

# The NICHD Connection

**September 2012**

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## Letter from the Editor

Dear NICHD Fellows,

Over the past six months, I have been on a wild ride. I have experienced moments of joy followed by days of uncertainty and fear. I have been fighting something that many of you are actively working to understand. Cancer.

On February 21, 2012, I was diagnosed with Primary Mediastinal B-Cell Lymphoma (PMBL), a subtype of non-Hodgkin lymphoma. I won't go into detail about this cancer here because I know many of you have already opened another Internet window and started your Google search. My purpose in writing this letter is to affirm that your contributions as doctors and scientists are making a real difference in saving lives, whether you see it in your day-to-day experiments or not. I know this because researchers at the NIH have developed a treatment that is saving *my* life.

After spending a year at the NICHD as a postdoctoral fellow and another year as the editor for this newsletter, I find myself back at the NIH. Only this time I'm a patient on a clinical trial. I have done the research; I have supported the research; now I am the research. I'm one of the numbers in  $n=49$ .

### THE HISTORY IN MY VEINS

I am here today because years before I was born, a set of experiments happened in the right place at the right time. But more importantly, those experiments were communicated to the right people.

In the early 1980s, research into B-cell development was revealing critical information about the workings of the immune system. Doctors and scientists were rapidly identifying B-cell specific surface molecules. At the same time, other researchers were gaining ground on creating the first genetically engineered monoclonal antibodies, combining antibody fragments from both mice and humans. The simultaneous success of the two research initiatives spawned the idea to create genetically engineered antibodies that could target proteins on human B-cells. In 1997, the resulting product, Rituximab, became the first FDA-approved chimeric antibody used to treat a human disease: B-cell

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## Letter from the Editor (continued from page 1)

non-Hodgkin lymphoma.

On the other side of the country, NIH researchers were testing a new concoction of chemotherapy. My doctors found that cultured cancer cells have decreased drug resistance when exposed to low doses of specific agents (known collectively as EPOCH) for long periods of time. Based in part on this evidence, the team developed a continuous infusion-based chemotherapy. My doctors took information from basic laboratory experiments and applied those same concepts to a novel treatment protocol, which has shown close to a 100% cure rate when combined with Rituximab.

I received my first doses of Rituximab and EPOCH on March 2, 2012. Just like the cultured cancer cells, my body was bathed in a continuous infusion of drugs. I can't help but feel like I've had history pumped into my veins, a history of which each of you has helped to create. Whether you use human cancer cells or *C. elegans*, the knowledge we gain as a society from your ideas and efforts will continue to fuel the most important thing for a patient: hope.

### MOTIVATION, SUPPORT, AND CREATIVITY

As scary as the situation is, I'm comforted by the fact that I'm being treated by some of the brightest minds in the world. If I had been born only a few decades earlier, my prognosis would be very different. I shudder at the thought. But thankfully we live in a time when accumulated knowledge from around the world is at our fingertips. The most imaginative ideas are being tested. Technology is expanding the boundaries of creativity. Your work possesses the real potential to affect the health and well being of your family, your peers, and our future generations.

On behalf of all patients whose lives have been touched by your dedication to science and your brilliant ideas, thank you. I will do everything in my power to provide motivation, support, and creative inspiration through this newsletter. The work that is done within these NIH walls is saving my life in a very acute and obvious way, and for that, I will be forever grateful.

Your Editor in Chief,  
Shana R. Spindler, PhD

## Former Fellow Follow-up with Kristofor Langlais, PhD

This month *The NICHD Connection* chats with Dr. Kristofor Langlais, a health science policy analyst at the NIH. Before his transition into policy, Dr. Langlais completed three years of postdoctoral work in the Kassis lab, Program on the Genomics of Differentiation. There he studied the epigenetic control of development genes by Polycomb and Trithorax group.

