? Please contact us at **Shana.Spindler@gmail.com.**

## Former Fellow Follow-up with Dr. Emily King (continued from page 1)

Humboldt website <http://www.humboldt-foundation.de/web/selection-procedure.html>.

The process could take up to 10.5 months. I applied in July 2010 to guarantee making the Oct/Nov 2010 selection committee meeting in order to be able to move to Germany in March 2011. You choose your starting date. I chose March 2011 because that allowed me enough time to do the four months of language courses followed by a two-year postdoc and return in time to start a position at a U.S. university Fall 2013.

### *What's your typical day like?*

I read papers, do mathematics, program in Matlab, and handle a number of issues peripheral to my research. For example, I am also a postdoctoral faculty member at the Berlin Mathematical School and am involved in planning a seminar series with BMS explaining exciting research topics in mathematics at a beginning graduate student level.

### *Did you do anything in particular at the NICHD to make you more competitive for this opportunity?*

Certainly! Most of the work in my dissertation was theoretical mathematics. Biomathematics is a very hot field right now, and my work at NICHD made my application more competitive. Working directly with bioscientists in varied fields was invaluable to me. Also, I learned the different perspectives and challenges that come with lab science. Specifically, biomedical image processing has many unique issues that traditional image processing does not have. For example, if you take a picture

of the interior of a room, your eyes and intuition are very good tools for picking up any errors in the digital image. However, you can't exactly vivisect a patient's eye to explain exactly what the black area in the scan of his retina is.

### *What has been the most exciting aspect of going overseas?*

I love learning a new language and experiencing a different culture. You learn so much more about your own culture when you move abroad, too.

### *What are some of the future career options for someone who completes this fellowship?*

I don't know the exact numbers, but I believe that the majority go into the medical field or become tenured professors after being a Humboldt Fellow.

### *What are your future career plans?*

I am currently applying for tenure-track positions in mathematics departments at research-oriented universities in the U.S.

### *Do you have any advice for fellows who are thinking about pursuing similar opportunities?*

Do it! There are more and more opportunities for Americans to do postdocs or graduate school (in English) overseas. Beyond being a fantastic personal opportunity to experience another country as a resident, they provide opportunities to network with more people around the world and to do research with a different focus.

If you have additional questions for Emily, please feel free to contact her at [eking@math.tu-berlin.de](mailto:eking@math.tu-berlin.de).

## Interesting Opportunity: Genetics Clinic for Postbacs

By *Carla M. Lopez*

For postbacs with their sights set on medical school, the NICHD offers a unique clinical shadowing experience right here on the NIH campus. Once a week, up to three postbacs are invited to attend the “Pediatric Genetics Clinic” on the INW ward of the Clinical Center, where they have the opportunity to shadow closely the medical team (Dr. Margarita Raygada, Dr. Owen Rennert, and Dr. Constantine Stratakis, all experts in clinical genomics). Each clinic session lasts an average of two to four hours, depending on the number of cases, and is packed with valuable opportunities for postbacs to observe, listen in, and ask questions.

The weekly sessions begin with a genetics team group meeting to review the clinical documentation for each case. The team discusses—in depth—previous lab results, past clinical findings, and the medical/family history of each patient. Once the patient arrives, the medical team meets with the family to obtain a comprehensive patient history and to perform a physical exam. Following the exam, the entire team reconvenes to discuss findings and to

develop a tailored treatment or diagnostic plan. One last meeting with the family is held to discuss the team’s conclusions and to address any remaining questions or concerns. Postbacs are allowed to observe at every stage in the process, with an average of two to four patients each week, and are more than welcome to ask questions during team meetings.

In addition to giving postbacs the chance to explore the etiology of disease from the lab to the clinic, this unique shadowing opportunity holds equally important lessons in patient-doctor interaction and the meaning of compassionate care. Under the personal guidance of our medical role models, postbacs can count on learning about both the cutting-edge as well as the interpersonal side of medicine.

NICHD postbacs interested in signing up for the Pediatric Genetics Clinic can contact their postbac reps, Rocky Ferrandino ([rocco.ferrandino@nih.gov](mailto:rocco.ferrandino@nih.gov)) and Carla M. Lopez ([carla.lopez@nih.gov](mailto:carla.lopez@nih.gov)).

## Useful Advice for Interview Prep

By Yvette R. Pittman, PhD

As fellows, we are constantly thinking of our next career move, and more specifically, what we need to accomplish to achieve that goal. According to public speaking coach and author Scott Morgan, a good CV or resume only gets us to the door of opportunities, but good interviews will open the door to the position we are seeking. Knowing that interviews are equally or more important than the application itself, why don't we spend more time preparing for them?

