

## Lochner Earns NSF Fellowship and SUNY Chancellor's Award

Claire M. Lochner (BS EE '11) was recognized with a 2011 National Science Foundation (NSF) Graduate Research Fellowship. She was also honored with a State University of New York (SUNY) Chancellor's Awards for Student Excellence, for SUNY students who have best demonstrated the integration of academic excellence with other aspects of their lives.



Claire M. Lochner

Lochner, a Barry M. Goldwater Scholar and recipient of UB's

John D. Gallatin International Honors Scholarship, has conducted several research studies at UB and UCLA and has been published internationally. She has also served as an officer of Tau Beta Pi, Engineers for a Sustainable World, and the Institute of Electrical and Electronics Engineers. Lochner is entering the PhD program at University of California at Berkeley's Department of Electrical Engineering and Computer Science, with a departmental graduate fellowship.

## NFTA Good Going Award for Environmental Affairs Department



Mike Alcazaren

Under the leadership of AE and ME student **Mike Alcazaren**, the UB Student Association (SA) Environmental Affairs Department won the 2011 Good Going Award for Best Earth Day Outreach for an Organization. Sponsored by the Niagara Frontier Transportation Authority (NFTA) and given at the Annual Buffalo Niagara Earth Day

Celebration, the award recognizes outstanding efforts of regional organizations to improve the environment and promote environmentally sustainable habits.

Alcazaren stated the newly-formed department works to create a culture of climate awareness in the SA and on campus. The group has quickly distinguished itself with a rich slate of events that appeal to the larger community, as well as to students.

The department was formed in the spring of 2010 after the UB chapter of Engineers for a Sustainable World (ESW), a national engineering student organization, successfully proposed the idea to SA.



May Cheung with her winning research poster

## Celebration of Academic Excellence: Student Posters

The following students presented at UB's Center for Undergraduate Research and Creative Activities (CURCA) Celebration of Academic Excellence.

ISE student **May Cheung** earned the event's top award, the 2011 Undergraduate Research and Scholarship Award of Distinction, for her research project (listed below) with ISE Assistant Professor **Jun Zhuang**.

The following student-mentor teams participated on these projects:

### BME:

**Yang Li** with BME Assistant Professor **Chulhong Kim**: "Recovery of optical absorption in quantitative photoacoustic tomography"

### CBE:

**Karl Barber** with CBE Assistant Professor **Sheldon J. Park**: "ERK2-peptide interaction on yeast cell surface"

**Ryan Barton**, with CBE's SUNY Distinguished Teaching Professor **Carl R. F. Lund**: "Study of Acid Catalyzed Hydrolysis of Fructose and Formation of Humins"

### EE:

**Derek Brim** with Jennifer Zirnheld: "The Characterization of Electrochemical Devices"

**Antonio Upia** with Jennifer Zirnheld: "Rechargeable Electrochemical Energy Storage"

### EnvE:

**Elizabeth Hennessey** with Ecosystem Restoration through Interdisciplinary Exchange (ERIE) Director **David Blersch**: "Use of Algae in Pollutant Removal"

**William E. Seychew** with CSEE Professor **Joseph Atkinson** and Geography Professor Sean Bennet: "Hydraulic Cover Stones"

### ISE:

**May Gin Cheung** with **Jun Zhuang**: "The Games Between Oil Companies and the Government"

### MAE:

**Josh Weisberger** with MAE Professor **Joseph Mollendorf**: "Heat Transfer in a Foam Insulated Brick"

### ME:

**Alex Borsuk** with New York State Center for Engineering Design and Industrial Innovation Research Associate **Andrew Olewnik** (BS '00 MS '02 PhD '05 ME): "Understanding Bicycle Riding Dynamics"

**Michael Sparks** with EE Assistant Professor **Jennifer Zirnheld** (BS '93 MS '97 PhD '04 EE): "Various methods to characterize electrochemical cells"

### Research Exploration Academy

Students applied their research skills to biomedical engineering topics for Research Exploration Academy projects, which were executed under the direction of Academic Director, CSEE Professor **James N. Jensen**. All projects listed below were mentored by Jensen and Biology student Jennifer Trapani.

- Vivaswath Ayyar (Biology), Anna Krasopoulos, Susan Lorenz (both of Pharmacy), **Varun Vruddhula** (AE): "Rebuilding the body: An insight into the potential of stem cells"
- Thomas Cleland (Pharm.), Margaret Camanzo (Psych.), Rachel Sokoloff (Sociol.), **Chihu Ikechi-Uko** (ME): "Inkjet Organs: An Examination of Computer-Aided Tissue Engineering and Bioprinting"
- Justin LaMarca (Pharm.), Natalie Licata (Linguistics), Rauwolfia Mannan (Biology), **Lumiere Valentine** (AE): "Reducing Liver Transplantation Rejection Rates with Bone Marrow"
- Kan Hong Zheng (Undecided), Shirin Vartak (Biol.), **Paul-Andrae G. Lewis** (CSEE), Aaron Wray (Biochem.): "Artificial Circulatory System: Can It Be Done?"