Research Experiences for Undergraduates
The College of
William and Mary in Virginia
Summer 2002

Paul E. Brewer, (Mentor: Gregory D. Smith), *Effects of Input Frequency and Reticular Inhibition on a Firing-Rate Model of Retinogeniculate Transmission.*

David Charlot, (Mentor: Michelle Shinn), *Reduction of heat diffusion in metals during laser welding using two-laser setup.*

Kirsten Fuoti, (Mentor: Todd Averett), *Characterization of Polarized ^{3}He Target Cells.*

Brian Glover, (Mentor: Steve Benson), *Theoretical Modeling of FEL pulse propagation.*

Scott Hertel, (Mentor: Kenneth Petzinger), *An Exactly Soluble Model of an Atom-like System and its Application to Improving Density Functional Approximations.*

J. Hippert, (Mentor: Mike Finn), *Development of New Position and Current Microwave Cavity Monitors for Parity Violation Experiments at Jefferson Lab.*

Jason Hoffman, (Mentor: Dennis Manos and Paul Denehy), *Spectral modeling for non-intrusive temperature and pressure measurements using Fourier transform infrared spectroscopy.*

Brian Koch, (Mentor:William Cooke, and Saffron Mills), *Cavitation in Liquids by a Pulsed Focused Laser Beam.*

John F. Lesoine, (Mentor:Anne Reilly), *Magneto Optical Kerr Effect Studies of Exchange Biasing.*

Mark Maxwell, (Mentor: Gunter Luepke), *Vibrational Dynamics of Interstitial Oxygen in Silicon.*

K. J. McGrath, (Mentor: W. J. Kossler, and D. Humes), *Martian Armageddon: Meteoroid Impact Hazards to Mars Colonizers.*

Marc McGuigan, (Mentor: Todd Averett), *Measuring the Wall Thickness and Density of a ^{3}He Target Cell.*

Joseph Musielski, (Mentor: R. Wincheski), *Shape Memory Alloys.*

Vien Nguyen, (Mentor: Gregory Smith), *Modeling of Intracellular Calcium Signaling that Accounts for Domain Ca{2+} Activation.*

Lauren O'Malley, (Mentor: Gwyn Williams), *Building a Terahertz Spectrometer.*

Kevin Rudd, (Mentor: Mark Hinders), *Ectobot Sensor System Development*

John Sinko, George Vahala, *An Improved Fluid Algorithm for Landau Damping in Plasmas*