Mr. Morgan suggests that interviewers tend to ask questions related to one of ten categories, with the sole purpose of wanting to know more about you. They want you to share the things about you that aren't on your CV—the white space—and how your life experiences have shaped your motivations to pursue a career in science. As a good preparation tool, assign a “trigger word” to produce mental imagery for each of the ten common questions. This imagery will help you give descriptions of your life experiences rather than scripted answers.

The first two types of questions focus on your personal and academic background. Personal background questions are related to your life from early childhood to high school, while questions on academics target your undergraduate experiences up to the present. For example, someone may ask, “Can you tell me a little about yourself?” or

“Do I detect an accent?” An effective way to answer these questions is to describe a childhood or college snapshot that displays your strong attributes but avoids simply sharing events in a chronological order.

Questions pertaining to early scientific or specific field motivation give opportunities to share when your passion for science developed. Talking to someone about the motivation behind your career choice will express genuine enthusiasm, and that is priceless during an interview.

When it comes to strong and weak points, it is important to avoid adjectives and talking in the third person. Share a short story where you describe your strengths. This will give the interviewer an opportunity to judge your character, instead of you just telling them you are hard-working and a team player. When it comes to speaking about your weaknesses, it is crucial that you don't list them. Give examples of how you came up with a solution to improve or overcome hardship. Employers are not



### THE TEN MOST COMMON INTERVIEW QUESTIONS ASK ABOUT YOUR:

1. Personal background
2. Academic background
3. Early scientific motivation
4. Specific field motivation
5. Strong points
6. Weak points
7. 5-year plan
8. Why you?
9. Hypothetical questions
10. Current work

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## Useful Advice for Interview Prep (continued from page 5)

looking for perfect employees, but people who continuously strive to become better.

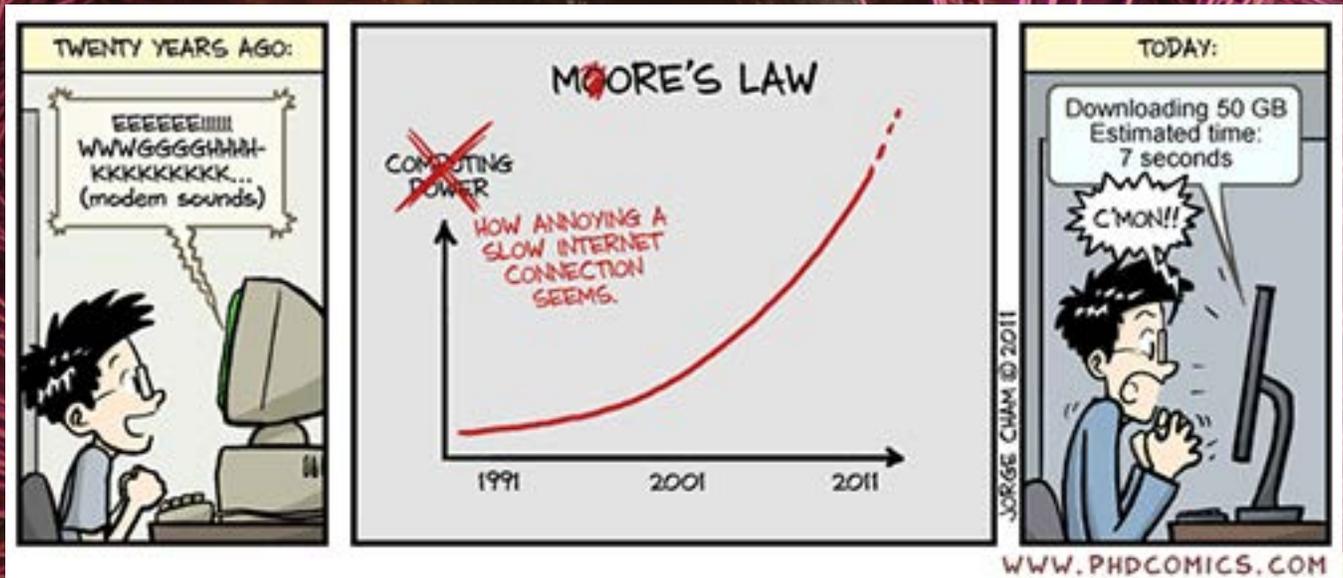
For the questions related to a 5-year plan and why you?, interviewers want to identify your passion and determine if you have vision. Speak in the present tense and evoke a mental image of you making a meaningful contribution to their organization at the same time as projecting your own excitement.

