MOLLY BRIGHT

NIH-Oxford Scholar 2006

Degrees: Massachusetts Institute of Technology, B.S., Physics, 2006

Research Interests: Imaging, Biophysics, and Neurobiology

Molly Bright graduated with a Bachelor of Science in Physics from the Massachusetts Institute of Technology in 2006 with a near-perfect grade point average. Her interest in scientific research began as a member of her high school Science Olympiad teams and blossomed during the summer after her sophomore year of college when Molly received a Department of Energy National Undergraduate Fellowship in plasma physics. The fellowship brought Molly to the University of California at San Diego and General Atomics where she worked to create a sub-micron x-ray point source to be used in imaging the hydrogen ice targets that will one day fuel inertial fusion reactions. She also adapted an existing plasma focus device to form a novel multi-burst x-pinch. One year later, Molly received one of ten National Science Foundation Fellowships in Optics and Photonics through the International Research Experience for Undergraduates. She spent 12 weeks at the Max Born Institute for Nonlinear Optics and Ultrafast Spectroscopy in Berlin, Germany. She explored new ways to create ultrashort MIR and FIR transients and apply them to novel spectroscopy tests on GaAs semiconductors. In addition to these prestigious fellowships, Molly was also a MIT Burchard's Scholar and a MIT Arts Scholar. Molly is an accomplished oboist and won a MIT Emerson Scholarship for music private study and the Naess Award and Epstein Award for music performance. She served as president of the MIT Symphony Orchestra and performed for the disadvantaged at homeless shelters and residents of nursing homes in Boston and Cambridge. Recently, Molly joined the MIT Laboratory for Nuclear Science doing computational analysis for the BaBar collaboration based at the Stanford Linear Accelerator Center. In her graduate work, she hopes to apply new imaging technologies to studies in neuroanatomy. She states, "Examining breaking science headlines continually reaffirms my belief that the most intriguing and important future science will take place in the evolving interfaces between the traditional disciplines."