

The NICHD Connection

May 2011

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Former Fellow Follow-up: Andrew Evans, PhD

The *NICHD Connection* recently held a Q&A session with Dr. Andrew Evans, a former NICHD fellow, to learn about his career path in a non-bench position. Read on to find out about Andrew's experiences!



Andrew Evans, PhD

Q: What is your current position, and what do you do?

A: I'm a contractor with Computercraft Corporation working at NCBI as a RefSeq Curator. The RefSeq database provides a non-redundant, comprehensive set of DNA, RNA, and protein sequence standards for model organisms. As a curator, I analyze publicly available sequence data from GenBank to create reference sequence standards, review literature for specific genes and write gene summaries, and collaborate with other bioinformatic databases to provide a comprehensive resource for information on individual genes (Gene; <http://www.ncbi.nlm.nih.gov/gene>).

For more information about the RefSeq project: <http://www.ncbi.nlm.nih.gov/RefSeq>

Q: How did you find out about this job?

A: I initially applied for an opening with Computercraft to work at GenBank (also NCBI); I found the advertisement using Jobfox. I didn't hear back from the company for weeks, but sent a follow-up email and was invited in for an interview. Computercraft decided not to hire me for GenBank, but the GenBank team recommended me for an open position at RefSeq. A week later, I had my interview with RefSeq and was offered the position.

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

A: Not so much in the lab—most of my scientific credentials for the position

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Letter from the Editor

It is quite the month ahead for NICHD fellows! Among the NICHD Seventh Annual Meeting at the Airlie Conference Center, the Fourth Annual NIH Career Symposium, the Postbac Poster Day, and the great workshops offered in May, there is little time to waste. Between these great events, I hope you find a moment to read the fantastic articles in this month's issue written by our NICHD fellows.

Dr. Andrew Evans, a former NICHD fellow who recently began a career away from the bench, describes his new work in a **Q&A session** with *The NICHD Connection*. For those fellows still in the midst of postdoctoral training, Dr. Silviya Zustiak offers an intriguing piece about the different lifestyles and stress levels of **postdoc moms versus postdoc dads**.

If you missed the April career panel hosted by the Bethesda Chapter of the Association for Women in Science, check out **Dr. Megan Sampley's recap** for a brief review and more information.

Given that many fellows are currently preparing posters for this year's retreat, *The NICHD Connection's* own design guru, Nichole Jonas, offers a few insightful tips about **how to enhance communication in scientific posters using graphic design**.

As always, don't forget to read this month's **announcements** and mark **May's events** on your calendar!

Your Editor in Chief,
Shana R. Spindler, PhD

Please send any questions, comments, or ideas to **Shana.Spindler@gmail.com**.

A Look at Federal Funding

Twice within the span of two months we have averted a federal shutdown. Every year, the President and Congress must decide how the government should appropriate federal funds. As we have recently seen, the debate surrounding this decision can be quite heated. So how does the NICHD fare in all of this?

In fiscal year (FY) 2003, the NIH budget (adjusted to the dollar value of FY 2010) reached a high of \$36.1 billion. This number has fallen to the FY 2010 level of \$31.9 billion (not including the supplemental income from the American Recovery and Reinvestment Act)¹.

Out of the total FY 2010 money budgeted to NIH, the appropriation to NICHD was \$1.329 billion². For at least this first half of FY 2011, the budget has been \$1.369 billion, a \$40 million increase over FY 2010 levels³.

On February 14, 2011,

President Obama submitted to Congress a budget that requested a \$32 billion appropriation to NIH for FY 2012. As Congress battles it out, we'll have to wait and see what the final FY 2011 and FY 2012 budgets will be.

For more information about NIH budgets and government appropriations, check out the following sites:

- » National Institutes of Health Office of Budget at <http://officeofbudget.od.nih.gov>
- » AAAS Budget and Policy Program at <http://www.aaas.org/spp/rd>
- » FASEB Policy and Government Affairs at <http://www.faseb.org/Policy-and-Government-Affairs.aspx>

¹ H. Garrison and K. Ngo. *NIH Research Funds and Trends: FY 1995-2012*. FASEB Office of Public Affairs.

