

Dear Reader,

Welcome to the first ever issue of the Minnesota Undergraduate Research & Academic Journal. In this issue of MURAJ, we aimed to launch the first journal of its kind at the University of Minnesota. A journal, that supports and highlights the wonderful research and academics being done by our undergraduates. This journal displays the best work from all fields of study. We aimed to share these diverse ideas and thoughts, to not only exemplify the work of our students, but to also follow in the mission of our university – “Driven to Discover.”

Our publications are written and published so that they are accessible to all members of the UMN community and beyond. This interdisciplinary journal provides an opportunity for our readers to learn of research other than their own and expand their academic breadth depth. We also hope that this journal will serve as a place not only to share ideas, but be a catalyst for debate and the free exchange of ideas.

We extend our profound appreciativeness to the hardworking people that made this journal possible. We acknowledge the help of our advisor, Victoria Munro, the Undergraduate Research Advisory Board who review our work, and the continued support of the UMN Libraries. We would also like to thank MSA and the UROP office for the appropriation of funds, which made this publication possible. Finally, we acknowledge the diligent work of our Reviewers who took their time to peer review all papers and worked with us through this year of growth.

As this is our first edition, if you find our work interesting or would like to participate as a reviewer or author, we welcome you. Submissions will be accepted on a rolling basis. Please e-mail muraj@umn.edu or visit our website, <https://pubs.lib.umn.edu/index.php/muraj>, if you have any other questions or comments.

Sincerely,

Matthew Freeman

2017-2018 Editor in Chief, on behalf of all the people who made this possible