Welcome back for another installment of your biannual newsletter. Hopefully you’ve had a productive summer and are settling into what promises to be a spectacular fall. One of the main issues, we hear about when meeting with postdocs are related to ambiguity in their career outlooks and future funding. This combination can be stressful, but we at the PDA are firmly in the camp that the history favors the prepared. Specifically, we are very excited to be expanding the number and diversity of career related events as well as social opportunities specifically geared towards postdocs.

Our focus on career development this fall kicks off with a number of events during the NPAW that are focused on building your professional network and polishing your interviewing skills. Later in the fall and in the spring there will further events that will help in your career development, including a seminar by Dr. Phillip Clifford (co-author of myIDP Individual Development Plan) and a series of panels on careers outside of academia.

To help take the edge off and provide postdocs a place to get together and discuss life in the lab, we are re-introducing monthly mixer events both at the Medical Center as well as River Campus. In addition, we will continue to have family friendly events as well as a monthly happy hour.

As always we are very interested in your feedback about how we’re doing and what changes you’d like to see in the events we schedule and services we’re providing.

Please visit our online version of this newsletter @ www.postdocs.urmc.edu
Postdoctoral Association Activities in Pictures
Anton W. Yun

17th August 2014. Postdoctoral Association BBQ.

28th May 2014. Postdoctoral Association: CV review Workshop

14th March 2014. Postdoctoral Association recruitment lunch.

5 Ways to Future-Proof Your Doctorate
VersatilePhD

1. Discover interesting career paths away from the faculty track
2. Join a large community of post-academics, consult about your situation and the versatility of your PhD
3. Read job listings appropriate for PhDs
4. Network with successful post-academic PhDs nationwide
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Get to know PDA Committee

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Join PDA?
Would you like to be part of the PDA committee? Please come participate with us every 2nd Tuesday of the month at 12:30. Please email wanaruk_chaimayo@urmc.rochester.edu to ask for location which alternates between River Campus and the Medical Center.

Please visit the online versions of our newsletters @
www.rochester.edu/gradstudies/pda/newsletter.html

Join our Facebook group
By searching “University of Rochester - Postdoc Association” (or click this link)

Or use your smartphone to scan this QR code

Why join a UR PDA Committee?
Be involved at U of R beyond conducting scientific research.
Improve your networking by interacting with peers, top-level scientists, and university administrators.
Build your management, leadership, and communications skills—a selling point for your next job search.
Learn about planning and organizing meetings, seminars and other events of your interests while educating other postdocs.
We realize as a postdoc your time is valuable. The executive committee meets only once a month for an hour. Otherwise, any additional time commitment is completely your decision.
Experience at National Postdoc Association (NPA) Meeting
Patrice Tankam and Sheila N. Bello-Irizarry

The National Postdoctoral Association (NPA) is a 501(c) 3 nonprofit association headquartered in Washington, D.C. with the mission to improve the postdoctoral experience by supporting enhanced research training and a culture of enhanced professional growth to benefit scholarship and innovation. The NPA serves the postdoctoral community, including some 2,800 individual members and some 190 institutional members and the 60,000-plus postdoctoral scholars at these institutions.

The NPA also provides significant inputs and recommendations to funding agencies such as The National Institutes of Health (NIH), the National Science Foundation (NSF), etc., with the goal of improving the postdoc experience. Recent efforts include:

- The increase in the Ruth L. Kirschstein National Research Service Awards (NRSA) postdoc stipends to $42,000.
- The pilot program for institutional postdoctoral offices to compete for funding to experiment in Broadening Experiences in Scientific Training (BEST).
- The requirement of Individual Development Plans (IDP) for all NIH-supported postdocs and the assessment of implementation of this requirement in the review criteria of training grants.
- The revision of the NIH policy for all NIH-supported postdocs to receive benefits that are comparable to other employers.
- The recommendation to double the number of pathway to independence (K99/K00) awards.