² *Appropriations History by Institute/Center (2000-2010)*. National Institutes of Health Office of Budget.

³ *National Institutes of Health Funding Table, AAAS R&D Budget and Policy Program*.

Former Fellow Follow-up: Andrew Evans, PhD

(continued from page 1)

came from my Ph.D. and a previous postdoc, but being at NIH was critical for learning about “alternative” career options and opportunities. In particular, I took full advantage of the incredible resources offered by the OITE.

Q: Do you have any particular likes or dislikes about your job?

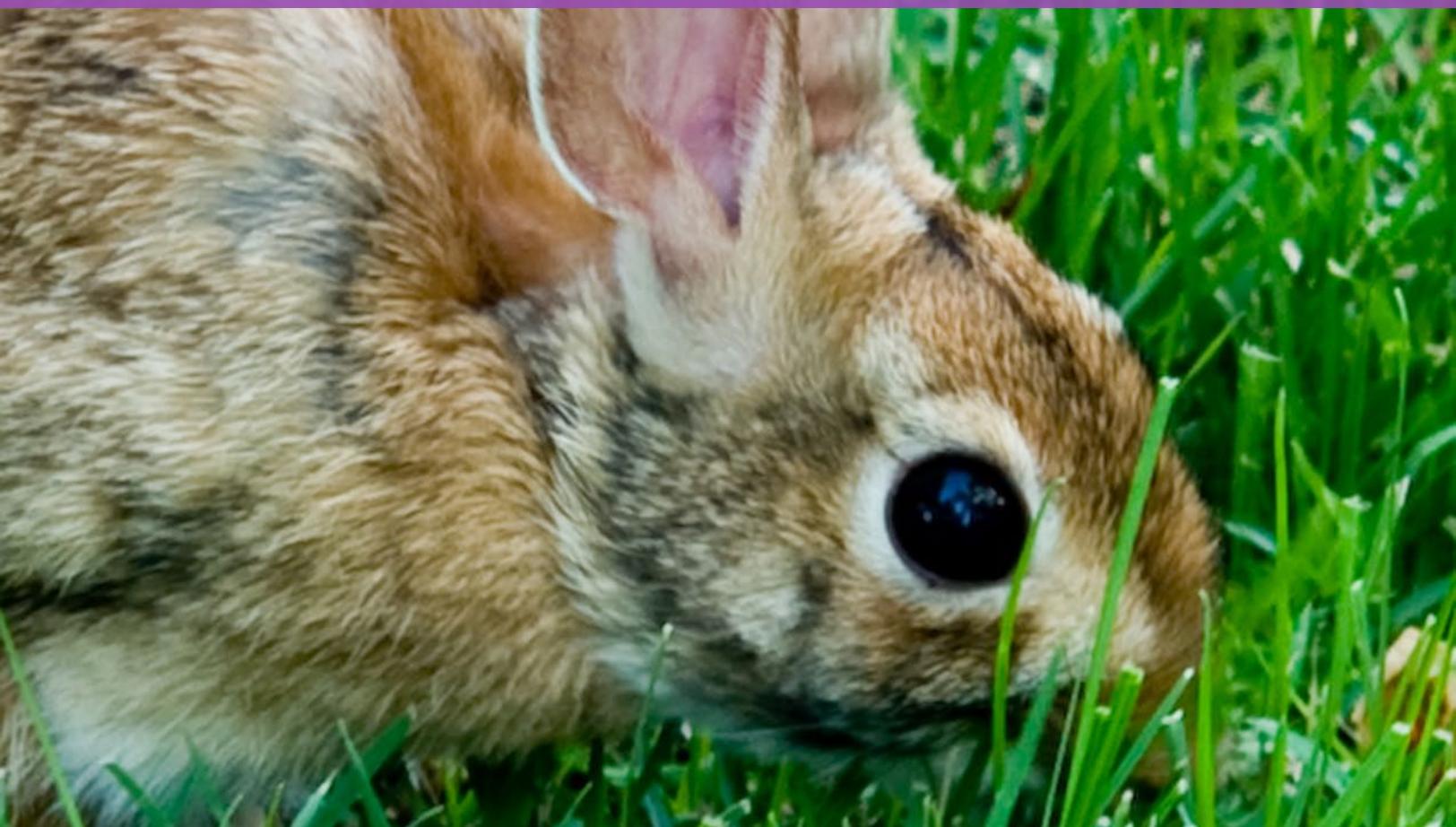
A: At work, the best thing about my job is that it’s perfect for my personality and work style—detail-oriented, organized, and rules-based. On a personal level, I really enjoy completing projects every day and the 8-hour work schedule—my schedule is no longer at the mercy of experiments. This became much more of an important factor for my career after my son was born and I searched for a different work-life balance.

