

Dear Reader,

We are delighted to share with you Volume 6, Issue 1 of the Minnesota Undergraduate Research and Academic Journal. With this launch, we return from our hiatus the previous year to once again spotlight the amazing research conducted by undergraduate students across the University of Minnesota campus. Through presenting the works of these authors, we continue our efforts to create a space to showcase some of the best research conducted across campus.

With the launch of this latest volume, we reaffirm our dedication to the university's mission, "Driven to Discover." This issue features manuscripts that represent months of diligent research by our undergraduate scholars, each meticulously refined through multiple review cycles by our peer reviewers and editorial team. We are honored to collaborate with such talented authors and reviewers, whose dedication has made this volume possible. We hope this edition of MURAJ inspires students to immerse themselves in research and actively contribute to the academic community.

Finally, this issue would not have been possible without the continuous support of our advisor, Victoria Munro. Thank you, Vicky, for always being available no matter what our request is and for showing us patience and grace as we worked to bring MURAJ back this year. Additionally, we are grateful for the support of the University of Minnesota Libraries. We also thank the amazing faculty members who took time out of their busy schedules to provide thoughtful feedback to our student authors, ensuring academic excellence in our publication. We thank Dr. Michael Silverman, Dr. Lucy Dunne, Dr. Brian Hinderliter, Dr. Richard Lee, Dr. Joshua Feinberg, Dr. Sujaya Rao, Dr. Thomas Hoye, and Dr. Bo Hu. Finally, we would like to express our sincere gratitude to our reviewers and our cover artist, Boyu Wen, without whom this issue would not have been possible

We are honored to serve the MURAJ community and excited to continue to grow our presence on campus through projects such as MURAJ: In Action, MURAJ: In Focus, and more. We encourage all who are interested in learning more about MURAJ to explore the many opportunities to become involved in our community that can be found on our website, <u>z.umn.edu/MURAJ</u>.

Sincerely,

Alice Qian Zhang, 2023-24 Editor-in-Chief Marie Ronnander, 2023-24 Managing Editor Cynthia Shao, 2023-24 Publishing Editor Gavin Fuchs, 2023-24 Grant and Finance Editor Tyler Swiatkowski, 2023-24 Media and Outreach Editor Leah Kellgren, 2023-24 Training Editor Manasi Nagargoje, 2023-24 Recruitment Editor