Every year the NPA organizes a meeting that brings together more than 300 postdoc fellows and officers across the US and Canada to share their experiences and practices. The purpose of the meeting is to strengthen the postdoctoral community by serving as a meeting place and venue for networking, providing opportunities for professional development, disseminate resources and information, provides a forum to discuss relevant issues and future trends in the postdoctorate and provides an opportunity to share and develop innovative practices that support postdocs.

In April 2014, two of our PDA Board members, Sheila Bello-Irizarry (currently the Co-chair) and Patrice Tankam (currently the Career Development representative), along with Amy Perazzo (Advisor), represented your Rochester PDA at the 12th NPA Annual meeting in St. Louis, Missouri. This is not only a great opportunity for personal and professional development for the participants, but also a source of inspiration, motivation and ideas to improve our local PDA. With all the ideas and strategies shared at the meeting, the UR PDA board has restructured its organization to include a career development position. Several local events for career development are planned in the Academic year 2014-15.

Join the National Postdoctoral Association

Being a member gives you access to a vast source of Career Development Resources, including career planning, international postdoc resources, diversity issues, tax issues and family friendly resources.

The University of Rochester is a sustaining NPA member institution, thus Postdocs affiliated at UR are eligible for a free Affiliate Membership with the NPA. We encourage you to register for free to take advantage of all the benefits this membership offers.

Become a member by registering at:
http://www.nationalpostdoc.org
Select “Affiliate Individual Member, Postdoc”
Last August, Dr. Mrim Boutla, an Alum from the Brain and Cognitive Sciences Department here at UR gave a seminar at URMC on How to Turn Your PhD Skills Into Work You’ll Love. Her focus was the reality of how your PhD and postdoc experience has exposed you and trained you in very valuable transferrable skills that can be used at any job outside of academia. Currently, only 15% of PhDs get tenure track faculty positions within 6 years of post-grad (Cyranoski, D. et. al., Nature, 2011). Exploring careers in and beyond academia is not only a way to open more doors for your professional future. Whether or not you will secure a tenure track job, making contacts and exploring options in and beyond academia will make you a better and more agile communicator about the value of your research, and the breadth and depths of the professional skillset you have gained as a graduate student and postdoc.

One of the key points outlined by Dr. Boutla during her keynote for the 1st PhD Career Day Conference hosted at River Campus on May 2014 focused on how PhD skills are directly aligned with entrepreneurial best practices: “A twist on the traditional “Publish or Perish” motto, her keynote address offered examples and best practices to help PhDs realize that, in many ways, earning a PhD is similar to growing a lean startup. All PhDs start with an idea, build experiments, measure the impact of different factors on a complex problem, and learn how to make significant and innovative contributions to human knowledge. All PhDs can choose to “Publish and Pivot,” or use their PhD training to add value to employers in any sector.

Some key insights on PhD career transitions shared throughout the PhD Career Day also included:

The illusion of knowledge is worse than ignorance. Many PhD candidates believe that their only job options are postdocs, tenure track jobs or adjunct positions. This narrow view prevents many bright talent from learning about jobs that would make them both productive and happy. The UofR graduate school is making a smart move by starting the conversation through hosting events that make PhDs aware of alternative careers in Science. By helping their current and alumni PhDs connect, the university is building a future cohort of grateful alumni (and potential donors) that are sure to enhance its brand and, hopefully, improve its future bottom line.

You can be a researcher without working at a university. Several alumni talked about conducting research without being employed at universities. For example, Dr. Grace Scarborough has been conducting research on political ecosystem for 30 years (three of which were in an academic institution). Dr. Yong Zhang heavily relies on his Material Science PhD to develop and commercialize new materials at Sigma-Aldrich. There are many organizations beyond academic institutions where research is conducted, including think tanks, private labs, as well as innovation centers and R&D departments at a variety of companies. Use LinkedIn and employer directories to identify organizations that houses research groups you can add value to.

