



POSTDOCTORAL TRAINING in the 21th CENTURY

Nancy Schwartz, Ph.D.

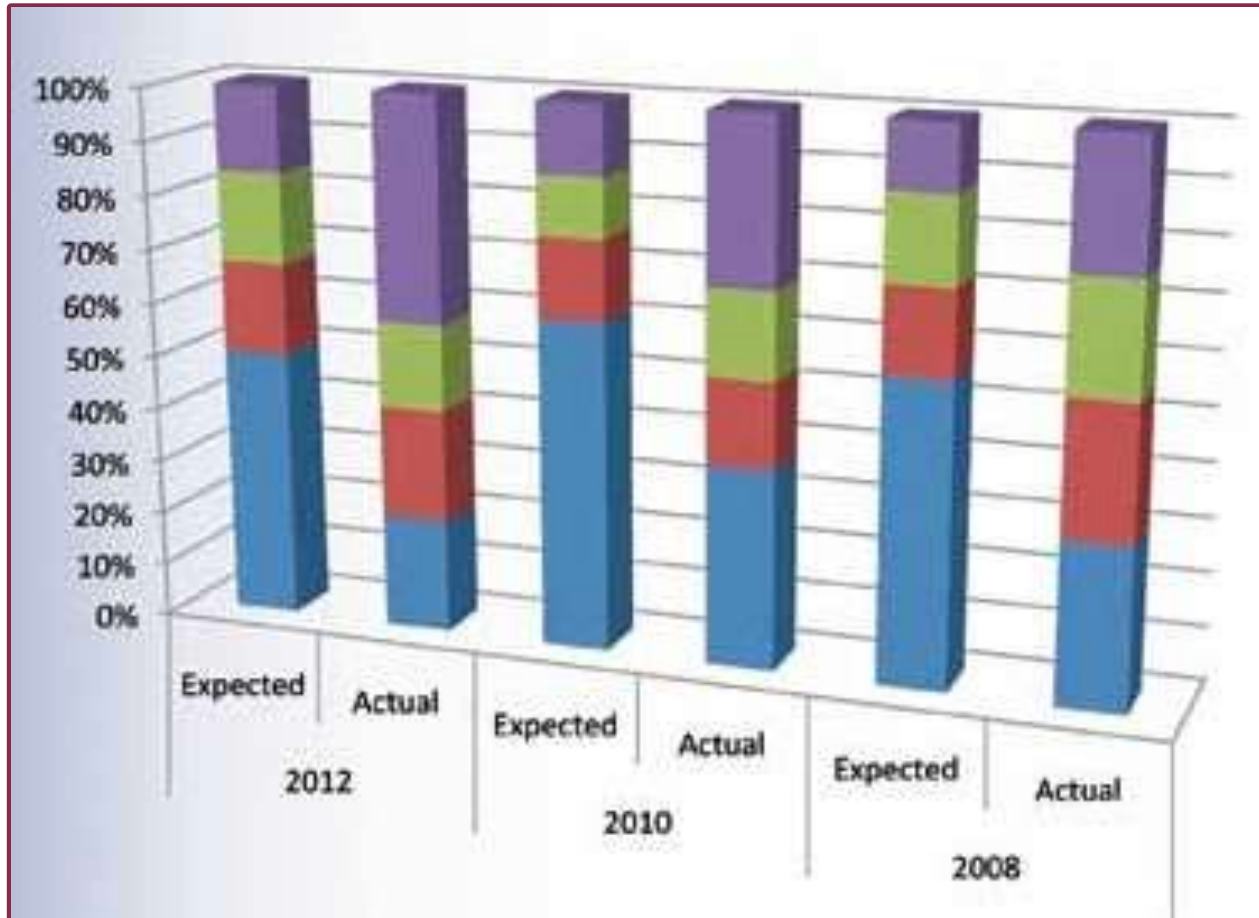
Professor, Pediatrics & Biochemistry and Molecular Biology
Director, Kennedy Intellectual and Developmental Disabilities Research Center
Associate Dean and Director, Postdoctoral Affairs, Biological Sciences Division
The University of Chicago



POSTDOCTORAL EXPERIENCE

- ◉ Postdocs play a critical role in the research enterprise
- ◉ Train and attract the best and the brightest
- ◉ Reality vs expectation
- ◉ Progress in the last decade
- ◉ Learn from successes and mistakes
- ◉ Set the stage for the next decade

