

Career Opportunity in a Teaching Postdoc

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Overview

- Introduction to Teaching Postdocs
- Determining if a Teaching Postdoc right for you
- Distinguishing Teaching Postdoc Opportunities
- What I would do differently

What is a Teaching Postdoc?

A TRAINING PROGRAM THAT PREPARES POSTDOCTORAL RESEARCHERS FOR ACADEMIC CAREERS

A teaching postdoc combines...

Traditional mentored research training with...



Teaching training and experience



<http://www.dfoam.ecampus.utah.edu/utah-tech/images/researchLab.jpg>

http://www.kingsportnc.com/images/college_classroom_2_08ba.jpg

These programs usually involve...



- Research productivity
 - Research progress
 - Publications and presentations
 - Funding applications
 - Student Mentoring
- Pedagogy Training
 - Education and instruction workshops/courses that teach Teaching
- Teach Courses
 - Graduate or undergraduate
 - Small modules, Development of an entire course (with/without TAs), or BOTH

<http://www.insidejournal.com/5000000-juggle.jpg>

Who should consider a teaching postdoc?

As with all postdocs,
You must **DECIDE** if a teaching postdoc is right for you...

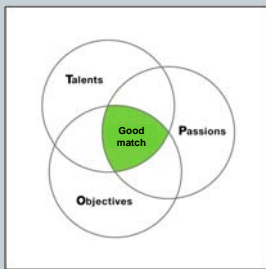
You may consider want to consider a Teaching Postdoc if...

- You want to teach
 - Research-1
 - Medical School
 - Undergraduate
 - Community college
 - Other
- You need teaching experience/perspective
 - Liberal Arts institution – teaching/mentoring students, pedagogical training
 - Science administration at a university, government, foundation
- You want to determine (demonstrate) your proficiency with the requirements for faculty success– balancing research, teaching, and service
 - Gain insights from faculty and develop collaborations
 - Get your “foot in the door” for future job openings

If you're unsure, work backwards...

- Where do you see (want to) yourself in 10, 5, and 2 years?
- What impact do you want to have?
 - At the end of your career, you want to have achieved/contributed what?
 - You want others to say that you contributed what?
- How and where do you position yourself to accomplish these goals and achievements?
- What's your ideal position? (at least your idea at the moment)

Your ideal position should be here...



- Think about where your talents, passions, and (career) objectives intersect
- Exclude career paths that you definitely do not want or don't interest you
- What are you left with...
- What skills/experience do you need to obtain and excel in that position?
 - If you don't know, ask people on that career path

U. Abu, How to Build a Motivated Research Group (2010) Molecular Cell 37(1):151-152.

Factors to consider when investigating Teaching Postdocs

REMAIN FOCUSED ON YOUR PRIORITIES AS YOU DIFFERENTIATE TEACHING POSTDOC OPPORTUNITIES...

Program Considerations...

- Funding source and mission
- Application process, timing, eligibility
- Postdoc funding and duration
- Timing and effort of required program components
- Time in lab
- Teaching component– when, where, role
- Level of faculty and institution support
- Lab identified pre/post acceptance into program
- PIs with matching research interests and appreciation for your goals
- Options to perform research at other local institution
- Competitiveness and placement of trainees
- Age of program
- Lifestyle compatibility

Variety of Teaching Postdoc Opportunities

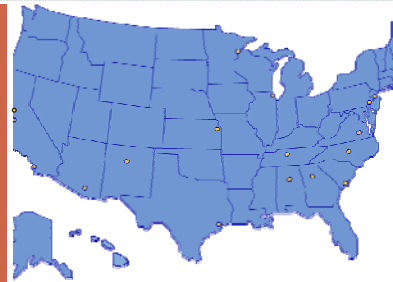
Carefully determine which opportunity fits your career and personal goals *BEST!*

