**Postdoctoral Researcher Mentoring Plan**

As a young faculty member who received excellent mentoring upon arriving in her new position, the PI is well prepared to mentor a postdoctoral researcher who is at a career stage only a couple years from becoming faculty, or pursuing a different direction. One of the best ways to make career decisions about pursuing academia is to be fully exposed to all aspects of the job beyond research in the lab, from mentoring students, to teaching, to grant writing. Postdocs considering a career at a small liberal arts college that values cutting edge research will be particularly well matched for this position. Effort will be made to give access to all aspects of faculty life, including departmental meetings and workshops when desired.

The request for a postdoc in this proposal is somewhat unusual in that part of the expectations will be to teach one full course each year, which is considered half a teaching load at Mount Holyoke. The PI will first co-teach with the postdoc, sitting in on his/her classes and offering feedback. The PI uses pedagogical tools such as “Just in Time Teaching” (preclass questions submitted on a website) and would like to implement the use of “clickers” in the introductory courses to get real-time student feedback on comprehension. The postdoc will be invited to attend any faculty workshops on science education (or other subjects) that are of interest. Past workshops have examined “best practices” in science education, peer led mentoring, and how to maintain a sustainable research program at an undergraduate institution.

The postdoc will be expected to work directly with undergraduate students in the lab. The PI will engage the postdoc in discussions of appropriately designed undergraduate projects, as well as how to motivate and effectively guide students with a range of personalities, expectations, and backgrounds in the lab. The PI is as hands-on with the students as time permits, but being a small college with only undergraduates, postdocs at Mount Holyoke generally take on a wide range of responsibilities in the lab and serve as direct mentors and role models to the students. This prepares them well for taking the helm of their own lab in the future.

It is virtually impossible to be at Mount Holyoke without taking part in the dialogue surrounding ways to increase the participation of women and minorities in the sciences, and in physics in particular. The PI taught a course on Gender in Science, and is prepared to provide as much discussion, or reading material, as the postdoc may wish to engage with.

The postdoc will have regular interaction with the PI, discussing science, teaching, lab management, and mentoring. The postdoc will be funded for travel to at least one national conference each year. Feedback will be given on all abstracts, presentations, and papers, as well as applications for future jobs and grants.