EXPECTATION GAP



- Other (including government, nonprofit research, self-employment, and other)
- Industry
- Nontenure-track research scientist
- Tenure-track academic position

POSTDOCS RATE FACTORS THAT CONTRIBUTE TO A SUCCESSFUL POSTDOC EXPERIENCE



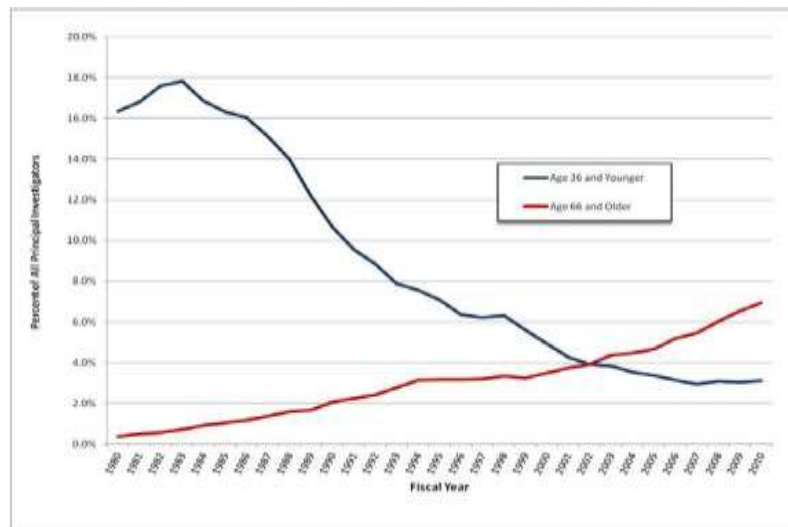
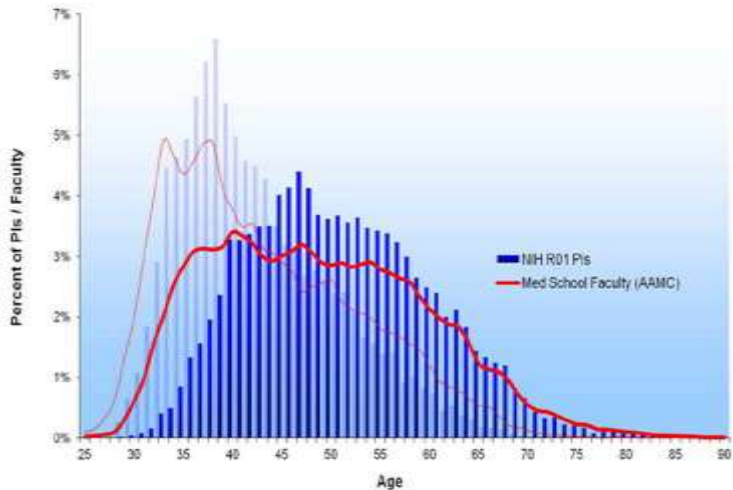
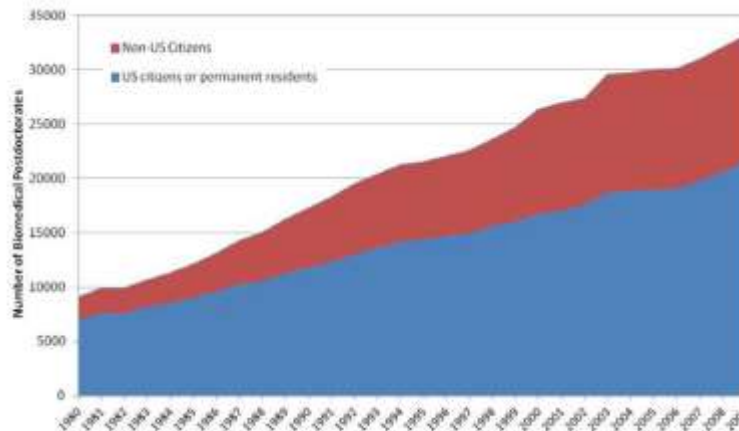
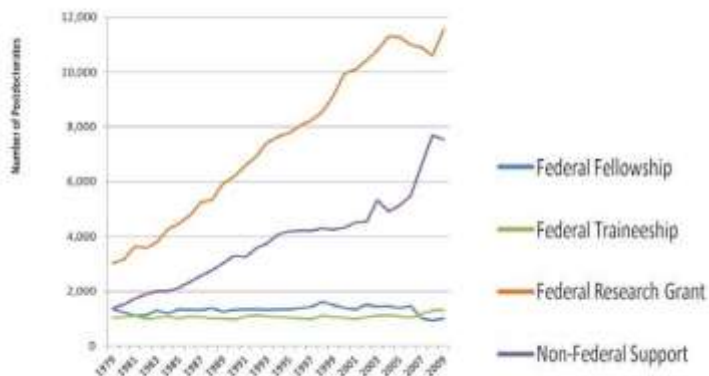
■ 2012 ■ 2010 ■ 2006



