

Editors-in-Chief

Andrew Niles '08
Harshika Satyarthi '09

Managing Editors

Libet Chang '09
Jessica Gambacurta '10
Shweta Krishnan '08
Elizabeth Tien '09

Content Editors

Ritesh Agnihotri '10
Anjali Chandra '09
Tao-Hung Chang '08
Cody DeHaan '10
Elizabeth Dominic '11
Michael Gambino '11
Matthew Golder '10
Aaron Gorenstein '11
Suzanna Harmouche '11
Karen Horovitz '10
Sheena Kapoor '11
Timmy Li '11
Christina Poh '11
Andrea Polanski '11
Benjamin Pollack '10
David Reiner '10
Rachel Sitts '11
Stephen Supoyo '09
Ashley Thai '09
Jason Wang '09
Yeon Yoo '10

Layout Editors

Rebecca Lu '10
Alisa Thavikulwat '10

Acknowledgements

Faculty Advisor

Priscilla Auchincloss, Ph.D.

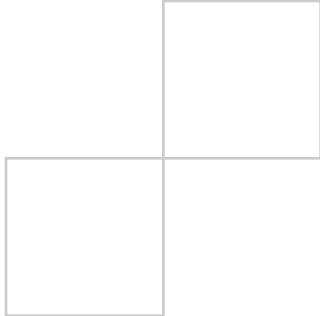
The College

Richard Feldman, Dean

Professorial Review Board

Michael Jarvis, Ph.D.
Michael R. King, Ph.D.
Robert Marquis, Ph.D.
Michael Peress, Ph.D.
Morris A. Pierce, Ph.D.
Robert Westbrook, Ph.D.

From the Editors



The University of Rochester's *Journal of Undergraduate Research (jur)* is now in its sixth year of publication, and its central mission remains unchanged: to provide a medium through which outstanding Rochester undergraduates can have their original research recognized and made available to institutions throughout the country. Today, research is not merely useful in academia, but is also pervasive in our daily lives. The University provides a rich and nurturing environment for aspiring researchers to be exposed to their area of interest. Students in the physical and social sciences, as well as humanities, are all actively encouraged to participate in research through various opportunities including lab work, summer projects, and senior theses. Indeed, *jur* regularly receives more deserving submissions than can be possibly included in an issue, illustrating the enthusiasm of Rochester students towards research. This speaks as much to the efforts of the university to get its students involved in research as to the quality of the work of its students.

In addition to recognizing the achievements of Rochester undergraduates, *jur* also provides a medium for others to appreciate the works of their peers and encourages further involvement in active learning. While classroom training is an important aspect of an undergraduate education, there is no better way than through the pursuit of original research to foster the development of important skills relating to creativity, critical thinking, and personal growth. No classroom experience can truly serve as a substitute.

Our journal provides examples of the highest quality of research which motivated undergraduates can produce. It is our hope that our undergraduate readers gain both the new knowledge in the articles themselves and the inspiration to fulfill their similarly great potential.

Sincerely,



Andrew Niles, 2008



Harshika Satyarthi, 2009

Editors-in-Chief