FACULTY OF SCIENCE NEWSLETTER

September 2022
Version 2.0
Monthly newsletter sharing extraordinary work within the Faculty of Science

"Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop questioning."
– Albert Einstein

Allied Health - Liz Rohrs, a TRU RT Program graduate (2009) and adjunct faculty member recently received her PhD from SFU, became editor-in-chief for the Canadian Journal for Respiratory Therapy (CJRT).

Lindsay Wetterstrand, a new faculty member of the Respiratory Therapy program now chairing monthly webinar in collaboration with BC Lung Foundation to help patients who have COPD with their abilities to self-manage their health. September's presentation was "Getting to Know Your Baseline: Action Planning".

Architecture and Engineering Technology (ARET) - Second-year class of the ARET program participated in the "Amazing Race to Inclusion" on September 29, 2022, organized by the Kamloops Speak Up Self-Advocacy Awareness Group. This event highlighted barriers to inclusion for people living with a disability. Students were placed in teams to experience downtown Kamloops in a wheelchair, crossing streets, entering businesses, riding a bus in a wheelchair. Teams also put lego blocks together using only verbal directions and tried wayfinding without sight and other challenges that individuals with disabilities face daily. This challenge helped students understand the importance of developing more inclusive and accessible structures whether designing homes, office buildings, roads and sidewalks and other infrastructures.

Pictured above (left to right), ARET Department Chair Mindy Marshall with students Marcus Abraham, Taylor Munden, and Corbin Guenther in the Kamloops Museum.

Biological Sciences - Sun Peaks Secondary teacher Jennifer Caputo with fourteen students in grades 10-12, visited TRU's biology labs where professor Dr. Naowarat (Ann) Cheeptham and student volunteers showed them how to grow bacterial cultures from common everyday items as part of the *Natural Science and Engineering Research Council of Canada (NSERC) PromoScience funding program* with lab support from Kathy Baethke.

Seeing Green: A Close Look
It's More Than Dandelions

KAC Main Gallery, Old Courthouse, 7 Seymour St W
Opening Reception: Thursday July 14, 5-7 pm
July 8-23, 2022

Artists

Lyn Baldwin • Ila Crawford • Linda Franklin • Susan Miller •
Martha Ritchie • Elizabeth Sigalet • Amanda Forrest-Ewanyshyn
with Visual Arts 1020 (Winter 2022) • KAC Cyanotype Workshop Participants

Lyn Baldwin, Co-Chair of TRU's Biological Sciences Department, spent the bulk of summer organizing a botany-based art show, "Seeing Green: A Close Look – It's More Than Dandelions," at the Kamloops Art Council. The event was featured on CBC Kamloops.

Biology Department announced its first International Field School to Chang Mai, Thailand, under the direction of Dr. Naowarat (Ann) Cheeptham, open to third- and fourth-year TRU students who have completed BIOL 2160.

TRU Ferments Dinner – tickets for this event are now sold out. TRU Ferments dinner will occur on November 26, 2022, 5:30-9:30pm at Harvest by Nandi – 339 St. Paul Street, Kamloops, BC.

Chemistry - Associate Professor, Dr. Dipesh Prema is working on various Equity, Diversity, and Inclusion (EDI) initiatives that includes:

- Developing an EDI strategic plan and accreditation guidelines for undergraduate programs in Chemistry through the Canadian Society of Chemistry's Working Group on Inclusion, Diversity and Equity.
- Organized a full-day EDI Symposium "*Affecting Institutional EDI Mindsets*" at the 105th Canadian Chemistry Conference and Exhibition in Calgary, Alberta, between June 13-17, 2022.
- Working with TRU Faculty of Law on several multidisciplinary EDI research projects, which were presented at the 105th Canadian Chemistry Conference and Exhibition in Calgary, Alberta entitled: *Changing the EDI Narrative: Multidisciplinary Research Projects in Science and the Law.* Part of this work was also published here: Prema and Dhand. Inclusion and Accessibility in STEM Education Navigating the Duty to Accommodate and Disability Rights. Can. J. Dis. Studies. 2019, 8(3), 121-142.
- Working with Natural Science and Engineering Research Council of Canada (NSERC) to develop its new accessibility plan in accordance with the Accessible Canada Act.

Computing Science - The Kamloops Hackathon took place at TRU on Sept 23 to 25th with over forty students from Business, Computing Science, Math, and Software Engineering participating in the 3-day event. The event attracted domestic and international students across all levels.

Winning team pictured above (left to right) Riley Hall, Ethan Gelinas, Phoenix Parisian, and Hamza Ahmad pictured with event sponsor Jesse Ebbett from Arc Technologies, were from Computing Science.

Engineering - After a rigorous peer-review process, the Software Engineering program recently became accredited under the Canadian Engineering Accreditation Board (CEAB), a professional body responsible for accreditation of all undergraduate engineering programs across the country. Please click here to view the official new story.

THOMPSON RIVERS UNIVERSITY

On the morning of September 28th, 2022 – Thompson Rivers University [and Chengdu University of Information Technology (CUIT)](#) gathered for the signing ceremony of the 'Cooperation Agreement between Chengdu University of Information Technology and Thompson Rivers University to Organize Undergraduate Education Projects in Data Science and Big Data Technology'.