Biomedical Research Workforce Working Group Report

National Institutes of Health

June 14., 2012



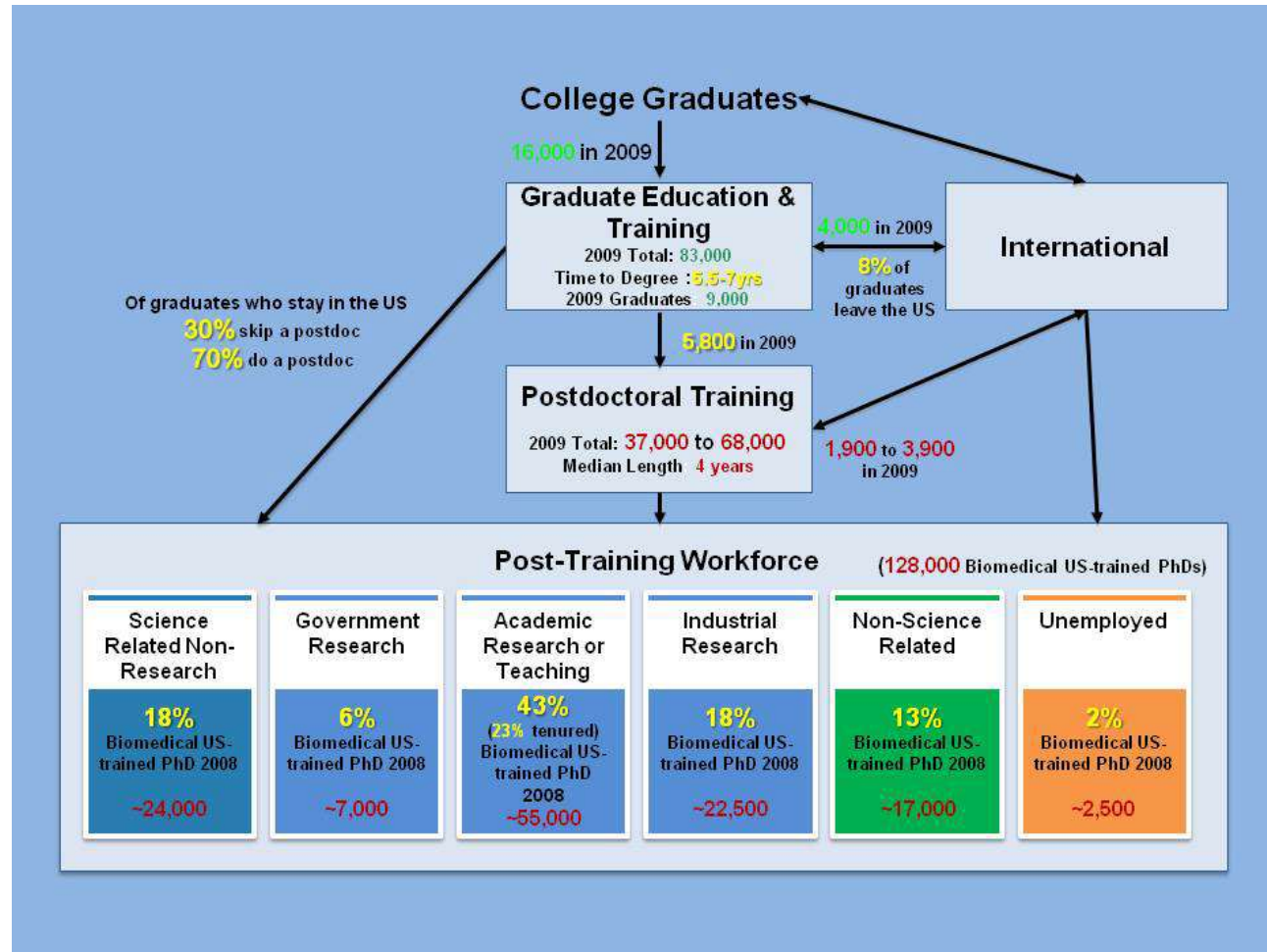


Modeling the PhD Biomedical Research Workforce

Biomedical Research Workforce Working Group Report

National Institutes of Health

June 14, 2012





WHOSE RESPONSIBILITY IS IT?

- ⦿ Funding Agencies
- ⦿ National Postdoctoral Association (NPA)
- ⦿ Professional Societies
- ⦿ Other Organizations
- ⦿ Academic Institutions
- ⦿ Postdoc-Associations
- ⦿ PIs / Mentors

NIH Implementation Activities



1. Establish a grant program to encourage innovative training approaches
2. Improve graduate student and postdoctoral researcher training
 - A. Put individual development plans in place for all trainees
 - B. Reduce the length of graduate training
 - C. Provide F30 and F31 from all ICs
 - D. Increase postdoctoral stipends and consider policies on benefits
 - E. Increase support for K99/R00 and shorten eligibility period
 - F. Increase support for Early Independence Awards
 - G. Broaden training via IRACDA (K12)
3. Develop a simple and comprehensive tracking systems for trainees
 - A. Identify all NIH-supported students and post-docs
 - B. Automate NRSA training tables
 - C. Develop a Fed-wide researcher profile system
 - D. Encourage adoption of unique persistent researcher IDs
4. Encourage fair consideration of staff scientists on grant applications
5. Initiate discussion with the community to assess NIH support of faculty
6. Promote Early Status Investigator (ESI)
7. Create an office in the NIH Office of the Director to assess the biomedical research workforce
8. Conduct ACD Working Group study on optimal research training of individuals in clinical disciplines