Q: Do you have any advice for fellows who are thinking of entering this career field?

A: Absolutely: one of the best places for a career in bioinformatics is right here on campus! The NCBI website is an excellent place to start learning about the bioinformatics databases that are out there, both national and international; also check out <http://www.biocurator.org>. Make some contacts at NCBI, and look for bioinformatics seminars and workshops at NIH. Also, if you’re a biologist (like me), know that you will use your science every day, and your Ph.D./postdoc skills are exactly what are needed for this career field.

Q: What are your long-term goals having made the transition into your current position?

A: My long-term goal is to increase my bioinformatics knowledge and skill set so that I am able to take on greater responsibilities here at NCBI and for RefSeq, and have a long, stable, and successful career.



Using Graphic Design to Enhance Visual Communication in Scientific Posters

By Nichole Jonas

Originally presented as a poster at the Fourth Annual NICHD Fellows Meeting on April 27 and 28, 2008, in Airlie, VA.

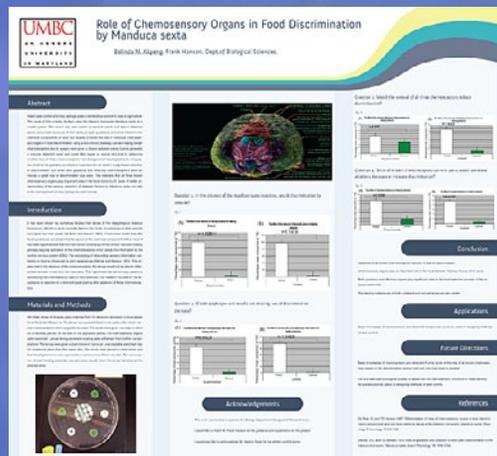
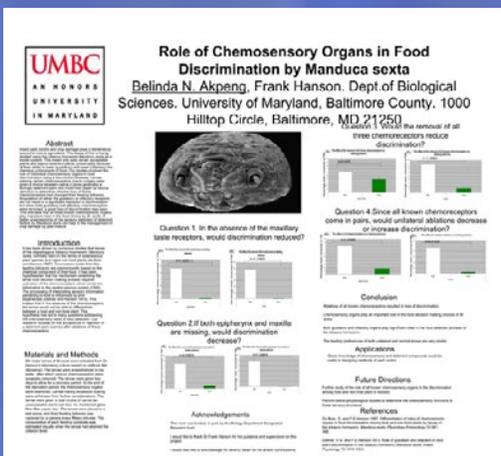
The design of a poster should enhance and attract attention to the information being conveyed. By adopting techniques and strategies used by graphic designers, researchers can help their work reach a wider audience. Choices in whitespace, typography, color, and layout can impact the effectiveness of a poster. Many such choices are largely a matter of personal preference. However, there do exist accepted rules of thumb regarding aesthetics and how graphic design fundamentals can be applied to both comprehension as well as “curb appeal.”

The **typeface** you choose is the voice of your work. Choose a font that will speak with the level of professionalism you would like to convey. “Hand-written” fonts—for example, Comic Sans—may be attractive because they appear “friendly.” Unfortunately typefaces such as this tend to be overused and abused, most often in contexts for which they are entirely inappropriate.

