



RUTGERS



Advice on how to prepare for educational careers with a biology PhD

- Get *experience* by volunteering in after school programs, museums, and zoos. Programs like ASPIRA, Big Brothers Big Sisters, etc. will provide teaching opportunities. Also the NYAS has the Scientist-In-Residence Program (<http://www.nyas.org/WhatWeDo/ScientistsInResidence.aspx>)
- During your postdoc you could get a part time job at a community college as an adjunct. There are job fairs for adjuncts at least once a year but you can also contact the Department director directly if you have already identified an institution that you really want to work in.
- Take the Scientists Teaching Scientists class at NY Academy of Sciences. This is a very specific course for scientist with teaching experience, but no educational background. American Society for Microbiology, American Writers Association and other associations also have educational workshops.
- When you interview, remember that the things that you do in graduate school such as teaching lab techniques to undergraduates and giving seminars are great preparation for teaching.
- For K-12 you need to register and get licensed with the state. Visit the NJ Department of Education web site to see licensing requirements. Licensing requirements are due to change in 2016 (and are a moving target, of late). There are many alternate route programs; regardless of the one in which you choose to enroll, the State of NJ requires all alternate route candidates to enroll in a 24-hour Pre-Service course. Without a certificate of completion for this course, you will not get eligibility to teach in K-12 setting and final licensure. The pre-service course is offered at many community colleges, including Middlesex County College.
- Be aware of the Next Generation Science Standards (<http://www.nextgenscience.org/>) for curriculum. You do not have to learn the detailed standards, just the overall scope of the standards.
- Be familiar with new teaching techniques such as the flipped classroom. Also, since the world is hooked on technology, think about your technology skills and how you could incorporate them into the classroom. Clicker questions are popular and keep the kids engaged, as well as Youtube videos and pop songs. Right now online teaching is the new big thing, so being knowledgeable about the techniques used for online teaching is a plus. Rutgers has Online Hybrid Teaching Symposium every year.

- Prepare a Teaching Portfolio which includes your Teaching Philosophy, Samples of Your Teaching Materials, and Evaluations. Your teaching philosophy statement is as important as your resume. It is part of your portfolio, but in many cases you are required to present a cover letter, resume and teaching philosophy statement before you even get an interview.
- Some of the time you get materials and curriculum from the person who was teaching the course prior to you so you don't have to create everything from scratch but you do edit it to your own style and update it over time. A successful educator should be able to deal with both scenarios: continuing an existent course for the Department or creating a new course. This is something that should be asked in the interview as it varies from institution to institution.

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