NATIONAL POSTDOC ASSOCIATION- NPA

- ⦿ Founded in 2003
- ⦿ Represent ~40,000 science Postdocs in the US
- ⦿ 3,500 registered individual members
- ⦿ >170 institutional members (U of Chicago is founding member)
- ⦿ Accomplishments
 - National Voice for Postdocs
 - Resources (POSTDOCket)
 - Annual National Meeting (2002)
 - Recommended Practices (2005)
 - Core Competencies (Six areas of advanced training) (2008)
 - Postdoc Appreciation Day/Week - (2010 Congressional resolution)



PROFESSIONAL SOCIETIES

- ◎ Federation of American Societies for Experimental Biology (FASEB)
 - 22 societies with more than 90,000 members,
 - Largest coalition of biomedical research associations in US
 - Individual Development Plan (IDP) (2002) (“My IDP”, 2013)
 - Identify career/professional goals
 - Self assessment
 - Take charge of career
 - Improve communication between PD and mentor

- ◎ Other- SfN, ASCB, ASM, AACR, ACS, etc.
 - Young investigator meeting
 - Profession development and career advising
 - Grant writing courses
 - Session with funding agencies
 - Job fairs/Placement services
 - Networking sessions
 - Travel Awards

OTHER AAMC-GREAT



- ◎ Membership designated by Dean
 - Great Group >350 members (1996)
 - MD/PhD Section >150 members (2005)
 - Postdoc Leaders >100 members (2007)

- ◎ Priorities
 - Outreach
 - Networking and Collaborations
 - Modernize PhD Curriculum
 - Address Diversity
 - Team Science
 - Tools/Resources
 - Mentoring
 - Professional Development
 - Data analysis and Outcome



OTHER ORGANIZATIONS

◎ Sigma Xi

- 1st major survey (2005)
 - 7600 postdocs at 56 institutions
 - PD with structure oversight and formal training
 - were more satisfied
 - experience less conflict with mentor
 - were more productive

