I am delighted to introduce the first issue of *Acta Spartae*: The Journal of Undergraduate Research in the Sciences and Mathematics at the University of Tampa. Almost a year in development, this journal has been a learning experience for all involved in its production. I am proud to have shepherded it through to its first printed edition.

Here at the University of Tampa, undergraduate research has been a part of the core DNA of the sciences since the early 1980's, far pre-dating the current nationwide interest in STEM education. Undergraduate research, whether in the laboratory or through an internship, gives not only a taste of what a future career may be like; but also gives the student an edge in the competive world of graduate school acceptance and the job market. Higher education today is at a crossroads. Faced with mounting external financial pressures, governmental initiatives to increase the number of students who attend college, and the worrisome burden placed on students and families by loans, academia is being pushed toward a new world where student outcomes will be measured and critiqued. It is in this coming world that what was once a competitive edge will become an expectation—it is an advantage that students at UT have been afforded this opportunity for the past 35 years!

This issue showcases research from a broad range of disciplines, from Astrophysics to Public Health, conducted by undergraduates while at the University. It is our goal at *Acta Spartae* to publish articles that continue to showcase the wide variety of exciting opportunities for students to pursue research at UT, as well a way for these students to present their work in a professional, refereed journal.

I would like to take the opportunity to thank everyone who helped in the process of starting and producing this journal: Dr. Joseph Sclafani for his excellent advice and unending well of support; the Editorial Board of *Acta Spartae*, Drs. Thomas Jackman, Leslie Jones, Mark McRae, Simon Schuler, and Jennifer Wortham, for their assistance with article review and editing; and Dr. James Gore, Dean of the College of Natural and Health Sciences, and Dr. Jack Geller, Dean of the College of Social Sciences, Mathematics and Education, for their advice and support; and to all the students who sent in submissions and worked with the referees to produce the articles that have been published—without you, there would be no journal.

In conclusion, as we begin the 2015–2016 academic year, 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 http://www.ut.edu/ActaSpartae. It is my hope that this journal will both inspire students in their research, and continue to be 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*