

# Editorial

Dear Readers,

Welcome to our Summer edition Volume 22, Issue 2. I hope our readers and their families are staying safe and healthy.

-In the first article of the publication, authors Marialice Mastronardi, Maura Borrego, Nathan Choe, and Risa Hartman discuss how research at an undergraduate level can affect future career choices in students. You can find the results of this study in the article, "The Impact of Undergraduate Research Experiences on Participants' Career Decisions."

The next article "Interactive Service Learning," demonstrates collaboration between university and high school students through an interactive outreach activity. This report was written by Murat Okcay, Tia Kauppila, Reece Ticotin, Chloe McBride, Deniz Akyazi, Breanna Larkin, Adriana Jackson, and Matt Haslam.

The third article, written by John Carrell, Jessica Spott, and Levi Johnson, is about LAZARUS which is a lab aimed to engage K-12 students in research. You can find more about the lab in the article, "When Traditional Research is Delayed: Bridging the Gap Between K-12 and the University through LAZARUS."

The following article, "Collaborative Assessment of Collective Reach and Impact Among INBRE Supported Summer Undergraduate Research Programs Across the United States," is written by Laura Lessard, Christine Smith, Sharon O'Connor, Sarah Velasquez, Julie Benson, Jessica Garfield, Jane Onoye, and Linda Liou. The article looks at the effect on student outcomes in STEM in students who participated in the research programs.

The fifth article is written by authors Kristen L. Morgan, Jasmine Crenshaw, and Marcus L. Martin. This article, "Establishing a STEM Summer Research Program for Underrepresented Minority Students," dives into research programs designed to increase retention of minority students in the STEM field.

The following article explores an assessment of teachers involved in professional development STEM programs aimed to understand perspectives on content, challenges, and where support is needed. You can see the findings of these assessments in Ahmad Qablan's article, "Assessing Teachers Education and Professional Development Needs to Implement STEM after Participating in an Intensive Summer Professional Development Program."

The final article for this publication is called "Developing Student Metacognitive Skills Using Active Learning with Embedded Metacognition Instruction." Authors Jessica Santangelo, Marissa Cadieux, and Samantha Zapata discuss the impact of active learning with embedded metacognition instruction and practice on students.

We would like to thank our associate editor Eliza Banu, content editorial assistant Sarah Franklin, layout editorial assistant Amy Clark and format editor Wally Ridgway for their efforts throughout this publication.

If you have any comments or questions, please send them to [jstemed@gmail.com](mailto:jstemed@gmail.com). If you are interested in publishing your own research, please visit our website [jstem.org](http://jstem.org) for instructions.

Thank you,

P.K. Raju

Editor-in-Chief

Telephone: (334)-332-5197