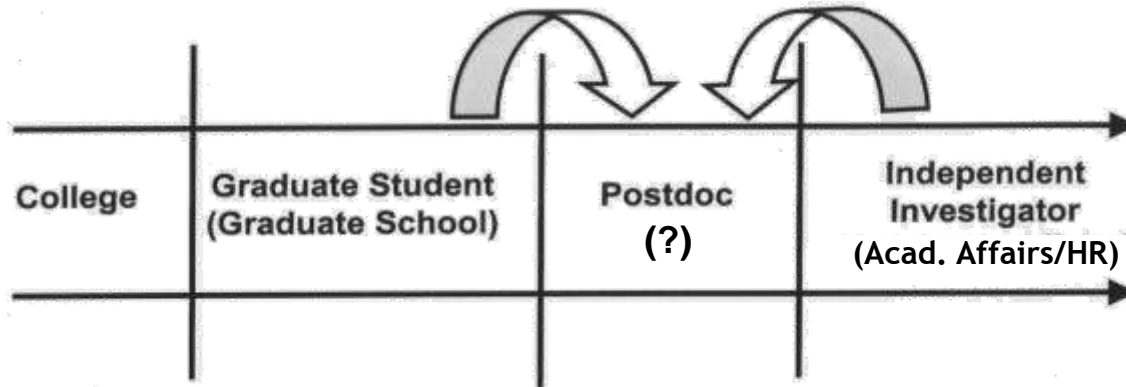
◎ AAAS

- Science Nextwave (2000)
- Science Careers (2005)
- Nature jobs

◎ HHMI/Burroughs-Wellcome

- Making the Right Moves (2004)

ACADEMIC INSTITUTIONS



Policy

- Definition
- Term Limit
- Salary
- Benefits
- Mentoring

Process

- Appointment
- Monitoring
- Career Development
- Office of Postdoc Affairs
- Postdoc Association

THE UNIVERSITY OF CHICAGO



- ◎ Postdoctoral Association (1999)
- ◎ Postdoctoral Office (2000 with Graduate Affairs)
- ◎ Postdoctoral Office (2010 separate with dedicated staff)
- ◎ Overall achievements:
 - Definition
 - Postdoctoral Policy Manual:
Term limits; Salary levels; Grievance process, etc.
 - Quarterly Info Session
 - Orientation Packet for New Postdocs
 - Equal benefits for Fellows and Scholars (Supplement for Fellows)
 - Weekly career seminars hosted by PDO/PDA
 - Social events hosted by PDO/PDA
 - Annual Postdoc survey
 - Postdoctoral Symposium with keynote speaker
 - Individual Development plan
 - Annual review/monitor mentoring plan
 - RCR training
 - Courses (lab management, grant writing, etc.)
- ◎ Policies adopted University-wide via Provost's Office (2007)
- ◎ Biotech Association (2010)



Job Title	Postdoctoral Fellow	Postdoctoral Scholar
University Employee	No	Yes
Funding	Grant or fellowship paid as stipend ¹	Grant or fellowship paid as salary
Compensation	NIH NRSA minimum	
Appointment Length	Generally 1 year appointment	
Eligibility	Within 7 years of award of degree. See U of C Postdoctoral Researcher Policy Manual: http://www.bsdpstdoc.uchicago.edu/downloads/postdoc-research-policy.pdf	
Term Limit	Maximum 4 years postdoc experience at U of C and elsewhere, although can apply for 5 th year	
Benefits eligible	No. Can purchase benefit coverage through the University	Yes. Benefit costs payroll deducted ²
Supplementary stipend for benefits coverage Effective Jan 1, 2004	\$1,600 / year (if health insurance funding provided by outside source) for dental, disability and life insurance, retirement and taxes; \$6,200 / year (if health insurance funding not provided by outside source)	No
Health Insurance Plans available through the University	All postdoctoral fellows and scholars have the option of health and dental care managed through Garnett Powers and Associates http://www.garnett-powers.com/uchicago/ . All other healthcare and dental options will not be available as of January 1 st 2008	
Leave Policy	4 weeks paid vacation, 12 days paid sick leave per year. This time may be used as parental leave. Ineligible for Family Medical Leave Act, Short/Long term disability and leave of absence as a non-employee	4 weeks paid vacation, 12 days paid sick leave per year. This time may be used as parental leave. Eligible for Family Medical Leave Act after 1 year of employment. Eligible for short term disability and leave of absence if 1 year appointment. May be eligible for long term disability and leave of absence after the first year, depending on circumstances
Retirement Benefits	Included in Supplementary stipend. Contribution cannot be made to University fund as a non-employee	Retirement plan for University Employees. University contributes 2.5% of your pay after 1 year of employment
Life Insurance	Starts at \$12,000 at no cost to postdocs. This life insurance also covers repatriation of remains for foreign citizens	
Taxes	No payroll deduction ³ . Estimated taxes filed quarterly. No FICA contribution	Payroll deduction. FICA contribution
Visa restrictions	Cannot have H1-B visa status or be sponsored for permanent residency	May have H-1B visa status. Cannot be sponsored for permanent residency
Mentoring program	Yes	
Lab Schools Tuition Benefit	No	
Reduced Tuition for UofC	No	
Eligible for University Housing	Yes. Staff/faculty and student housing. Ineligible for Employer-Assisted Housing Program and Staff Loan Programs.	
Eligible for Commuter benefit	Not eligible	Eligible to pay for certain commuting expenses using tax-free dollars. Conexis administers the benefit plan