Color should be used judiciously. A white background is safe, but doesn’t draw attention to your work. Bright, saturated colors might catch someone’s eye, but may also overwhelm the content of your poster. The color spectrum plays an important role in color and readability. Color combinations utilizing colors at opposite ends of the spectrum (such as red and blue) are difficult to read and can cause eye fatigue. The key, however, is to remember: *everything in moderation*. In general, reserve bright, saturated colors for accent elements and keep your backgrounds light and/or muted.

Whitespace, also known as negative space, refers to the space between objects (such as graphics or blocks of text) on a page. Text margins are perhaps the most common utilization of whitespace. Adding more whitespace to your layout prevents it from looking crowded and increases readability. In addition, text that is broken into shorter paragraphs encourages reading, whereas long blocks of text do precisely the opposite. Eye-tracking studies conducted by the Poynter Institute demonstrated that short paragraphs receive twice as much attention from readers as long paragraphs.

Before and After



Special thanks to Belinda Akpeng of UMBC for allowing me to redesign her poster and include it here.

The above posters demonstrate how careful arrangement of text and images and a balanced use of color can greatly enhance a poster’s visual appeal. For more information, please see: <https://science.nichd.nih.gov/confluence/display/~jonasnic/Elements+of+Style>

A Day in the Life of a Postdoctoral Parent: Mom versus Dad

By *Silviya Zustiak, PhD*

You have probably heard the statement that it can be difficult for a mother to pursue a challenging career. Why do we rarely hear the same claim about fathers? If both spouses work, chances are that both parents will be changing diapers, preparing food, doing laundry, and tending to the other numerous tasks associated with raising a child.

I have interviewed several NICHD postdoctoral fellows, both mothers and fathers, to learn about their average day. So, judge for yourself if fathers have it easier—or better yet, don't judge at all because raising a child is a challenging task for anyone!

THE AVERAGE DAY OF A MOTHER POSTDOC:

I found that moms usually wake up early, around 5:00-6:00 AM, to get both the kids and themselves ready for the day. In general, the mothers I interviewed spend two to three hours in the morning tending to chores before leaving for work.

Many of the moms shift their work earlier into the day, allowing for more family time in the evening—the average workday being seven to eight hours. To utilize every minute, moms eat lunch while working, forgo coffee breaks, and skip almost all but mandatory seminars and meetings; they also prefer telecommuting when possible. Even moms who worked endless hours pre-baby (occasionally sleeping in the lab!) convert to regimented work schedules post-baby. Usually, moms do not come to work on the weekends unless

absolutely necessary.

In the evening, moms pick up the kids from day-care, tend to their children's needs, cook dinner, put the kids to bed, and occasionally work from home. When asked if they feel stressed about their time constraints and busy schedules, the usual response was that moms love it all; yet, they tend to suffer from a "guilt-at-work-guilt-at-home" syndrome. This last response was universal!

AN AVERAGE DAY OF A FATHER POSTDOC:

The dads I interviewed usually wake up at a slightly more reasonable time of 6:00-7:00 AM to help get the kids ready for the day.

The dads maintain a regular workday of eight to nine hours. They try to be home at a set time, but feel free to stay later when work requires it. During the workday, dads tend to avoid coffee breaks, but they usually allow time for a proper lunch. The particular fathers that I interviewed do not view weekends strictly as family time and will come to work if needed. In general, dads seem to have a more flexible work schedule than moms—albeit not as flexible as pre-baby—and they rarely feel the need to work from home.

After work, dads may pick up the kids from day-care. At home, dads help with dinner and tend to the children and other tasks. Many of the dads I interviewed admit that they rarely put the kids to bed. Once the children are asleep, the dads say that they enjoy a well-deserved free time after all is quiet.

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AWIS Panel Offers Advice about Away-from-the-Bench Careers to Scientists

By Megan L. Sampley, PhD

How does a postdoctoral researcher—who has spent innumerable hours in the laboratory—parlay years of training into a career path such as scientific editing, grant review, or program management? To address this most mystifying question, the Bethesda Chapter of the Association for Women in Science (AWIS) hosted a panel discussion on April 7, 2011, in its annual series titled “Careers in Policy, Programming, and Review.”

