SCIENCE THAT HAS IMPACT

Faculty of Science: Developing People and Transforming Economies
“Collectively, we represent a forward-looking academy with deep-community ties seeking to make meaningful contributions globally. Our successes are measured by the quality and the impact of our activities in teaching, research, and service, and by the legacy of successes of our alumni.”

DR. DOUGLAS FARENICK

- Dean, Faculty of Science, and Professor, Department of Mathematics & Statistics
- PhD 1990, University of Toronto
- University of Regina, BSc 1984 in Mathematics and Computer Science
- NSERC Discovery Grant Holder (continuously for 26 years)
- Author or co-author of 50 peer-reviewed journal articles and two books
- Centre de recherches mathématiques Post Doctoral Fellow
- Supervisor of PhD and undergraduate students, and postdoctoral fellows from Canada and abroad

S ituated in the heart of the Canadian prairies on Treaty 4 territory and the homeland of the Métis people, the Faculty of Science’s programs are offered through the efforts of talented academic, administrative, technical, and research staff across the Faculty’s six departments (Biology, Chemistry & Biochemistry, Computer Science, Geology, Mathematics & Statistics, Physics) and the University’s Federated Colleges. Science graduates become part of an educated workforce adept at harnessing the rapid pace of change in the modern world and addressing the challenges of today and tomorrow.

Among those graduates is Nevan Krogan BScHon’97, MSc’99, who received the 2012 Alumni Crowning Achievement Award for Distinguished Professional Achievement. Nevan, an internationally recognized systems biologist and professor in the Department of Cellular and Molecular Pharmacology at the University of California in San Francisco, led recent breakthroughs in research on the connections between HIV proteins and those of the human cell, with the possibility that their discoveries will lead to the development of new drugs to treat people with HIV/AIDS.

The Faculty of Science values excellence in research, high-quality teaching, enthusiasm for discovery, cooperation and collaboration, community engagement, and service. The Faculty is strongly committed to the University of Regina’s three strategic priorities of student success, research impact, and commitment to community. Natasha Jacques BScHon’12, another notable member of our science alumni, is dedicated to making a positive and meaningful impact on human lives with her innovative research. An artificial intelligence doctoral candidate at the Massachusetts Institute of Technology, Natasha is investigating the possible application of using advanced machine learning to help detect and predict when a person’s mental health is in decline, which is critical for early intervention.

In advancing our vision to be a premier scientific academy that is recognized for the significance, novelty, and impact of its research, and for the quality, relevance, and currency of its academic programs, the Faculty has identified the following priorities:

The Faculty of Science: Advancement Priorities

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AWARDS AND SCHOLARSHIPS

Advancement Target: $200,000 by 2022

The University is seeking support for awards and scholarships, which recognize, financially reward and promote the efforts of high-achieving students. The following are three examples of awards and scholarships you may consider supporting:

- **Dean of Science Scholarly Achievement Award**
  In recognition of high academic achievement by students who have completed 60 to 90 credit hours of undergraduate study (two or three years at full load), the Dean of Science Scholarly Achievement Award is to be presented annually to six students (one from each Science department). Initial contributions to establish this award will be sought from the current and former Deans and Associate Deans of the Faculty of Science.

- **Faculty of Science Indigenous Scholar Award**
  In recognition of scholarly achievement by Indigenous students who have completed at least 30 credit hours of study, the newly created Faculty of Science Indigenous Scholar Award is to be presented annually to one Indigenous student.

- **Memorial Scholarships and Scholarships Founded by Academic Staff**
  Created by current and former academic staff or their families, these scholarships form a fitting legacy for the multifaceted contributions of individuals who have or who have had careers in the Faculty of Science.

LASER ABLATION INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY FACILITY

Advancement Target: $1,000,000 by 2021

Your investment in a world-class lab facility will elevate the quality of research being conducted within the Faculty of Science and other academic units at the University of Regina. The following is a description of this opportunity for investment:

This multidisciplinary LA-ICP-MS facility will use powerful state-of-the-art technology to perform highly sensitive analysis and testing of solid materials of remarkably small size. In a province whose economy is reliant on energy resources, such as oil, natural gas, and uranium, the LA-ICP-MS facility will, for example, aid researchers in understanding the factors that influence the formation of deposits and reservoirs, which is relevant to resource exploration. The facility will also be used to determine the mechanisms of environmental change and their impacts on ecosystems. There are numerous other scientific investigations that will be undertaken with this facility, including meteorite composition and carbon-capture analyses. The thrust of the research activities through this facility will be closely related to the Water, Environment, and Clean Energy research cluster at the University of Regina.

This cutting-edge facility will create a competitive advantage for the University of Regina over other research institutions across Canada, attracting and retaining the best faculty and the brightest students.

ENVIRONMENTAL SUSTAINABILITY INITIATIVES

Advancement Goal: $100,000 by 2022

The University of Regina plays a major role in sustaining human wellbeing and the natural environment. Your support of the Environmental Sustainability Fund will help our academy position itself as an innovative leader in environmental responsibility and sustainability. The following is a description of the Fund:

Initiatives that promote environmental sustainability are especially important to scientists and students. The Faculty of Science Environmental Sustainability Fund will be used for special projects that assist researchers, educators, and staff in adopting environmentally sustainable technologies and methodologies (such as solar panels, super-insulated high-efficiency freezers, and lighting).

SCIENCE PUBLIC LECTURE SERIES

Advancement Target: Three-Year or Five-Year Named Sponsorship of $20,000/year by 2019

This Lecture Series is one way the University demonstrates its commitment to engage, share knowledge with, and stimulate scientific interest in members of the community. We welcome your partnership, which will help ensure we have sufficient funding to continue providing this forum for public lectures, described as follows:

The Science Public Lecture Series is a newly-established series of annual lectures aimed at the general public and the University of Regina community. This lecture series features leading scientists touching upon topics, ideas, and issues that are relevant to contemporary society. Invited speakers spend two days on campus, meeting with students, academic staff, alumni, and members of the public.

Each lecture features a pre-lecture dinner with students, alumni, and select guests, and a reception after the lecture during which audience members may speak with the lecturer. Established in 2018, thanks to a generous $20,000 donation from Larry Hesterman, the first Science Public Lecture featured keynote speaker Dr. Victoria Kaspi, an astrophysicist world-renowned for her major discoveries in the study of compact neutron stars (pulsars). Dr. Kaspi is Director of the McGill Space Institute and she was awarded the Gerhard Herzberg Canada Gold Medal in 2016.
**Vision**

The Faculty of Science aspires to be a premier postsecondary academic unit, recognized for the significance, novelty, and impact of its research, and for the quality, relevance, and currency of its undergraduate and graduate programs.

**Mission**

The Faculty of Science is devoted to the creation and application of scientific knowledge, both pure and applied, and to the dissemination of this knowledge through scholarly publication, undergraduate and graduate education, and community outreach and service.

**Values**

Excellence in Research and Scholarly Pursuits  
High-Quality Teaching  
Enthusiasm for Discovery  
Cooperation and Collaboration  
Community Engagement  
Service

**How to Donate to Science:**

1. Visit uregina.ca  
2. In the drop-down menu under Faculties & Academic Units, select “Science”  
3. Click or tap “Donate Now” on the Faculty of Science web page