Peer Mentoring meetings are a new progression for the software engineering students where five upper-level (third year) students mentor the first-year students, meeting bi-weekly to plan discussion topics and activities to support students in the first year of their software engineering studies.

[**Acres**](#) and [**TRU supporting SD# 73 Engineering Innovation Competition**](#) - TRU's Engineering Department – Software Engineering program is pleased to host the Acres Design Competition. Over the next three months, SD# 73 high school student teams will be guided by the faculty of TRU's Software Engineering program to come up with a creative solution to an industry problem. High school students will compete for an entrance scholarship of $4000 to be divided evenly between the students where teams choose a topic that matches any [UN Sustainable Development Goals](#).

Anti-discrimination Response Training workshop - The Engineering Department - Software Engineering Program is pleased to invite Dr. Tehmina Khwaja, Equity, Diversity, and Inclusion Specialist at Thompson Rivers University, to offer anti-discrimination response training to the Engineering Department faculty members.

This Anti-discrimination Response Training (A.R.T.) offers participants an invaluable opportunity to learn the model of active witnessing and acquire concrete and practical skills for addressing various types of discrimination in multiple settings.

MSc Data Science (MSc DS) – *see Awards and Publications*

Natural Resource Sciences – *see Awards*

Physical Sciences

Astronomy - Kim Fehr from Kamloops donated a telescope to the faculty of science in memoriam of her late husband. Kim indicated that it is what her husband would have wanted – to be put to a good use and make impact. Joanne Rosvick, professor of Astronomy and Barbara Tolevski, Director of Development of the faculty of science brought the telescope on Campus. The telescope will be brought to the Wells Gray Education and Research Centre where students and faculty will be able to learn and explore the skies.

Geology - Nancy Van Wagoner and Sheridan Sigstad spent a day taking 20 students on a tour of local geological sites.

Physics – *see Awards*

Awards & Recognition

Awards

ARET - Jianzhong (James) Gu was recently awarded as the 2021 Outstanding Reviewer for [Journal of Performance of Constructed Facilities](#).

Biological Sciences - Dr. Greg Anderson was invited to review Canadian Institutes of Health Science Catalyst Grants.

TRU Board of Governors recognized faculty member Dr. Naowarat (Ann) Cheeptham's [3M National Teaching Fellowship](#).

Chemistry - Dr. Kingsley Donkor was recently appointed by the [Natural Science](#)

[and Engineering Research Council of Canada (NSERC)](#) as member of the Chemistry Research Tools and Instruments (RTI) Selection Committee for a one-year term ending June 30, 2023.

Computing Science - Congratulation to Dr. Mridula Sharma, Computing Science faculty member who recently received her Professional Licence in Engineering with Engineers and Geoscientists (P.L.ENG), British Columbia in accordance with the Professional Governance Act.

Mathematics & Statistics - Kateryna (Kate) Tretiakova, Mathematics student from Kyiv, Ukraine is the recent recipient of the Dr. Sherman Jen Scholarship for Science. Please click [here](#) to view TRU Newsroom story.

MSc Data Science - Six students from the Fall 2022 MSc DS cohort received the Dr. Sherman Jen Graduate Entrance Award. The students awarded are Melvin Biju, Shu Chen, Duo Feng, Rezvan Pourhashemi, Shohada Sharmin, and Kanimozhi Subramanian.

In June 2022, Bhavithry (Bhavi) Sen Puliparambil, a recent TRU MSc Data Science graduate was awarded the very prestigious Governor General Gold Medal for the highest academic excellence standing across Canada. Click [here](#) to view the official TRU Newsroom story.

Natural Resource Science - Dr. Wendy Gardner won the [Trail Boss Award](#) for the Pacific Northwest Section Society for Range Management (Oregon, Washington, BC, Alaska) of the Society for Range Management. The Trail Boss Award is the highest award presented to give recognition to those individuals, partners or formal groups for outstanding work or activities contributing to better understanding, use, or development of range resources of the Pacific Northwest. The Trail Boss Award typically recognizes sustained or long-term accomplishments and/or contributions to range or achievements of a very substantive nature.

Physics - Cooper Wendland (3rd year SENG student) (working with Mark Paetkau, faculty supervisor) was just awarded a TRUSU grant of $3700 for a robotic arm. This funding will provide opportunities for a wide range of student groups to gain experience programming and utilizing robotics.

Grants

ARET - James (Jianzhong) Gu secured external funding of $43,400 from the British Columbia Innovation Investment beginning April 2022 - March 2023 to support his research in fostering BC's leadership in heavy timber construction.

Publications

Allied Health - Cael Field, TRU Respiratory Therapy (RT) program faculty member, published September 2022 in [CJRT](#), "[A Survey on the Attitudinal Differences between Acute and Community Settings](#)". Mark Rakobowchuk assisted with data analysis.

Biology - Dr. Greg Anderson co-authored "[A Qualitative Analysis of the Mental Health Training and Educational Needs of Firefighters, Paramedics, and Public Safety Communicators in Canada](#)". Int. J. Environ. Res. Public Health.

MSc Data Science - MSc DS graduate, Bhavithry (Bhavi) Sen Puliparambil received very welcome news from the journal Biology with impact factor over 5 who published her article "[A Novel Algorithm for Feature Selection Using Penalized Regression with Applications to Single-Cell RNA Sequencing Data](#)".