Institutional & Private Foundation Programs

School & Program	Length	Teaching component	Other
Univ of Georgia - Postdoctoral Teaching Fellows	3 years	Temporary Asst. Prof. at the U of Georgia	Teach ~5 courses per year, but no more than three preparations
Texas A&M Univ - Teaching in the Biomedical Sciences	2 years	Teach undergrad, grad, & professional levels; use classroom as research lab	Emphasis on scholarship of teaching and educational research; publish in biomedical education journal; present at national teaching conference
Iowa State Univ - Program for Innovative Undergraduate Science Education (HHMI)	1 year renewable	Develop activities and lab materials to promote student learning	Develop and assess goals for student progress in Biology and Chemistry
St. Joseph's Univ - Signature Program Teaching Postdoc	1 year (Renewable up to 3)	Teach intro biology and develop course in area of expertise	Contribute on an established research initiative within the department
Haverford College - Teaching Postdoctoral Fellows (HHMI)	???	Lecture or lab-course based on department needs	Research and teaching at liberal arts institution
*Notre Dame - Edward Sorin Postdoctoral Fellowships	2 years	Teach 3 classes per year	Open to Notre Dame grad students only
*Princeton Univ - Council of Science & Technology	3 years	Co-teach 1 course per semester	Teaching experience weighed in the admission decision

<http://www.nigms.nih.gov/Training/CareerDev/PartInstIRACDA.htm>

Sponsored by the NIGMS, the 17 funded IRACDA programs combine mentored postdoctoral research training with teaching assignments at minority-serving institutions (MSIs)



Goals

- Prepare postdoctoral researchers for careers in academia
- Encourage pursuit of research careers by under-represented groups
- Develop and maintain collaborations between R1-institutions and MSIs

Institutional Research And Career Development Awards (IRACDA) Programs

<http://www.nigms.nih.gov/Training/CareerDev/PartInstIRACDA.htm>

IRACDA Programs

Name	School	Length	Teaching component	Teaching institution	Other
MERIT	Univ of Alabama B'ham	3 years	Develop & teach course with mentor (year 3)	Stillman College, Miles College (within 50 miles)	Mentor summer undergrad research interns
PERT	Univ of Arizona Tucson	3 years	Teach 1 semester course and lab	Pima Community College (nearby)	Develop undergrad lab exercise
Professors for the Future	UC San Diego	3 years	3 lectures per semester at SDSU	San Diego State Univ (SDSU)	Research at UCSD or SDSU, grant submission
ISIS	UC San Francisco	4 years (1 PI + 3 ISIS)	Teach course with mentor (year 3)	San Francisco State Univ (SFSU)	Employee benefits, require previous diversity efforts

<http://www.nigms.nih.gov/Training/CareerDev/PartInstIRACDA.htm>

IRACDA Programs (page 2)

Name	School	Length	Teaching component	Teaching institution	Other
FIRST	Emory Univ	3 years	Design & teach 1 semester course (year 3)	Spelman College, Morehouse College & School of Med, Clark Atlanta Univ (within downtown Atlanta)	Develop online version of course
NU-START	Northwestern Univ	3 years	Teach 1 or more courses (year 3)	Northeastern Illinois University (7 miles away)	Writing course for grant & teaching philosophy preparation
KU-IRACDA	Univ of Kansas	3 years	Teach Biology course and seminar course (year 2)	Haskell Indian Nations Univ (4-year tribal college)	Seminar course in postdoc's area of expertise

<http://www.nigms.nih.gov/Training/CareerDev/PartInstIRACDA.htm>

IRACDA Programs (page 3)

Name	School	Length	Teaching component	Teaching institution	Other
TEACRS	Tufts Univ	3 years	Design and teach course (year 2 or 3), guest lecture at partner schools	Pine Manor College, Univ of Massachusetts Boston, Bunker Hill Comm College	Research center supports research progress
UMN-IRACDA	Univ of Minnesota Duluth	3 years	Pedagogy & lab teaching emphasis, on-line and problem-based courses	Lake Superior College, Fond du Lac Tribal & Community Coll (northern MN)	Targeting Native American participation in science
ASERT	Univ of New Mexico	3 years	Design and teach course (year 3)	Central NM Comm Coll, New Mexico State Univ	Development of teaching portfolio

