

# Letter *from the* Editors

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DEAR READER,

It is with great pleasure that we present you with the 10th edition of the Journal of Undergraduate Life Sciences (JULS). This issue caps off a transformative decade for JULS, and undergraduate research as a whole at the University of Toronto. Therefore, as our tenure as Editors-in-Chief concludes, we wish to take a moment to acknowledge the many staff, sponsors and volunteers whose tireless work allows us to produce this exemplary, peer-reviewed publication.

We also wish to extend a special note of gratitude to Her Honour, the Lieutenant Governor of Alberta, Lois Mitchell; the Premier of Ontario, Kathleen Wynne; and the President of the University of Toronto, Prof. Meric Gertler – who kindly took time to acknowledge the anniversary and achievements of JULS. We were touched by their messages of congratulations and their unequivocal support of the sciences and scientific training. As academic institutions around the world feel increasing fiscal strain and receive ever fewer resources, we understand that supporting research becomes increasingly difficult. However, should society demand the same, insatiable need for innovation and scientific advancement, then support of independent research, including at the undergraduate level must remain a priority.

The achievements in Transplantation, which we celebrate in this issue, are testament to the fruits of effective training. It was sixty years ago that Toronto doctors introduced heart valve transplants to the world, thereby providing an in-vivo mechanism to alleviate major cardiac disease for the first time. Thirty years later, the next generation of surgeons performed the world's first double lung transplant, establishing the gold-standard treatment for end-stage respiratory disease. Finally, early in 2016, in an oddly fortuitous thirty years after the first double-lung transplant, Toronto doctors performed Canada's first hand transplant, providing novel insights into advanced micro, muscular and neurological surgery. We congratulate the many surgeons, physicians and researchers who have given Toronto science this remarkable pedigree of innovation.

In this issue we offer an in-depth look into transplantation with no less than four independent literature reviews taking a closer look at the various intricacies surrounding this field. We also acknowledge the many other investigations examining broad questions across the life sciences. This year, we received a record number of submissions across all categories, and we are exceptionally grateful for all the authors who submitted their work to JULS. With increasing submissions, our editorial and peer-review teams must work ever harder to maintain the standards of publication, therefore we offer our sincere appreciation to the peer and faculty review boards for their diligent work and edits.

Finally, we wish to thank you for your readership. JULS exists to serve you, the undergraduate researcher, and we encourage you to pursue your own research ambitions, in whatever field they may be. You can find details of some research programs offered at the University of Toronto inside this issue.

We hope you will find the research presented herein insightful and illuminating.

Sincerely,

**Imindu Liyanage & Charles Lee**  
Editors-in-Chief, 2015-2016