

## 2009 RIT Goldwater Scholars (Written 4/30/09 by Suzanne O'Handley)

Three RIT undergraduates, Jessica Alexander from Nashua NH, Karl Michael Martini Jr. from Pelham MA, and Katherine Varandas from Hampden MA have been named 2009 Goldwater Scholars. The Barry M. Goldwater Scholarship is the premier undergraduate award for students interested in pursuing a career in mathematics, the natural sciences, or engineering. The award is based on academic merit, and virtually all winners plan on pursuing a Ph.D. Many have extensive undergraduate research experience as well. This year, 278 sophomores and juniors were selected from 1,097 nominees. The \$7,500 per year scholarship covers tuition, fees, books, and room and board. Goldwater Scholars compose an elite group with 73 Rhodes Scholarships and 102 Marshall Awards being awarded to past Goldwater Scholars.

Jessica Alexander, a junior majoring in both Biochemistry and Biotechnology, will receive \$7500 for her senior year. Jessica has been conducting physical chemistry research with Dr. Christopher Collison in the Department of Chemistry at RIT. Her research is currently focused on the interactions between carbon nanotubes and organic molecules, which has been published in the Journal of Physical Chemistry; she has also presented this work at the National Meeting of the American Chemical Society. Additionally, Jessica has done research through the Harvard Stem Cell Institute Summer Internship Program. Jessica plans to obtain a Ph.D. in Biochemistry or Molecular Biology with a focus on the relationship between stem cells and cancer, and envisions a career as a PI of a biomedical research laboratory. Jessica holds an RIT Presidential Scholarship, a Nathaniel Rochester Society Scholarship, and a Scottish Rite Abbott Scholarship. She is in the RIT four-year Honors Program and is an RIT Chemistry Research Scholar.

Karl Michael Martini, Jr., a junior Physics major, will also receive \$7500 for his senior year. Michael has been involved in research since high school. He has worked on granular materials at the University of Massachusetts Amherst, chaos theory at Western New England College, and since the spring of 2008, has conducted research in the RIT biophysics research laboratory of Dr. George Thurston on the theoretical electrostatic properties of Gamma-B crystallin. His research on granular materials won him a semifinalist award for the Intel Science Talent Search. Michael plans to obtain a Ph.D. in applied physics, and conduct computational and theoretical research and teach at the university level. Michael holds an RIT presidential scholarship, is in the RIT four-years Honors Program, and was awarded the Norman A. Miles Award for Academic Excellence. Michael is also in the RIT Orchestra.

Katherine Varandas, a junior Biotechnology major, will also receive \$7500 for her senior year. Kate has done research in Dr Burns Blaxall's laboratory in Cardiovascular Medicine at the University of Rochester's Aab Cardiovascular Research Institute since the fall of 2007. Kate's research centers on the role of the novel gene Mena in heart failure, and she has presented her work at the Upstate New York Cardiovascular Research Symposium. Kate plans to obtain a Ph.D. in Genetics or Molecular Biology, and pursue an academic career at a primarily undergraduate institution. Kate holds an RIT Presidential Scholarship, and a Julia and Charles Cala Nathaniel Rochester Society Scholarship. Kate is a member of the RIT Honors Program and in the RIT Biological Sciences Research Scholars Program. Kate is a resident advisor and has also been involved as a peer mentor for the first year enrichment program, and supplemental instruction leader for the academic intervention and mentoring program.