Communication agility is the linchpin to success. Different employers describe different skills and experiences using different industry-specific terms. Learning how to talk about your PhD skills using the language of your target employers will make your search considerably easier and faster. Dr. Yong Zhang was right on target when he cited Bill Carroll, former American Chemical Society (ACS): “Chasing degrees is a waste; chase knowledge and experience. And remember job-wise, a degree is an enablement, not an entitlement.” Mentioning your PhD will often be much less productive than talking about the skills and experiences you gained from your PhD that will help you solve problems for your future employer.

The only constant is change. While visiting my home department of Brain and Cognitive Sciences a decade after graduation, I was reminded of the high faculty mobility in multidisciplinary fields. No one from my dissertation committee nor my qualifying exam committee were at the department during my visit. Daphne Bavelier, my dissertation advisor, moved to the University of Geneva. Ted Supalla moved to Georgetown University, as did Elissa Newport. Mary Hayhoe moved to UT Austin. Dick Aslin and Jeff Runner are still at UofR but are both on sabbatical this spring.

Overall, the conference confirmed that no matter what their research field is, all PhDs develop transferrable skills that are applicable to a wide range of careers in the private, nonprofit and government sectors. However, to secure a nonacademic job, PhDs need to be able to pivot and articulate, in the language of their industry of interest, how their PhD skills and experiences will add value to their future employer.

(Continued on the next page.)
“Publish or Perish ?” What about Publish and Pivot!
Mrim Boutla and Sheila N. Bello-Irizarry

So you think you are not qualified? Think twice: Use Job Postings to Your Advantage

Many of you have already heard that 80% of job opportunities are never advertised, and are instead filled through networking. Today, we will focus on the 20% of job (and internship) opportunities that are actually advertised, and how you can best compete for those!

Here are a few suggestions for you to use the job posting to maximize your chances to convert your application into an interview:

The job posting represents the profile of the ideal candidate the company wants to hire

The hiring manager knows that it is unlikely that s/he will find the ideal candidate. Therefore, your job is to show how close your profile is to that of the perfect candidate described in the job posting.

Don’t let the job description intimidate you: Job seekers are quite often intimidated by job descriptions and don’t apply for jobs they actually are qualified for. As a job seeker, remember that 100% of people who get the job applied for it! Therefore, if your profile meets most of the requirements and some of the preferences listed on the description, apply and let the hiring manager make a decision!

Requirements versus preferences: Hiring managers know that they will not find a candidate with all the requirements and preferences they listed on the description. Based on numerous conversations with recruiting managers, it is not uncommon to hear that the job description changes as they meet with candidates. Therefore, focus on the value you can create by highlighting how much you have in common with the ideal candidate.

Use the job posting as your road map: Your goal is to demonstrate how close your profile is to that of the ideal candidate described in the job description. Use the keywords and skill names used in the job description to tailor your resume and your cover letter.

A computer will first review your application: In the digital age, your application is likely to first be evaluated by a computer program. The computer program will assess if your cover letter and resume match at about 60%-80% of the terms used in the job description. If your resume and cover letter don’t meet the set criterion, your application is likely to be discarded. Therefore, it is important to take the time to send tailored applications for your jobs of interest. This will increase the probability of your application to be taken seriously, and to be reviewed by the hiring manager. A word density analysis tool like TagCrowd (TagCrowd.com) to create a word cloud to represent visually the keywords that are most important for you to highlight in your resume and cover letter when applying for a specific job, that will match a job posting. When you have that cloud, revisit your previous work experiences, coursework, and volunteer experiences. Don’t make anything up, only highlight and emphasize the aspects of these experiences that best showcase how close you are to the ideal candidate described in the job posting.

It’s crucial for you to focus on quality; it’s all about spotlighting how close you are to the ideal candidate the organization hopes to bring on board, and that you have what it takes to add value and to hit the ground running. If you apply these insights moving forward, you will increase your conversion rate dramatically, no matter whether 10, 100 or 500 other applicants are also sending their application for this job.