Dr. Langlais generously offers his experience with science policy and a bit of advice for interested fellows:

### ***What is your current position, and what does it entail?***

I am a Health Science Policy Analyst in the Office of the Director, Office of Science Policy, Office of Clinical Research and Bioethics Policy. This is a Federal position. I work mostly in the Genetics, Health, and Society Program, assisting in the development and implementation of NIH's Genomic Data Sharing Policy. This policy provides a framework for the sharing of sensitive human genomic data to the scientific community while protecting research participant privacy and ensuring responsible use of the data in line with the participants' informed consent.

My job involves a wide variety of activities, such providing scientific input on policy development and interpretation, staffing key policy governance committees, drafting internal and public communications, analyzing trends regarding data access and use, and developing solutions to improve the various

management and administrative challenges of a data sharing program that involves a large number of stakeholders and participants from across the NIH. In addition, the



rapid advances occurring in genomic science, sequencing technologies, and bioinformatics mean that we need to stay current on the science and trends and be ready to make modifications to the policy or to our procedures as needed to ensure broad and timely data sharing while striking a balance with research participant protections.

### ***When and where did you learn about this career field?***

I learned about it from reading the policy forum in *Science* and from attending the 2008 AAAS Annual Meeting. At the meeting, I attended many science policy-related talks and spoke to attendees working in policy.

### ***How did you find this particular job?***

I discovered this job through a colleague who I met in the NIH Science Policy Discussion Club. He began a job in the NIH Office of Science Policy after his NIH Management Fellowship. I now share an office with him.

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## Former Fellow Follow-up with Kristofor Langlais, PhD (continued from page 3)

*Please describe the application/hiring process.*

*Did it take a long time?*

The application and hiring process was a bit shorter than I expected for a federal job. Within two weeks of the application deadline, my application made it through the initial HR process and I “made the cert,” meaning my materials would be passed on to the Office of Science Policy for consideration. I went through two days of interviews, and not long after I received an informal offer. I believe I actually started work six weeks after I accepted the offer.

*What’s your typical day like?*

My typical day involves a lot of work on the computer, formal meetings, and informal meetings with colleagues to brainstorm and discuss issues. I am part of a pretty tight team of six people, and while one of us will lead a given project, we are all significantly involved with each other’s work. So to boil it down, my day consists of writing and other computer work, and talking to people. Since the governance of the policy involves people from across NIH, I get to talk to and work with a lot of great people beyond my team.

*Did you do anything in particular at the NICHD to prepare you for your career transition?*

Yes, I did quite a lot. I got involved with things outside the lab that interested me.

I was on Felcom, helped organize the NIH Career Symposia and NICHD Fellow Retreats, started the Science Policy Discussion Group, worked with the National Postdoc Association, wrote for The NIH Catalyst, and—by far most significantly—I arranged a full-time three-month detail in the HHS Office of Global Affairs to gain experience in health policy, build skills, and get experience that I hadn’t been able to get anywhere before. This experience was absolutely crucial to my being able to apply and get my current job. It also helped me figure out if I really wanted to work in an office environment. I also arranged several informational interviews with the directors of various policy offices around NIH, prior to my detail.

*What are some of the future career options for someone in your position?*

I think the experience I am getting in this office will allow me to go in a number of directions. I can probably move to research administration leadership at a university or stay in government and move up to a position of leadership anywhere within HHS or even in another department. Experience in science, policy, and government is pretty valuable to many employers, so there are probably many options, but I haven’t thought too hard about them yet.

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## Former Fellow Follow-up with Kristofor Langlais, PhD

*(continued from page 4)*

### *Do you have any advice for fellows who are thinking about entering this career field?*

Yes, you should first speak with many people who are at various career stages in policy. Set up informational interviews, meet people at the science policy happy hours, find other NIH fellows interested in policy, go to policy-related talks, etc. Read the science policy sections in *Science*, *Nature*, and other journals. If you are still interested, you will then want to gain some relevant experience to allow you to make the jump. You should apply to the known policy fellowships, but you need not rely on these if you can arrange for a good detail and fill in other gaps by getting involved with activities outside the lab. I would be very happy to provide more information about this if you contact me. Also, be on the lookout for an article on doing details in an upcoming issue of *The NIH Catalyst* (early 2013).