When asked hypothetical questions, remember that they are not interested in a final answer—"yes" or "no." Interviewers want to get a sense of your decision-making process, and how you handle challenging and complex situations. There is usually

more than one appropriate approach to answer these questions. The key is to be yourself.

As scientists, being in an interview will probably include a presentation to describe your current work, during which they will hardly ever ask about the details of your data, whether it is published or not. But it is important to share clearly where you see your research going, the rationale behind it, and the common ground between your current work and the audience.

Preparation is the key to success, and Scott Morgan's tips should help you prepare succinct and well-executed answers to each of the questions in an interview.



<http://www.phdcomics.com/comics/archive.php?comid=1456>

## Safety at NICHD: Reminders from the Safety and Health Committee

By Niamh Cawley, PhD

The NICHD Division of Intramural Research has an active Safety and Health Committee composed of basic science researchers, administrative staff, and safety specialists located across the NIH campus. For details about the committee and its members please see the NICHD safety website: <https://science.nichd.nih.gov/confluence/display/shc/Home>.

Every year the committee performs an annual safety walkthrough of NICHD workspaces to evaluate the safety environment and practices, especially in the laboratories. The committee has observed several dangerous practices, which are listed here. Remember, you are responsible for your safety in the lab, so know the hazards and follow the safety rules. Please contact the committee at [cawleyn@mail.nih.gov](mailto:cawleyn@mail.nih.gov) for further information.



### PLEASE, BE CAREFUL!

Wearing sandals or flip-flops in the lab is not only a bad idea but also a safety violation.

### Exposed skin in the lab can lead to burns



## DANGEROUS PRACTICES AND EASY FIXES

Non-functional, blocked, or not flushed eyewash stations

Every lab should have a functional and accessible eyewash station that supplies clean water

Lab occupants not properly attired

Wearing lab coats and gloves in the lab prevents burns and cuts

Razor blades on benches/shelves

Results in accidental cuts on fingers

Chemical fume hood cluttered

Results in improper air flow and possible back flow of fumes/gases

No inline filters for house vacuum

Results in liquid in the vacuum lines and overheating of the compressors leading to fire

## NICHD DIR Year in Review

Join the *The NICHD Connection* as we reminisce about NICHD Division of Intramural Research (DIR) 2012 highlights:

- » NICHD celebrates its 50th anniversary!
- » On 1 January 2012, the NICHD Fellows Intramural Grants Supplement (FIGS) took effect, providing stipend increases for fellows who apply for a competitive award of \$30,000 or more and an additional stipend increase for those who receive the award.
- » Former NICHD IC Basic Science Representative **Dr. Kevin Francis** and Associate Director of the University of Maryland Honors College ILS program **Dr. Byrn “Boots” Quimby** initiated an exceptionally successful collaborative teaching workshop for NICHD Fellows.
- » Fifteen NICHD fellows received the Fellows Award for Research Excellence (FARE) during this year’s FARE annual travel award competition.
- » NICHD graduate students **Madhav Sukumaran** and **Mark Ziats** received the 2012 NIH Graduate Student Research Award (NGSRA) at the 8th Graduate Student Research Symposium on January 11, 2012.
- » The NICHD Fellows’ Retreat Steering Committee organized an impressive daylong event—with engaging keynote speakers, relevant panel discussions, and intriguing scientific perspectives from NICHD investigators and fellows—for the 8th Annual NICHD Fellows’ Retreat, held at the beautiful Smithsonian National Zoological Park.
- » **Dr. Prabuddha Sengupta** of the Lippincott-Schwartz lab received the 2012 Mentor of the Year Fellow Award.
- » **Dr. Karl Pfeifer** of the Program in Genomics of Differentiation won the 2012 Mentor of the Year Investigator Award upon nomination by postdoctoral fellow **Megan Sampley** and postbac fellow **Mathew Van Winkle**.
- » NICHD postbacs **Chinedu Anyaeji, Cecilia Bahamon, Justin Chen, Rania Dagalakis, Stephen Hung,** and **Carla Lopez** were among the top 20 percent in the NIH-wide postbac poster judging at the 2012 NIH Spring Research Festival. NICHD’s three annual “best postbac poster” awards were given on April 25, 2012 to: **Megan Cermak, Justin Chen,** and **Carla Lopez**.
- » The NICHD Scholars Developing Talent Program provided a unique learning experience for young trainees for its second year running.



