

## Previous Directed Research Students & Projects

### 2009

- John M. Mongelli - *Simulation and Optimization of an Ultrafast Laser Cavity*
- Chris Shanor - *On Sommerfeld's fans for diffraction by a triangular aperture*
- Asher Sussman - *Simulations for a partially liquid-filled Fabry-Perot detection sensor of surface deformations*
- Javier Yanez - *Simulation of liquid surface deformation measurement using laser beam profile distortion*

### 2010

- Steve Haim - *Simulation of an optomechanical cavity with an optical spring mirror*
- Phat Lu - *Measurement of the properties of a Bose Einstein condensate using laser beam diffraction*
- Sean Keller - *Trapping of optical elements using novel laser beams*
- Nick Sischka - *Measurement of laser-induced plasma properties using laser beam diffraction*
- Christine Bradley - *Propagation of novel laser beams in optical systems with vortex retarders*

### 2011

- Eric Ramon - *First-order optical system simulator*
- Matthew Barnum - *First-order optical system simulator*
- Joe Cocchi - *Reflection of novel laser beams from metallic and dielectric cones*
- Steven Glass - *Microwave propagation in filament-induced plasma waveguides*
- Lena Wolfe - *Laser scattering from holographic gratings*
- Jeffrey Chia - *Pulse dynamics of a femtosecond Amplification Cavity (fsAC)*
- Sam Martin - *Spatial dynamics of a femtosecond Amplification Cavity (fsAC)*