## OITE Resources Made Just for You

The NIH Office of Intramural Training and Education (OITE) provides excellent resources for fellows at all levels of training. If you haven't already, check out the following:

### THE OITE LINKEDIN GROUP

The OITE hosts a LinkedIn group by the name of "[NIH Intramural Science](#)." According to the OITE, they post 3-5 jobs per day spanning all sectors of science, including academic, government, industry, and non-profit. If you're in the job market, this is a must-join list!

Don't have a LinkedIn account? You can also find the job information at [https://www.training.nih.gov/career\\_services/jobs](https://www.training.nih.gov/career_services/jobs), but by joining LinkedIn and becoming a member of the NIH Intramural Science group, they will send job information straight to your email!

### THE OITE BLOG

If you like *The NICHD Connection's* Former Fellow Follow-ups, check out the OITE blog, where they have profiled 20 former NIH fellows and offered insightful advice on anything from work-life balance to networking and grant writing. To learn more, visit the blog at <http://oitecareersblog.wordpress.com> or have a look at *The NICHD Connection's* [OITE Blog review](#).

### THE COMPILED FOR POSTDOCS

The OITE posts a summarized list of resources and interesting opportunities on their "The Compiled-Postdocs" page, which can be found at <https://www.training.nih.gov/compiledpostdocs>.

### OITE IS ON TWITTER

To read notable facts about careers in science, follow OITE on Twitter at [@NIH\\_OITE](#). They even live Tweet important pieces of advice that event speakers are giving!

### AND MORE

For more information about the OITE and to access their vast pool of resources, visit their homepage at <https://www.training.nih.gov/home>.

### OTHER LINKEDIN GROUPS OF INTEREST

- » [Fellows at the NIH](#)
- » [National Postdoctoral Association \(NPA\)](#)
- » [Science Careers](#)

## The Academic Job Search: Traversing the Minefield

By Dr. Kevin Francis

While the NIH Intramural Program provides fellows exposure to a number of different career paths, obtaining a tenure-track academic appointment continues to be the ultimate goal for many Visiting and IRTA postdoctoral fellows. Recently, fellows within the Program on Genomics of Differentiation hosted a seminar and informal job search discussion with newly appointed NICHD Investigator Dr. Todd Macfarlan. Dr. Macfarlan received his Ph.D. from the University of Pennsylvania, performed his postdoctoral training under HHMI Investigator Dr. Samuel Pfaff at the Salk Institute, and began his appointment within the NICHD Intramural Program in July as an Earl Stadtman Investigator.

Over the course of an hour, Dr. Macfarlan shared his personal job search experiences by breaking the process down into two steps: getting an interview and getting the job. Some common themes in getting an interview arose, including:

- » Start your job search early, particularly if you are limited by geography (Dr. Macfarlan began his job search two years prior to obtaining his appointment).
- » Do your utmost to publish in high impact journals, a must for the most competitive positions (sacrifice quantity for quality).
- » Fully utilize your network to find open positions and obtain interviews—raise your profile through

presentations and ask your PI to make calls on your behalf.

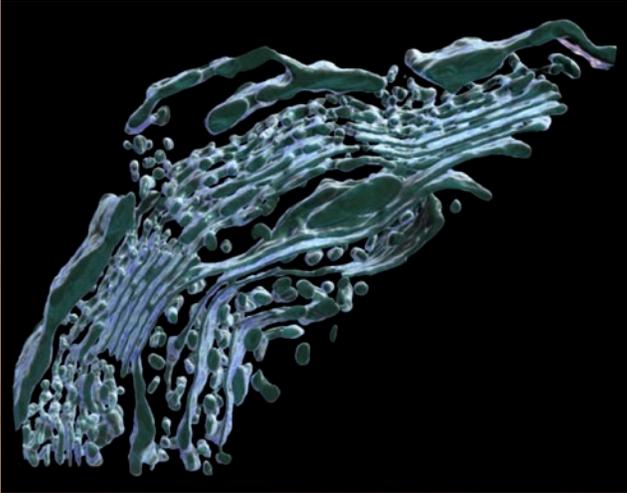
Once you've obtained an interview, you will likely be evaluated based on your "fit" within the department or program, the quality of your research plan (especially your plan within the two years after your hire), how likely you can obtain extramural funding, and your potential as a scientist and administrator (i.e., could you be a department head in the future?). Also, does your research complement the work of others within the program? Does the balance of research and teaching required by the position coincide with your needs? Dr. Macfarlan mentioned a few important points when preparing for your interview:

- » Be exceptionally prepared for your seminar and chalk talk. Practice both with individuals who can critically evaluate both portions of the interview.
- » Ask your interviewers great questions to demonstrate both your knowledge and interest. This will also let the interviewers see that you would be an excellent collaborator.
- » The interview process is a battle of attrition. Even though you will be exhausted, don't lose focus.

Dr. Macfarlan's shared experiences and helpful suggestions were very well received by the attending fellows and will undoubtedly aid those fellows planning to enter the academic minefield in the near future.



## Have You Met the NICHD Bioviz Team?



*A 3D model of the Golgi apparatus, created for the Jennifer Lippincott-Schwartz Lab*

NICHD's **Biovisualization Team** is the institute's best-kept secret! At no cost to your lab, we can provide you with professional quality visual communication services, such as:

- » Scientific and medical illustrations for publications and journal covers
- » 3D animations illustrating your research
- » Graphic design for event posters, programs, fliers, and brochures
- » Short run printing jobs
- » Photography and videography

To learn more about us and see what we've worked on in the past, visit <http://bioviz.nichd.nih.gov>. To contact us about a potential project, please email Dr. Chandan Sastry at [sastrych@mail.nih.gov](mailto:sastrych@mail.nih.gov).

## Committee Corner Column

The NICHD Committee is seeking your input. What do you need to help you succeed during your time here? Is there a particular resource that you'd find helpful, but you can't find it anywhere? Do you get enough time to discuss your research with other NICHD fellows?

Please send your comments to Dr. Kevin Francis ([franciskr@mail.nih.gov](mailto:franciskr@mail.nih.gov)). The Committee will work hard to incorporate your suggestions into our training.

In the next issue we'll discuss the new NICHD teaching initiative, a collaboration with the Honors College Integrated Life Sciences Program at the University of Maryland, organized by our NICHD Scientific Liaison Dr. Kevin Francis. Stay posted!

## September Announcements

*Postdoctoral and visiting and clinical fellows: Please take advantage of this opportunity to provide comments about your training experience in NICHD's Division of Intramural Research (DIR)--*

### NICHD'S BLUE RIBBON PANEL: A MESSAGE FROM DR. JEFF MURRAY

I serve as chair of the Blue Ribbon Panel and write to you in that capacity to request your input to inform our work, which will cover ten specific avenues of inquiry, listed below. We will be visiting campus in September and November to meet with many members of DIR's leadership and staff, but are also providing several online avenues to receive comments and invite you to respond via one or more of the following ways:

» **Survey for DIR investigators:** <http://dir.nichd.nih.gov/dirweb/login.html>

We ask all DIR investigators to complete this survey by **Monday, September 10, 2012** to provide specific information about your research program.

» **Survey for fellows and graduate students:** <http://dir.nichd.nih.gov/dirweb/login.html>

We ask all DIR fellows and graduate students to complete this survey by **Monday, October 15, 2012** to provide specific information about your experience as a fellow/trainee in DIR.

» **Open survey for all staff—Anonymous comments:** <http://dir.nichd.nih.gov/dirweb/login.html>

Any of you who are interested in providing comments to the entire Blue Ribbon Panel about any aspect of the DIR may send them—*anonymously* if you so choose—through the end of the calendar year.

» **Online discussion board for all staff:** <https://science.nichd.nih.gov/confluence/display/BRPDB/Home>

This site will provide a forum for you to initiate discussions with your colleagues or provide comments accessible to the Panel *and* staff DIR-wide.

