"Life is not easy for any of us. But what of that? We must have perseverance and above all confidence in ourselves. We must believe that we are gifted for something, and that this thing, at whatever cost, must be attained."

- Marie Skłodowska Curie

FOREWORD

Dear Reader,

Since its inaugural year, the central vision of the SFU Science Undergraduate Research Journal was to connect the undergraduate research community and create a platform to recognize and distribute scholarly, peer reviewed research by undergraduates. The first issue of the journal was published in 2016 and since then, we have published 19 research and review articles, worked with 79 different faculty and graduate student reviewers, and showcased the work of 52 undergraduate research authors.

As researchers ourselves, we know firsthand the many hours of physical and mental work which go into the creation of a manuscript. The quality of research and intellect that we see in our submissions each year is astounding. It is with great joy that we work with authors, editors, and reviewers in the peer review process to prepare papers for potential publication. When we look back at all we have accomplished, we are truly thankful. We would not be able to assemble such an issue without the work from our editorial team and peer reviewers.

This year, we have continued to broaden our online presence with our continuing blog series featuring undergraduate researchers and have expanded it to include graduate students and Faculty. We are also hard at work organizing the second annual science undergraduate research poster competition. We look forward to seeing SFU SURJ grow in the years to come, and we invite you to come along for the ride. Without further delay, we present to you, the third edition of the SFU Science Undergraduate Research Journal.

Sincerely,

Siobhan Ennis, Emily Leung, Anish Verma, and Christine Wang

Executive Editors