¹Find out if your fellowship can be used as a salary. If it can, you can be a Postdoctoral Scholar and a benefits eligible employee

²For benefit deductions through payroll visit **Employee Self-Service** at <https://ess.uchicago.edu/ess>

³Non-Resident Aliens: Federal taxes may be withheld at 14% unless a tax treaty is claimed



POSTDOC ASSOCIATION (PDA)

◎ **Mission Statement**

The Postdoctoral Fellows, Postdoctoral Scholars, Research Associates and Medical Fellows in Biological Sciences Division of the University of Chicago have formed an organization to address the concerns of the group by promoting their continued success in the research community. The PDA provides skills development organization and resource center which addresses topics that are essential for continued excellence in research careers. In addition, the PDA fosters communication among its members and provides representation in the division and university.

◎ **Activities in collaboration with PDO**

- Weekly Seminar Series
- Scientific topics given by PDs
- Career talks by professionals
- Workshops on funding, preparing for job markets, etc.
- Social Events/ Symposium
- Weekly Bulletin
- PDA Website



Got Experience? My approach to building translatable business experience as a post-doc

Michael Seiler, Ph.D.
Vice President, Scientific Development,
ArborVita Associates
will discuss transitioning to industry
in a start-up company

Friday, November 9, 4:00pm
Biological Sciences Learning Center- 205

All BSD/PSD and Pritzker, Postdocs, Faculty, Staff, and
Students Welcome!

Food and Refreshments provided by the Office of Graduate and Postdoctoral Affairs



Special one-time Professional Training Workshop: Preparing Academic Scientists for Careers in Industry



Randall Ribaud, Ph.D.
Partner, President, CEO
Human Workflows and SciPhD

Tuesday, May 21st, 1-5pm
BSLC - 109

- Half-day workshop featuring an introduction to industry, an online self-assessment and sessions on responding to job ads, targeting resumes and preparing for interviews.
- An additional follow-up session will be offered Wednesday morning for more personalized attention.
- Visit www.bsdpostdoc.uchicago.edu/events for more information and to register. Space is limited! Cost: \$10
- A reception with food and drinks will follow the workshop.



Postdoc Seminar

PhD to Consulting: A Career Transition

Aarohi Zokarkar, PhD
Boston Consulting Group

Friday, October 25th, 4pm
BSLC 205



All Postdocs, Faculty, Staff, and Students Welcome!

Food and Refreshments provided by the Office of Graduate and Postdoctoral Affairs



Postdoc Seminar

Presenting:
Melanie Norstrom, PhD
Regulatory Affairs Manager,
Clinical Research Support Office, The University of Chicago

Dr. Norstrom will discuss her experiences with coordinating
clinical trials and careers in clinical research

Friday, October 4th, 4pm
BSLC 205



All Postdocs, Faculty, Staff, and Students Welcome!

Food and Refreshments provided by the Office of Graduate and Postdoctoral Affairs

BSD Postdoctoral Association <http://www.bsdpostdoc.uchicago.edu/>
Contact: Laurie Risner, lrnsr@uchicago.edu



Come to our first Postdoc Seminar of the year!

Presenting:
Sarah E Powers, PhD
Assistant Professor, Biology Department, Lewis University
and
University of Chicago Alum

Dr. Powers will discuss her experiences with taking
on an academic position at a University with a focus
on teaching undergraduates.