» **For all staff: Email me directly at** [NICHDBlueRibbonPanel@mail.nih.gov](mailto:NICHDBlueRibbonPanel@mail.nih.gov)

As a final option for providing feedback, at any point throughout the review process, you may write to me directly.

Please note that all of the comments you share via these avenues, with the exception of the discussion board, will go to me and/or the Blue Ribbon Panel—*not* to DIR or NICHD leadership.

We greatly appreciate the time you will put into assisting with this important process.

### MAIN REVIEW AREAS UNDER CONSIDERATION BY THE BLUE RIBBON PANEL:

1. Innovation/impact of research
2. Basic organization/structure of the Division of Intramural Research
3. Effectiveness of the Board of Scientific Counselors review process
4. Optimal balance between clinical and bench science
5. Space/location issues
6. Quality of postdoctoral and graduate training; career development and mentoring of fellows
7. Interaction with the NIH Office of the Director (OD), other institutes, NIH central services
8. Recruitment, retention, and promotion
9. Succession planning
10. Scientific community

## September Announcements

### NIH SCIENCE EDUCATION CONVERSATIONS SERIES

Announcing a new seminar series for everyone at NIH with an interest in science education.

Please join us!

NIH can be a valuable contributor to the important conversations surrounding science education. The goal of this series is to promote thinking and discussion on the NIH campus about current science education topics, including those related to research, policy, and science education practices worldwide. We anticipate a diverse audience that will include people from a wide range of backgrounds and positions at NIH, from scientists and science educators, administrators, policy analysts and people who are generally interested in science education. Each session is intended to be an intimate discussion between the audience and the presenter.

**Time and Place:** 3:00 p.m., Building 50, Room 1328/1334, NIH Main Campus, Bethesda, MD

#### 2012 SCHEDULE

**September 27:** *Thinking Differently about How We Teach Science: Why Should NIH Care, and What Can NIH Do?*

Rodger Bybee, Executive Director Emeritus, Biological Sciences Curriculum Study

**October 25:** *Basic Cognition for Numbers: Potential Impacts in the Science Classroom.*

Justin Halberda, Associate Professor, Department of Psychological and Brain Sciences, The Johns Hopkins University

**November 29:** *Bringing Underrepresented Populations into the Sciences: What Difference Does Difference Make?*

Shirley Malcom, Head, Education and Human Resources, American Association for the Advancement of Science

**December 20:** *Attending to Students' Thinking in Science: Becoming a Responsive Teacher.*

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

**Contact:** For information and reasonable accommodations, call Terry Clark at 301-496-1727 or email [ose@science.education.nih.gov](mailto:ose@science.education.nih.gov).

**URL:** <http://science.education.nih.gov/home2.nsf/Educational+Resources/Scientists+Volunteer+for+Education/C9AA7FE5F0830EC685257A4C004C1380>

#### DO YOU HAVE AN ANNOUNCEMENT?

Have you recently received an award or taken an exciting vacation and would like to share pictures? Or are you looking for another fellow with expertise in a specific skill set? We'd like to know! Send your announcements to [Shana.Spindler@gmail.com](mailto:Shana.Spindler@gmail.com).

## September Events

### **THURSDAY, SEPTEMBER 6, 12:30-1:30PM**

2013 fellows' retreat Steering Committee meeting  
Building 31, room 2A48

### **MONDAY, SEPTEMBER 10, 3-4PM**

Postbac Welcome & Volunteer Opportunities meeting  
Come to learn about our "Becoming an Effective Scientist"  
course and other unique opportunities!  
Building 31, room 2A48

### **THURSDAY, SEPTEMBER 27, 3PM**

NIH Science Education Conversations Series  
"Thinking Differently about How We Teach Science: Why  
Should NIH Care, and What Can NIH Do?"  
Rodger Bybee, Executive Director Emeritus, Biological  
Sciences Curriculum Study  
Building 50, Room 1328/1334