Emma Previato* (ep@bu.edu), Department of Mathematics and Statistics, Boston University, Boston, MA 02215-2411. Funding and Mentoring Projects at Boston University.

The talk will describe the Undergraduate Research Opportunities Program at Boston University, created in 1997. Awarded on a competitive basis, it provides a work-study research stipend for students to experience research, in partnership with a faculty member. Students present a poster at the annual symposium. The experience is quite different from a standard Research Experience for Undergraduates, in that the mentoring relationship begins at the application process, is one-on-one throughout the experience, and typically also includes professional focus and professional development. The presenter has been an above-average active participant (two students per term, including the summer) since inception and will highlight general strategies to design, conduct, and report a research project, and follow through with professional development. She will illustrate specific projects, with the goal of showcasing the diversity of techniques, student skills and styles that students have exhibited, ranging from areas such as mathematical finance, to cryptography, quantum mechanics to climate change, computer simulation to projective geometry. Both strengths of, and challenges encountered by, different students at different stages of learning will be exemplified. (Received September 09, 2016)