Friday, September 13th, 4pm
BSLC 205



All Postdocs, Faculty, Staff, and Students Welcome!

Food and Refreshments provided by the Office of Graduate and Postdoctoral Affairs

BSD Postdoctoral Association <http://www.bsdpostdoc.uchicago.edu/>
Contact: Laurie Risner, lrnsr@uchicago.edu



Women in Bio-Chicago: Connecting a community of women in Biotech & Pharma on a local and national level

Kate Neville, Ph.D. – Vice-Chair, Women in Bio-Chicago

www.womeninbio.org

Friday, February 15, 4:00pm
Biological Sciences Learning Center- 205

All BSD/PSD and Pritzker, Postdocs, Faculty, Staff, and
Students Welcome!

Food and Refreshments provided by the Office of Graduate
and Postdoctoral Affairs
BSD Postdoctoral Association <http://www.bsdpostdoc.uchicago.edu/>
Contact: Sarah Elliott, selliott@uchicago.edu



National Postdoc Appreciation Week Ice Cream Social !!



Wednesday, September 18th 4:00pm
BSLC Lobby

All BSD Postdocs Welcome!

Bring your postdoc ID - One ice cream cup per person please!

Refreshments provided by the BSD Postdoctoral Association and the Office of Graduate and Postdoctoral Affairs

www.bsdpostdoc.uchicago.edu/
t@bsd.uchicago.edu



Fall kick-off Picnic



Friday, September 6th 4:00pm
Crerar Library - Lawn
Rain location BSLC Lobby

The winner of the Survey Raffle will be announced at the picnic.



Bring your own
Blanket and valid ID!

All BSD Postdocs Welcome!
Sponsored by Transnetyx

Food and Refreshments provided by the Office of Graduate and Postdoctoral Affairs AND
Postdoctoral Association <http://www.bsdpostdoc.uchicago.edu/>
Contact: Carol Tan: ctan1@bsd.uchicago.edu



Join us at **The Pub**

Ida Noyes Hall Lower Level

Thursday, October 24th 6:00pm

All BSD Postdocs Welcome!

Limited **FREE** food and drinks - Arrive early!
\$3 door fee applies

Support for this event provided by the Office of Graduate and Postdoctoral Affairs
BSD Postdoctoral Association <http://www.bsdpostdoc.uchicago.edu/>
Contact: Laurie Risner, risner@bsd.uchicago.edu



Speed Networking Event

June 12, 2013 4-6pm

Biological Sciences Learning Center Lobby



Come join us for an opportunity to learn about and practice the
"5 minute elevator pitch" with fellow post docs while enjoying
several wine and cheese pairings!!!

Don't forget your business cards!

Featuring Dr. Michael Seiler - Vice President of
Scientific Development, ArborVita Associates, LLC

Space is **LIMITED!**

*Please RSVP to Laurie Risner
(Irisner@bsd.uchicago.edu) by **June 10th**!

Please check the BSD Postdoctoral Association website
<http://www.bsdpostdoc.uchicago.edu/> for more information!

Food and Refreshments provided by the Office of Graduate and Postdoctoral Affairs

Persons with disabilities who need an accommodation in order to participate in
this event should contact Laurie Risner (773-834-7488) risner@bsd.uchicago.edu



MENTORS

- Mentoring as part of program structure.
 - “Speed mentoring”
 - PDA Advisory Committee
 - Equity Group
 - Faculty presenters in workshops
- Provide formal training
 - Entering Mentoring (HHMI - Univ. of Wisconsin)
 - Facilitating Mentoring Workshops at professional meetings
 - Academic Affairs quarterly sessions and annual retreat
 - CTSA - Mentor-Mentee pairs
- Create job market cohorts
 - IRACDA (Teaching Mentors)
 - Biotech (Industry Mentors)
 - Alums and local mentors
- Encourage good mentoring



CHALLENGES TO BE ADDRESSED

- ◉ Term limit – where do postdocs go next?
- ◉ Efflux of women and URMS
- ◉ Influx of international postdocs
- ◉ Trainees vs. workforce
- ◉ Mentoring
- ◉ Current conditions/unions
- ◉ Career paths
- ◉ Changing characteristics
- ◉ Evolving Responsibility of institution, funding agencies, etc