Dear Readers,

It is with great excitement that I am able to present to you the CUSJ Volume 14 - 2020 Edition. Since our very first volume in 2006, it has been the mission of CUSJ to provide an accessible and professional, open access platform for undergraduates to communicate their research advances in various scientific fields. We CUSJ editors believe, as a community of young scientists and writers, that it is absolutely essential for researchers of all ages and levels of experience to have the opportunity to share their ideas and learn from their peers. Creating a space to facilitate that discussion is exactly what CUSJ aims to achieve not only with each volume, but also with our outreach to the public and numerous research oriented events.

COVID-19 has posed an incredibly difficult and tragic challenge to communities all over the world, scientists and non-scientists alike. With the shutdowns of universities accompanied by sudden changes in employment status and housing, the perseverance and determination shown by both our authors and editing team has been a true testament to their character, work ethic, and resilience. The hard work evident in each article of this volume, from experimental design to data interpretation, is a display of the talent and strength of our authors, and their ability to push on through an unprecedented global emergency. These undergraduates have shown that even during the most trying of times, while physically isolated, we can all still come together and communicate through science.

Volume 14 of CUSJ is diverse in scientific fields represented, ranging from biochemistry and the development of enzymatic nanoreactors for industrial synthesis, to the social science of shame in teens. Our cover features a graph from author Aidan Reddy’s cutting-edge investigation into X-ray absorption spectroscopy data processing, in which he develops a new method for spectra correction. His work should allow for more accurate analysis of various materials’ atomic properties, advancing the fields of both materials science and physics.

It has been a pleasure to serve as the Editor-In-Chief of CUSJ for the 2019-2020 academic year. My sincere thank you to everyone involved in the creation of this volume for their passion and commitment.

Julia Parsley
Editor-in-Chief