



Undergraduate Research Programs at the University of Rochester

A selection of programs with comments by recent participants.

For complete program listings please visit our website at jur.rochester.edu.

Graduate Education in the Biomedical Sciences

The GEBS (Graduate Education in the Biomedical Sciences) Summer Scholars Program provides summer undergraduate research opportunities to students interested in summer research experiences in biological research. The program is especially aimed at providing research opportunities in all aspects of biological and biomedical research to undergraduates who may be considering applying to graduate (PhD) or combined degree (MD/PhD) programs, under-represented groups in the biomedical sciences, and undergraduates with a potential interest in attending University of Rochester graduate programs.

GEBS provides a summer stipend and free housing so that participants can have an intensive immersion in laboratory-based scientific research. The program is further enriched through shared research seminars, social activities, presentations on graduate school and careers, and a final mini-symposium and poster session. All trainees work under the direct supervision of a participating faculty member for 10 weeks during the summer and present the results of their research at the formal poster session. For more information, see the GEBS program website, or contact Dr. Stephen Dewhurst at Stephen_Dewhurst@URMC.rochester.edu

Peter Sidor:

"The GEBS program provided my first opportunity at actual laboratory research. GEBS combines working on an independent project with lectures, discussions, and various other academic activities to give you an introduction into both research and a simulation of actual graduate programs.

I worked in the lab of Dr. Mingtao Zeng, helping with the construction of replication-defective adenoviral vectors for the development of an improved anthrax vaccine. I am currently undecided about future plans, but the GEBS program provided me with a solid research foundation which I am sure will be useful in whatever future direction I take.

This program is great for anyone considering any sort of future in research. I would highly recommend it to anyone who is considering graduate studies."

Varun Chowdhry:

"Under the GEBS program I studied post-transcriptional tRNA modification under Dr. Eric Phizicky in the department of biochemistry and biophysics. In addition to working on our own research project, we were provided with the opportunity to attend various seminars on the research of different investigators. This gave us the opportunity to learn about other forms of research.

I eventually want to go into research, and this gave me an excellent background in how biochemistry research is performed. The opportunity also helped me in various courses which I took this past year. I got the opportunity to work closely with graduate students, post-docs, and techs. I also made friends with other students in the program.

Through GEBS, not only did I learn a lot about the practical aspects of biochemical research, I developed critical thinking skills which helped me with future science courses. I would recommend the program to anyone who is considering a career in the biomedical sciences."

2004 UR GEBS Scholars

Erin Bressler

"Urokinase (uPA) Induced Smooth Muscle Cell Migration Involves Protein Kinase C Activation"

Advisor: Mark Davies

Erin Conway

"Durability of HSV-1 Amplicon Vector Directed Protein Expression *in vivo*"

Advisor: Steve Dewhurst

Amy Hein

"Characterization of CaMKII Expressing Neurons in the Avian Basal Ganglia"

Advisors: Ernest and Kathy Nordeen

Lidza Kalifa
“The mitochondrial genome maintenance protein Mgm101p”
Advisor: Elaine Sia

Aaron Merriam
“Purification and Characterization of Bovine Immunodeficiency Virus Reverse Transcriptase”
Advisor: Baek Kim

Woo-Sin Park
“RNA interference against the *C. elegans* male sensory neuron genes, *cwp-4* and *cwp-5*”
Advisor: Doug Portman

Pranav Shah
“*In vitro* CD4+ primed precursor-like (Thpp-like) Balb/c lymphocytes produce IL-2 but not IL-4 or IFN γ , and have increased expression of CD73”
Advisor: Tim Mosmann

The HOUR Program

The HOUR Program (History Opportunities for Undergraduate Research) offers students a chance to collaborate with History Department faculty members on their scholarly work. The program enables participants to implement skills and knowledge acquired in history courses, while providing a close look at what professional historians do. Students may undertake HOUR projects for independent study credit or for pay. For more information and an application, see the History Department website, or contact Prof. Joan Shelley Rubin at joru@mail.rochester.edu.

Caitlin Meives:
“Working with Professor Wolcott through the HOUR program has been a useful learning experience. As a history major who plans on pursuing history at the graduate level and as a career, I’ve gained valuable experience that will come in handy in future research projects and papers. In particular, I’m more aware of the myriad of research resources available through the library and I’ve become familiar with an important tool in historical research – microfilm. Also,

perusing old newspapers has been fascinating.”

Byron Raco:
“The best aspect of the program is the connection between the primary source research that I have been doing and the class taught by Prof. Jarvis in the same topic area. Prof. Jarvis has always found time to sit down and talk with me whenever I have had a question. I would certainly say that I have had a fun time working with the HOUR program. When I signed up, my main goal was receiving experience in a more hands-on, practical approach to studying history and this is exactly what I have gotten. For anyone interested in enriching their college experience I would urge them to try it out.”

Jason Gogniat:
“Working in the HOUR program with Prof. Rubin has given me the opportunity to make some extra money doing something enjoyable. Going through microfiche has been a lot more amusing than I thought. There have been many times I have burst out chuckling or smiling while reading about people’s past ideas, thoughts, or worries. This is also my first white-collar-type job and my first working experience where I feel like my contribution in working actually mattered. I have also gained some sense of what history research entails and how historians conduct their research.”

2003-04 HOUR Scholars

Michael Adelman
“The Tucker Letters”
Advisor: Michael Jarvis

Daniel Apfel
“Poetry in Practice: Immigrant Experiences”
Advisor: Joan Shelley Rubin

Corinne Carpenter
“Poetry in Practice: Autobiographies”
Advisor: Joan Shelley Rubin

Emily Feldman
“Integrated Amusements”

Advisor: Victoria Wolcott

Jason Gogniat
“Poetry in Practice: Women’s Clubs”
Advisor: Joan Shelley Rubin

Rebecca Kowaloff
“Bermuda: The First Generation”
Advisor: Michael Jarvis

Caitlin Meives
“Integrated Amusements”
Advisor: Victoria Wolcott

Jesse Melman
“The Holy Warrior”
Advisor: Richard Kaeuper

Joy Newman
“The Concept of Stress”
Advisor: Theodore Brown

Katrina Nowak
“The Holy Warrior”
Advisor: Richard Kaeuper

Byron Raco
“Bermuda Sailors”
Advisor: Michael Jarvis

Rebecca Roberts
“Crime and Punishment”
Advisor: Michael Jarvis

Peter Schirtzinger
“The Holy Warrior”
Advisor: Richard Kaeuper

Jessica Stoll
“The Holy Warrior”
Advisor: Richard Kaeuper

Matthew Strabone
“The Holy Warrior”
Advisor: Richard Kaeuper

Benjamin Tejblum
“The Holy Warrior”
Advisor: Richard Kaeuper

Matthew Vnuk
“The Concept of Stress”
Advisor: Theodore Brown

Daniel Wolf
“Bermuda: The First Generation”
Advisor: Michael Jarvis