NIH Award from the National Cancer Institute

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School of Education and Social Policy

- **Project:** Summer Research Internships and Teaching Positions
- **Start Date:** June 1, 2009
- **Total Award Amount:** $113,715

**How the results of this project will benefit society:**
The Oncofertility Saturday Academy summer internship program will support undergraduate students along their trajectory toward science or health-related research majors and careers and enable current high school biology teachers to develop their hands-on research skills. Summer interns will gain valuable research experience. The teachers will develop curriculum that will expose a large group of high school students to the excitement of cutting-edge health-related research. The proposed funding will support four full-time paid summer positions — two for undergraduate students, two for teachers — each year for two years, and thus are responsive to the spirit of NIH stimulus funding.

**The problem the project is trying to solve:**
OSA is a two-year science program offered by the Oncofertility Consortium in partnership with Young Women’s Leadership Charter School in Chicago. The program is administered by the Office of STEM Education Partnerships at Northwestern’s School of Education and Social Policy. OSA is designed specifically for juniors and seniors from the Young Women’s Leadership Charter School. The program immerses participants in the active research program being conducted by the Oncofertility Consortium which is exploring and expanding options for the reproductive future of cancer survivors. Supplemental funding will provide employment to two undergraduate students and two high school biology teachers for a paid summer research experiences for two years (2009-2010).

These two students will work in Dr. Woodruff’s oncofertility research laboratory at Northwestern’s Feinberg School of Medicine and will be mentored and supervised by Dr. Woodruff, and her students and staff. Student interns will participate in active, ongoing research projects being conducted in the lab, with a particular focus on studying the impact of cancer and cancer treatments on fertility and on innovative approaches to preserving fertility for cancer patients and survivors. At the end of the summer, students will prepare scientific papers on their research and present their work to the entire oncofertility lab. This will help them develop these important communication skills and give them experience presenting their research in a professional setting.

The teachers will engage in active research projects in the laboratory, and will have the opportunity for extensive interaction with and mentoring by Dr. Woodruff, and her students and research staff. The teachers will be expected to translate their research experiences into new student activities that can be used in OSA or in their own classrooms.

During this part of their summer experience, teachers will be supervised by Dr. Jona and OSA curriculum developers from Northwestern’s School of Education and Social Policy.

**How this project will work:**
Summer interns will be followed longitudinally during their undergraduate programs to determine what kind of impact this summer research internship had on their success and persistence in science or health-related research majors, success in future undergraduate research opportunities, and graduate school application successes.

The high school science teachers will not only enrich their understanding of current, cutting edge research, but also produce activities that will expand the impact of OSA to other schools and classrooms. The need to translate personal research experience into curriculum materials that can be used by others provides a unique and valuable context that has been found to support powerful teacher learning and application of new content and pedagogical knowledge and skills.

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