The featured panelists consisted of four scientists who had, indeed, accomplished just that feat: Drs. Margaret Ames (acting director, NCI Office of Science Planning and Assessment), Della Hann (deputy director, NIH Office of Extramural Research), Yuan Luo (scientific review officer, NIH Center for Scientific Review), and Sacha Vignieri (associate editor, *Science* magazine). After giving a short biography and summary of their respective career trajectories, each panelist answered questions from NIH trainees interested in learning more about non-bench careers in science.

Perhaps the most important unifying bits of advice from the panel members were to maintain flexibility of interests, develop a broad skill set, and, of course, to “network, network, network.” Each member agreed that the most com-

petitive candidates on the job market demonstrate strong communication skills, both written and oral, as well as the ability to see the “bigger picture” of scientific research—those social, political, technological, and fiscal/economic matters relevant to designing, funding, and implementing effective research programs.

Also present at this event were Drs. Susan Daniels (acting director, Office of Autism Research Coordination) and Sharon Milgram (director, Office of Intramural Training and Education), who were honored by AWIS-Bethesda with awards for excellence in mentoring. Both women emphasized that postdocs can expand their skill sets by seeking involvement outside of the lab in the greater NIH community. Dr. Milgram advised that this can be accomplished by utilizing the resources offered by OITE, where young scientists can receive counseling on career options that will enhance their competitiveness in the scientific marketplace.

AWIS-Bethesda continues to advocate the interests of women for greater career opportunity and pay equity in the science, engineering, and technology fields. Additional career development seminars will be scheduled throughout the year. More information can be obtained at www.awisbethesda.org.

May Announcements

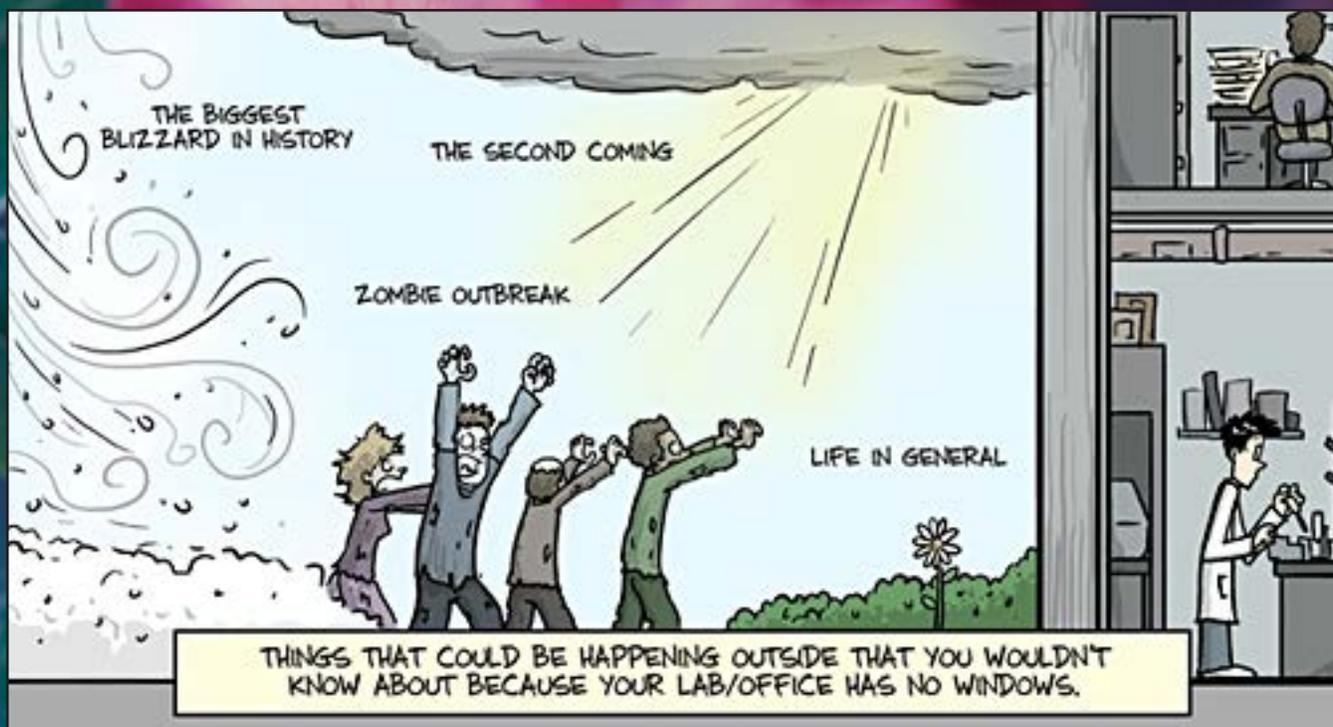
THE GE & SCIENCE PRIZE FOR YOUNG LIFE SCIENTISTS