An earlier modified version of this article was published on the Justmeans Responsible Careers Blog in 2010, National Peace Corps Association on 2012 and MTM-Careers Blog on 2014.

Dr. Mrim Boutla is a cognitive neuroscience PhD turned career coach. She has lived and worked in 4 countries, and served as a career counselor at Brown University and at the Kelley School of Business (Indiana University). She co-founded and manages More Than Money Careers (www.mtmc.co), which helps students and professionals get clear, get connected, and get hired for jobs that maximize meaning and money..

Find more tips online at: http://www.mtmc.co/category/mtmc-blog/

TO YOUR SUCCESS
How to defer your student loans as a postdoc
Alex Thomé

Let’s face it: in terms of salary, your postdoc is only a small step up from that of a grad student. However, earning your PhD also comes with the responsibility of paying back student loans often acquired during your undergrad/grad years. The student loan debt of postdocs can be hefty, so that monthly payment can be a significant chunk of your stipend.

Here’s the good news! Many student loan lenders will classify a postdoc as a training position. This means with a little bit of paper work you can defer your student loans. Interested? Let’s get started!

Here’s what you’re going to need. First download an Education Related Deferment Request and fill out the relevant parts. Next, you will need an offer letter (or similar) from your PI specifying the length of your appointment (this must be full-time). Don’t worry if this is year-to-year, you can submit these forms annually if you must. You will also need a supporting letter (from your PI) that states what the training objectives of your research program are going to be. This will put you in compliance with section 7 on the form. Finally, you need a copy of the official definition of a postdoctoral fellow/associate from the University handbook. Once you’ve collected all of these, provide this package to one of the following organizations/people: School Financial Aid Office, Associate Dean, or Post-doctoral Affairs Officer and get their signature. Once signed and dated, simply fax or mail all of these documents to your loan holder.
How long have you been working at the UR?
Since the summer of 2000. Before moving my lab here, I spent just shy of 19 years as an Assistant-to-Associate Professor in the Department of Human Genetics at Roswell Park Cancer Institute.

Did you always want to be a scientist or did you aspire to do something else?
In high school, I loved music, math, English and was fluent in Spanish, but I didn’t especially enjoy biology, chemistry or physics probably due to how the classes were taught. My volunteer work in a hospital hematology lab was also not very inspiring. However, once I got to college, I loved inorganic and organic chemistry and biology. As a sophomore, I was hooked on research science (and pulled away from considering medical school, which I thought was an either/or with PhD-thesis work) after a lecture on the molecular mechanism of protein synthesis from an mRNA template. Remarkably, a common thread in my work as an undergraduate, graduate student, post-doc and now faculty member is a focus on RNA – and for completely different reasons. My long-term interest in RNA reflects its many different roles in prokaryotic and eukaryotic cells. The roles continue to grow with every year, and they portend how much we can learn about human diseases from studying RNA.

What appointments do you currently hold? Can you share a bit about your various roles?
I hold the J. Lowell Orbison Endowed Chair and am a Professor in the Department of Biochemistry & Biophysics in the School of Medicine & Dentistry. I am also founding Director of the Center for RNA Biology: From Genome to Therapeutics, which spans the School of Medicine & Dentistry and the College of Arts, Sciences & Engineering. As founding Principal Investigator of an NIH T32 graduate-student training grant, I initiated the University of Rochester Graduate Women in Science (GWIS) within a few years of moving here. GWIS addresses the so-called “leaky pipeline”, which refers to the fact that fewer women holding a PhD degree compared to men holding a PhD degree go on to use that degree in a career. Everyone is welcome to attend GWIS http://www.urmc.rochester.edu/education/students/graduate-women-in-science/, which occurs once a month on a Thursday from 3-4 pm. In fact, our next (September) speaker is Jamie Cate, who is a UC-Berkeley Professor and spouse of National Academy member Jennifer Doudna. Jamie will talk about “Science at Breakfast”. It is really important that men understand and are supportive of those women who aim for a scientific career. I encourage as many men as possible to attend Jamie’s GWIS presentation.

