

## MSTP STUDENT DESCRIPTION

NAME: Thomas Loehfelm

E-Mail address: TWL@buffalo.edu

Undergraduate College/University attended: College of the Holy Cross, Worcester, MA

Major: Biology and English

Years in MSTP (1-8): 7

DEPARTMENT: Microbiology and Immunology

THESIS ADVISOR: Anthony Campagnari, PhD

### RESEARCH DESCRIPTION:

PhD Thesis title: Identification and Characterization of an *Acinetobacter baumannii* Biofilm-Associated Protein

Date of Completion (or expected) of PhD: May 2008

Research Description: *A. baumannii* is a Gram-negative bacterium that causes hospital-acquired infections. I've identified a large surface protein that enables this bacterium to form thicker biofilms, and have determined when and where this protein is expressed during biofilm development and maturation. I used classical microbiology, quantitative biochemistry, and advanced microscopic techniques to track expression of this protein in real-time in an actively growing biofilm.

### PUBLICATIONS / ABSTRACTS PRESENTED:

Loehfelm TW, Luke NR, Campagnari AA. Identification and Characterization of an *Acinetobacter baumannii* Biofilm-Associated Protein. *Journal of Bacteriology*, 2008, 190(3):1036-44

Loehfelm TW and Campagnari AA. Analysis of the Transcriptional Control of the *Acinetobacter baumannii* Biofilm-Associated Protein. American Society for Clinical Investigation/Association of American Physicians/American Physician Scientists Association Joint Meeting: Poster, April, 2008.

Loehfelm TW, and Campagnari AA. Identification of an *Acinetobacter baumannii* Homologue to the Staphylococcal Biofilm-Associated Protein. American Society for Microbiology, 107<sup>th</sup> General Meeting, Toronto, Ontario: Poster, May, 2007.

Howlett AJ, Loehfelm TW, Campagnari AA. Production and Characterization of a Monoclonal Antibody to the Lipopolysaccharide Core of *Acinetobacter baumannii*. American Society for Microbiology, 106<sup>th</sup> General Meeting, Orlando, Florida: Poster, May, 2006.

Loehfelm TW and Campagnari AA. Identification of a Large Surface Protein Conserved among Clinical Isolates of *Acinetobacter baumannii*. American Society for Microbiology, 18<sup>th</sup> Annual Western New York Branch Meeting: Poster, April, 2006.

Loehfelm TW and Campagnari AA. Production and Characterization of a Monoclonal Antibody Recognizing the LPS Core Polysaccharide of *Acinetobacter baumannii*. Upstate New York MD/PhD Research Conference: Poster, November, 2005.

### Oral Presentations

Loehfelm TW. Identification of an *Acinetobacter baumannii* Homologue to the Staphylococcal Biofilm-Associated Protein. Upstate New York MD/PhD Research Conference: Speaker, April 2007.

PROFESSIONAL/EDUCATIONAL MEETINGS ATTENDED (name of meeting, dates of attendance, location):

American Society for Clinical Investigation/Association of American Physicians/American Physician Scientists Association Joint Meeting, April 2008, Chicago, IL

106<sup>th</sup> General Meeting of the American Society for Microbiology, May 2006, Orlando, FL

107<sup>th</sup> General Meeting of the ASM, May 2007, Toronto, ON

Annual Meeting of the Western New York Branch of the ASM, May 2005, Buffalo, NY

Annual Meeting of the Western New York Branch of the ASM, May 2006, Buffalo, NY

Upstate New York MSTP Research Day, November 2004, Rochester, NY

Upstate New York MSTP Research Day, November 2005, Buffalo, NY

Upstate New York MSTP Research Day, April 2007, Syracuse, NY

AWARDS / HONORS:

Dean's List, Second year of medical school

Gold Humanism Honor Society

MEDICAL SCHOOL ACTIVITIES:

Orientation committee member, Fall 2003

Invited speaker, Medical Student Orientation, Fall 2004

Invited speaker, Medical Student Orientation, Fall 2005

Heart Smart, 2003-2004

Lighthouse Free Medical Clinic volunteer, 2002-2004

EXTRACURRICULAR INTERESTS:

Reading, YouTube-watching, SCUBA diving, taking care of my bulldog, too much TV, movies, Guinness, Belhaven Scottish Ale