Attention Molecular Biology Ph.D. Graduates of 2010:

Did you receive your Ph.D. in molecular biology in 2010? If so, apply for The GE & Science Prize for Young Life Scientists where you could win \$25,000 and be published in *Science* magazine. You will win a trip to Sweden to accept your award at the Grand Hotel in Stockholm and participate in a seminar with Nobel Laureates. All it takes is a 1,000-word essay by August 1. Find out more at www.gescienceprize.org

HELP JUDGE POSTERS AT THE NIH POSTBAC POSTER DAY

Please contact Brenda Hanning at hanningb@mail.nih.gov if you would like to help judge the postbaccalaureate fellows' posters at the NIH Spring Research Festival. Judges will visit about five posters each and attend a meeting to select the final three favorites. This can be a great learning experience for both the judges and postbac trainees! The postbac poster session will be held on Wednesday, May 18, between 11 AM and 2 PM at the NIH Spring Research Festival.



PhD Comics, April 6, 2011 • <http://www.phdcomics.com/comics.php?n=1427>

May Events

MONDAY, MAY 2, 8:30 AM-4:30 PM

FranklinCovey's *Writing Advantage* Workshop

Just a few spots left for this session, pre-registration required through [Brenda Hanning](#).

TUESDAY, MAY 10, 8 AM-5 PM

4th Annual NIH Career Symposium

Natcher Conference Center

Register at [www.training.nih.gov/events/view/ 2/433/4th Annual Career Symposium](http://www.training.nih.gov/events/view/2/433/4th%20Annual%20Career%20Symposium)

THURSDAY, MAY 12, 1-2:30 PM

Careers Discussion: Ask a (Former) Physician Recruiter

with Elizabeth Spencer, a branch chief in NIH's Office of Human Resources Building 10, B1L408 (near the BI Cafeteria)

For more information, contact Brenda Hanning at hanningb@mail.nih.gov

MONDAY-TUESDAY, MAY 16-17

NICHD Seventh Annual Meeting

Airlie Conference Center, Warrenton, Virginia

For more information, contact Brenda Hanning at hanningb@mail.nih.gov

WEDNESDAY-THURSDAY, MAY 18-19

NIH Spring Research Festival

Parking lot 10H (adjacent to the south side of building 10)

A Day in the Life of a Postdoctoral Parent (continued from page 5)

When asked if they feel guilty-at-home and guilty-at-work, the dads' response was "Why?"

And "Why?" is the response I pondered upon. After interviewing several moms and dads, I was surprised to find that even though their day-to-day lives and responsibilities are not that different, they respond very differently to the question of guilt! A friend of mine, a dedicated dad with four kids, spelled it out for me: "My wife feels that she needs to be in charge of everything

that happens with the kids and in the house. I don't."

Is that it? Is the main difference between moms and dads the fact that dads can get lost in their work at any time, while moms struggle to keep the balance between worrying about domestic matters and a career? Or does society as a whole assume that moms are less productive because they spend more time and effort on children, even if this is not the case? I think these remain open questions.