

MSTP STUDENT DESCRIPTION

NAME: Max Mandelbaum

e-Mail address: mrm34@buffalo.edu

Undergraduate College/University attended: The Cooper Union

Major: BE in electrical engineering

Years in MSTP (1-8): ending year 4

DEPARTMENT: Mechanical engineering

THESIS ADVISOR: Dr. Hui Meng.

RESEARCH DESCRIPTION:

PhD Thesis title: **Hemodynamics and Metalloproteinases In Aneurysm Initiation**

Date of Completion (or expected) of PhD: Summer 2010

Research Description:

My research involves determining in vivo the etiology of aneurysm development and how such development is affected by varying hemodynamic insults. Also, how these hemodynamic insults correlate with the MMP pathway and how this leads to aneurysm formation are being studied.

PUBLICATIONS / ABSTRACTS PRESENTED:

Research Publications:

Gao, L., Mandelbaum, M. et al. Localized Molecular and Cellular Changes Associated With Intracranial Aneurysm Initiation In Response to Hemodynamic Insult (in preparation)

Abstracts:

Metaxa, E., Mandelbaum, M. et al. High Wall Shear Stress And Positive Wall Shear Stress Gradient Trigger The Initiation Of Intracranial Aneurysms. Abstract for podium presentation at the 2009 Summer Bioengineering conference. Lake Tahoe, CA.

Gao, L., Mandelbaum, M., et al. Early Molecular and Cellular Changes in Intracranial Aneurysm Initiation by Hemodynamic Insult. Abstract for poster presentation at the Arteriosclerosis, Thrombosis, and Vascular Biology Annual Conference 2009. Washington, DC.

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

AWARDS / HONORS:

MEDICAL SCHOOL ACTIVITIES:

EXTRACURRICULAR INTERESTS:

volleyball (with the med school team), soccer, running, bicycling, hiking, mountain climbing, fencing, investing, theatre, skiing/snowboarding, Japanese (language)