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About PMUSER

Proceedings of Manitoba's Undergraduate Science and Engineering Research (PMUSER) is an open-access, peer-reviewed journal that is published annually and hosted by the University of Manitoba. The journal accepts research or review manuscripts written by undergraduate students from any science or engineering related faculty, or any topic concerning science or engineering. Upon submission, each manuscript undergoes a double blind peer-review process by two undergraduate/graduate students from a pool associated with the respective research area. Our mission is to provide opportunities for students to explore the frontiers of undergraduate research and add additional value and learning opportunities to students' degree programs through publishing their work.

Aim & Scope

The focus of *PMUSER* is three fold: author, reviewer, editor. Through preparing and revising a manuscript, students are recognized for their research, have an opportunity for out-of-classroom learning, and further develop communication skills. Through learning the role of a peer-reviewer and reviewing manuscripts, students learn to critically evaluate the scientific literature and to critique ideas in the broader world. Through the editorial board, an interdisciplinary team arises to provide mentorship to undergraduate students and valuable leadership and teamwork skills. The three prongs of our focus unite in preparing students for careers in science or beyond, and the stepping stones to get there.

Image Credits

William Steele, *Cover Art*
Stephen Young, *Preface Image*
Kartik Sachar, *Runner-up*

Open Access Policy

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Undergraduate authors are encouraged to submit their perspective, research, review, or rapid communication articles! Detailed instructions are available online: <http://ojs.lib.umanitoba.ca/pmuser/about/submissions>.

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About the Cover

The cover features the 2019 Cover Art Contest winner, William Steele. "As a piece that involves the theme of science and its continued progress, I thought about including imagery that evokes mythological connotations of trees that provide greater wisdom and knowledge; the world tree of Yggdrasil as well as the Tree of Knowledge of Good and Evil are both iconic in their own ways, and even referring to the myth of Isaac Newton's discovery of gravity through the simple falling of an apple from a tree. Science as a field is interconnected in many different ways amidst its branching studies, and only by working together can any of its greater fruits be grasped."