## December Announcements

### DON'T FORGET! NICHD 50TH ANNIVERSARY SCIENTIFIC COLLOQUIUM IS DECEMBER 5TH

Step away from lab for only a day to gain long-lasting insight and inspiration at "Research for a Lifetime," the full-day Scientific Colloquium in honor of the NICHD's 50th anniversary. Join NICHD investigators, fellows, and staff in the NIH Clinical Center Masur auditorium for stimulating talks by preeminent scientists and physicians.

With remarks by:

- » Francis Collins, Director, NIH;
- » Alan Guttmacher, Director, NICHD;
- » Duane Alexander, Former Director, NICHD;
- » John Gallin, Director, NIH Clinical Center;
- » Freeman Hrabowski, III, President, University of Maryland, Baltimore County;
- » Timothy Shriver, Chairman and CEO, Special

Olympics;

- » Rosemarie Truglio, Senior Vice President for Education and Research, Sesame Workshop.
- » And featuring 15 other select speakers

Visit <http://nichd.nih.gov/about/meetings/2012/120512-50th.cfm> for the agenda and more details, including RSVP information. Registration is not required, but is recommended.

This event is free and open to the public. The colloquium will not be videocast live, but will be available at <http://videocast.nih.gov> later in December.

Questions? Contact NICHD staff at [NICHDanniversary@mail.nih.gov](mailto:NICHDanniversary@mail.nih.gov) or 301.402.2205 for more information.

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## December Announcements

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### MSAR AVAILABLE TO NICHD POSTBACS

The NICHD-Office of Education has a subscription for MSAR® (Medical School Admission Requirements), which is a suite of up-to-date guides produced by the AAMC (Association of American Medical Colleges) in collaboration with medical schools. As a postbac trainee of our institute, it is available to you!

The **MSAR® Online** has many features, including:

- » Information on newly accredited medical schools
- » Application procedures and deadlines
- » Selection factors such as MCAT & GPA data
- » Medical school class profiles
- » Selection factors and Interview formats
- » Costs and financial aid packages
- » Data on applicant volunteer and research experiences
- » Research Opportunities
- » MD/PhD and other combined degrees

### MSAR®: Getting Started

MSAR: Getting Started is a guidebook designed to help you prepare for and apply to medical school. It also provides details about the MCAT® exam and AMCAS application, how to choose the right school, how to apply, how admissions decisions are made, information about diversity in medical schools, financing, applicant and acceptance data, and more.

For more information about MSAR products, see [www.aamc.org/msar](http://www.aamc.org/msar)

Please send Yvette Pittman ([pittmanyv@mail.nih.gov](mailto:pittmanyv@mail.nih.gov)) an email to schedule an appointment for gaining access to MSAR® in the Office of Education (Bldg. 31, Room 1B44)

## December Announcements

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### “KEEP THE THREAD” PROGRAM OPEN TO ALL IRTA POSTDOCTORAL FELLOWS

The Committee on the NIH Intramural Research Program of the NIH Working Group on Women in Biomedical Careers has launched a new, three-year pilot program to increase flexibility for NIH intramural fellows who need alternative career development schedules. This “Keep the Thread” program is an accommodation and reentry program open to all IRTA postdoctoral fellows, with the approval of their principal investigator and Scientific Director.

Emphasizing flexibility, the program offers an array of options ranging from alternative work schedules to temporary part-time work options. The goal of the Keep the Thread program is to encourage trainees to stay connected to the NIH community during times of intense personal or caregiving needs in order to facilitate eventual reentry into full-time research. The program encourages fellows and their PIs to work together to design an accommodation and reentry plan that meets the needs of both the fellow and the laboratory.

A detailed description of the program is posted in the NIH Sourcebook at [http://sourcebook.od.nih.gov/prof-desig/Keep\\_the\\_Thread\\_2012.docx](http://sourcebook.od.nih.gov/prof-desig/Keep_the_Thread_2012.docx).

## December Events

### WEDNESDAY, DECEMBER 5, 8:30 AM – 4:30 PM

“Research for a Lifetime”

A Scientific Colloquium to Commemorate the NICHD’s 50th Anniversary

Masur Auditorium, NIH Clinical Center

Reception to follow in the Clinical Center atrium

### THURSDAY, DECEMBER 20, 3 PM

NIH Science Education Conversation Series

Attending to Students’ Thinking in Science: Becoming a Responsive Teacher

Daniel M. Levin, Visiting Assistant Professor, College of Education, University of Maryland

Building 50, Room 1328/1334