What do you feel is one of your greatest accomplishments?
One is working together with very talented and driven graduate students, post-docs and technicians in my lab to discover many new aspects of human RNA metabolism – all from clues that initially derived from our studies of human diseases – and now working toward disease therapies. Another is having contributed to the success of so many young scientists who trained with me or who I influenced otherwise. I’m still in contact with most previous lab members via email, phone and visits.

(Continued on the next page..)
What is the most important quality for a mentor?
A good mentor is a good provider -- providing a good project, good advice, a fertile research environment, a good role model and, when a lab member is productive, the opportunity to present his or her research to the national and international research community. However, that is only part of the equation. The other part falls on the shoulders of the mentee. It follows that good mentors also carefully select who will join the lab so the lab environment is conducive to healthy and constructive interactions. Everyone in my lab contributes to selecting who will join us as a student, post-doc or technician.

What is the best way to keep competitive edge?
Choose research topics that are interesting and timely, avoiding “me-too” science; design and execute experiments with rigor (it is easy to do experiments, but much more difficult to do ones that inform a specific question); and, very importantly, follow where your results take you with an open and educated mind.

How do you motivate yourselves/ others?
It is easy to be motivated when experiments are working and the project has high impact. No matter what, though, persistence is key, as is balance. Work hard and play hard. If you don’t enjoy doing experiments at least 70% of the time -- this is an average since sometimes that percentage could drop into the single digits -- then you might want to reconsider your career. If you don’t enjoy any aspect of your life at least 70% of the time, then please consider that you may be depressed -- clinically depressed, which is a metabolic state. There is no shame in being depressed, and talk therapy coupled with medication can be very effective.

Post-docs should have more than one project so when one isn’t going well, hopefully the other is. When one project breaks open, then the focus should be entirely on it since productivity per unit time is critical. Productivity is a good indicator of future potential. I would be remiss if I didn’t say that it is normal to want to quit when the going gets tough. This happened to me as a graduate student, a post-doc and an untenured faculty member. However, persistence -- which can include redirecting research goals -- and having supportive lab members and non-scientist friends will help in the search for constructive resolution. Seek advice if you are struggling for whatever reason. As a graduate student, I was the first person in my lab to have a molecular biology rather than genetics project. The post-docs in the lab next door helped me in ways my lab members and PhD mentor could not.

Myths of academia and how to let go and embrace the exciting, inspiring, and deeply satisfying academic job.
Being in academics requires a love of learning -- being well-read and able to think critically and creatively. Life in academics is a series of phases (much as life in general, only in science the phases are more delineated). It is important to focus on the explicit goals of the phase you are in with an eye to the future. As long as you enjoy what you are doing and are doing what is constructive for the present and what you aim for the long-term, you are on the right track. As a post-doc, you need to work smart since you have a limited amount of time to prove that your success as a graduate student was not a one-off. I found the transition from graduate student to post-doc very tough. It took me 6 months before I found a productive project, and those 6 months were very challenging for me. Aim high in terms of your career goals. You can always take a step back if the fit isn’t for you. Surround yourself with smart and motivated scientists who you can talk with.

(Continued on the next page.)

GWIS
Graduate Women in Science
See more future events at
http://www.urmc.rochester.edu/education/students/graduate-women-in-science
Obstacles faced by postdocs in times of tight NIH budget:

NIH and NSF funding has gone up and down for many years. The funding level in some Institutes is increasing right now, e.g., funding in GM is up to around 17%. The cut-off for beginning PIs is even higher. When I started my lab, funding levels were at a low point. Since I started in a non-tenure track position, which was partly due to gender bias back then, I had a very small start-up package and needed to get NIH funding early on. I worked really hard and remember friends and colleagues saying that if anyone is going to be successful, it will be me. That was very encouraging for me to hear. If you have a goal and you are serious about achieving it, then you have a good chance of succeeding if you put in a smart and dedicated effort and persevere, modifying as need be, until you get what you need. Yes, it is scary. But it is OK to work outside of your comfort zone if you believe in what you are doing.

