



URECA Researcher of the Month - Margaret Brown

moira, chair, Anne Moyer, Arthur Samuel, rlm,
Karen Kernan to: Yacov Shamash, Nancy Squires, Eric Kaler,
Samuel Stanley

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Cc: Mark Aronoff, Donna Di Donato

Bcc: F.Jason Torre

The URECA website regularly features students' perspectives on research and/or creative activities.

This month's featured student is **Margaret Brown**, an Honors College applied mathematics & statistics major (class of 2010) who has worked with Dr. Anne Moyer, Department of Psychology, since she was a junior at Longwood High school in Middle Island. Margaret received a Howard Hughes Medical Institute pre-freshman fellowship in 2006; and for a follow-up project with Prof. Moyer this past summer was awarded a URECA fellowship (2009). Margaret Brown is a co-author on a publication with Prof. Moyer in the *Journal of Health Psychology*, Vol. **13(7)**, 862-865; she is also first-author on a publication with Prof. Moyer entitled "Predictors of awareness of clinical trials and feelings about the use of medical information for research in a nationally representative US sample" that was recently accepted for publication in *Ethnicity and Health*. Margaret Brown has worked with Aerodyne Aerosol Mass Spectrometer data, applying statistics to climate modeling using aerosol composition data, under the direction of Dr. Robert McGraw at Brookhaven National Laboratory, Environmental Sciences/Atmospheric Sciences. That project at BNL was funded by the DOE Science Undergraduate Laboratory Internship (SULI) program in summer 2008; Margaret has continued to be involved as a research assistant in the Atmospheric Sciences Division, working with Dr. McGraw. More recently, Margaret has been exploring theoretical mathematics topics for her senior Honors College project, mentored by Prof. Moira Chas of the Department of Mathematics. Her thesis project involves computer-based analysis of surface topology, uncovering underlying patterns in the number of self-intersections of curves on surfaces, as the length of these curves tends to infinity — and will be presented at the upcoming Honors College symposium in May 2010. Margaret will be presenting her ongoing work with Prof. Moyer at the URECA [Celebration/Psi Chi](#)-Psychology conference & poster event on **April 28, 2010**. Last summer, Margaret assisted with the [Math Midway](#) Interactive Exhibition of the World Science Festival Street Fair (June 2009) in Washington Square Park, NYC where she demonstrated a tricycle with square wheels. Margaret currently is applying to Ph.D. programs in applied mathematics; and is also studying for the second in a series of actuarial exams.

For the full interview/feature, please go to:

<http://www.stonybrook.edu/ureca/researcher-month.shtml>

Past Researchers of the Month:

<http://www.stonybrook.edu/ureca/previous.shtml>

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