<http://www.nigms.nih.gov/Training/CareerDev/PartInstIRACDA.htm>

IRACDA Programs (page 4)

Name	School	Length	Teaching component	Teaching institution	Other
SPIRE	U of North Carolina Chapel Hill	3 years	Teach intro- & upper-level courses (year 3)	Fayetteville State Univ, Johnson C. Smith Univ, NCA&T Univ, NC Central Univ, UNC-Pembroke	Join teaching institution faculty for 2 full-semester
PENN-PORT	Univ of Pennsylvania	3 years	Teach established & new courses (year 2)	Lincoln Univ, Delaware County Comm Coll, Rutgers Univ Camden Campus NJ	Mentor jr. PENN-PORT postdocs to teach courses
MUSC-Clafin	Medical Univ of South Carolina	3 years	Teach for 25% of time (years 2-3)	Clafin Univ (77 miles away)	

<http://www.nigms.nih.gov/Training/CareerDev/PartInstIRACDA.htm>

IRACDA Programs (page 5)

Name	School	Length	Teaching component	Teaching institution	Other
Scientist-Educator	Vanderbilt Univ	3 years	Enroll in TA, and teach gross anatomy course (year 1, 2, and 3 respectively)	Meharry Medical College	Emphasis on medical education
HEART	Baylor College of Medicine	3-4 years	Teach a course for 2 semesters (year 2-3)	St. Thomas Univ, Univ of Houston Downtown, Prairie View A&M Univ	
Stanford University			Contact: puglisi@stanford.edu		
Univ of Med & Dentistry of NJ			Contact: leibowitz@umdnj.edu		
Virginia Commonwealth Univ			Contact: pbfisher@vcu.edu		

<http://www.nigms.nih.gov/Training/CareerDev/PartfastIRACDA.htm>

Also keep in mind...

- PI's funding status – can support you for 1-2 years?
- Not traditional postdoc – make sure PI understands this
 - Your project – 2 years or additional funding from PI
 - Type of research project is important!
 - Opportunities to mentor students in lab
- Time to publication in that lab
- OPA at institution

Create your own Teaching Postdoc

- Attend Science Education Conferences to grow your network, find teaching mentors, find established programs/positions, MARKET YOURSELF!
- Identify a supportive research PI who values teaching
- That Institution should have
 - OPA
 - Center for Teaching & Learning or Faculty Excellence
 - Nearby teaching institutions
- Identify teaching opportunities
 - PIs teaching load
 - Guest lectures on campus or at nearby institutions
 - Summer courses
- Find Funding – HHMI, NSF, National Science Teachers Association (NSTA), Association of College and Undergraduate Biology Educators (ACUBE), National Postdoc Association (NPA)

Perspectives after the teaching postdoc...

MY PATH...

Questions I'm often asked...

- Why did I choose a teaching postdoc?
- What were my concerns as I began my program?
 - I was so afraid I was making the wrong choice
 - Will I be less competitive?
- Was this a useful experience and valuable to the next phase of my career?
- What would I do differently?
 - Allow my research interests to dominate my Teaching Postdoc choice.
 - Grad school taught me to keep my options open and never put all my eggs in one basket. I limited myself...not in undertaking my teaching postdoc, but in thinking that relegated me to a non-PI career – I never considered that I might change my mind about wanting to be a research-1 PI!
 - Establish a committee of scientists within my department to help me monitor my research progress
- Remember you can always change your mind... so position yourself for excellence no matter what you choose!
- And, don't be deterred... you have the tools to create the teaching postdoc of your dreams – you can make this happen!

Acknowledgements

- SPIRE Postdoctoral Training Program
- ASM CGPE
- UNC Office of Graduate Education
- Grad Student and Postdoc Interviewees

Questions????