What advice would you give to yourselves 10 years ago?

Well, 10 years ago is not very long ago for me considering I’ve been running a lab for more than 30 years. However, I would tell my former post-doc self the following. You are stronger than you know. Write down goals that you would like to achieve in the next 6-months, 1-year, 5-years and 10 -years, and reassess how you are doing every 6 months. A woman sought me out at the recent RNA Society meeting. She explained that she is now an Assistant Professor at the University of Illinois Urbana-Champaign before thanking me for mentoring her in 2008. She told me that I had advised a table of graduate students to “chip away” every day towards their career goals and, as a consequence, they will be surprised at what they will accomplish. She followed that advice, through good times and bad, and is pleased to have made it farther than she thought was possible. I can say that I did the same myself. As a post-doc, I put one foot in front of the other, first publishing...
# Postdoc Accomplishments 2014

## Anton W. Yun

### Sarah R. Heilbronner
Department of Pharmacology and Physiology

**Publication**


**Award**
National Research Service Award from NIMH, Title: “Anatomical connections subserving the default mode network”

### Bethany Plakke
Department Neurobiology & Anatomy

**Publication**


### Sundar Isaac K.
Department of Environmental Medicine

**Publication**


**Award**

2014 Melville A. Hare Award.

**Grant**
American Lung Association Biomedical Research Grant, Title: Molecular mechanism of DNA damage and histone modifications by cigarette smoke-induced lung.

### Yang Song
Department of Electrical and Computer Engineering

**Publication**


**Award**

Dissertation Award from International Society on Infant studies.

### Elika Bergelson
Department of Brain and Cognitive Science

**Publication**

Gonzalez M, et al., “Testing satisfaction of basic psychological needs as a mediator of the relationship between socioeconomic status and physical and mental health.” *J Health Psychology*

### Maynor G. Gonzalez
Department of Surgery (SHORE)

**Publication**

Gonzalez M, et al., “Testing satisfaction of basic psychological needs as a mediator of the relationship between socioeconomic status and physical and mental health.” *J Health Psychology*

### Julie M. Sahler
Department of Environmental Medicine

**Award**

2014 Melville A. Hare Award.

### Punima Ruberu
Department of Chemistry

**Award**

Travel grant from the Solid State Chemistry Gordon Research Conference. NH Poster “Photo electrochemical generation of Hydrogen from water using a CdSe quantum dot sensitized photocathode”.

**Grant**

American Lung Association Biomedical Research Grant, Title: Molecular mechanism of DNA damage and histone modifications by cigarette smoke-induced lung.

### Tankam Patrice
Institute of Optics Center for Visual Science

**Publication**


**Award**

FASEB MARC & Professional Development Travel Award, 2014 Postdoctoral preparation institute workshop. Bethesda, MD

**Grant**
Carl Strom underrepresented minority fellowship, Travel Award for 2014 image science Gordon research conference. Stonehill, MA

### Brendaliz Santiago
Center for Oral Biology

**Publication**

Santiago B, et al., “Regulation of fatty acid biosynthesis by the global regulator CcpA and the local regulator FabT in Streptococcus mutans” *J Molecular Oral Microbiology.*

**Award**

Dr. William H. Bowen Award from the 2014 Annual Meeting of The American Association.

### Sheila N. Bello-Irizarry
Center for Musculoskeletal Research Department of Orthopaedics & Rehabilitation

**Publication**


**Award**

2014 Rochester Vaccine Fellowship

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