The world has undergone some radical changes over the past year and a half. A major world-wide pandemic shut down the world that we once new, and the "new normal" is still settling into existence. We had planned to publish this issue in the fall of 2020; but all things considered, that was ambitious.

I always delighted to introduce a new issue of *Acta Spartae*: The Journal of Undergraduate Research in the Sciences and Mathematics at The University of Tampa, and in our fifth volume, we have some fantastic work done by our undergraduates. From searching for associations between stellar groups in the galaxy to the study of marine life here in Tampa Bay, our students' explorations of the local and the global (or universal) reach exciting frontiers of science.

This journal would not be what it is without the anonymous reviewers and assistants that took the time out of their pandemic-affected lives to give feedback and improve each of these papers presented in this volume. I would like to thank all of those who took their time to help with the production of this journal for 2020–2021, the Office of Undergraduate Research and Inquiry for their continued support and dedication to the success of undergraduate research at UT, and as always, the students that had to deal with a much longer than expected production process.

As we look forward toward the pandemic-free future, I would like to invite all aspiring authors to please consider publishing in *Acta Spartae*, and readers to send in their comments and suggestions through our website at <a href="http://www.ut.edu/ActaSpartae">http://www.ut.edu/ActaSpartae</a>. It is my hope that this journal will continue to inspire students in their research, and remain a place where students in the sciences and mathematics can show off their results for a long time to come.

—Dr. Ethan Deneault Associate Professor of Physics Editor-in-Chief, *Acta Spartae*