

The Western Conference on Science Education



Western Conference on Science Education 2023 Preliminary Conference Program

This is a preliminary draft of the WCSE 2023 Conference program. The finalized program will have specific times allocated to each session; the purpose of this preliminary draft is to support participants in planning their conference registration choices, and to ensure that the schedule conforms with all presenters' availabilities. Some minor tweaking may occur.

For reference, Plenary talks stand alone in the conference program; all other session types (presentations, debates, panels, workshops, and show-and-share presentations) may run concurrent with one to three other sessions. Posters have a dedicated poster time period in the program.

Note: to increase the efficiency of this preliminary program, we have only listed the first author's surname as an identifier; full authorship and affiliations will be presented in the final conference program.

Wednesday, July 12th MORNING

Title	First Author Surname	Event Type
Promoting sex and gender inclusivity in the classroom: A re-evaluation of discipline norms.	Chen	Plenary

Refreshment Break

Title	First Author Surname	Event Type
Recording Live Lectures: The Pros, Cons, and Everything In-Between	Uggenti	Debate
Enhancing student learning and engagement of scientific concepts through case studies in integrated science	Kochhar	Presentation
Assessments that foster belonging in the science classroom	Elkhoury	Presentation
Geographies of Kindness - Understanding and mapping the borders of pedagogical kindness	Ju	Presentation
Learner conceptions of biological processes in a content and language integrated learning (CLIL) context	Barker	Presentation
A STEAM game-based learning framework: Maximizing integrated and immersive learning in the classroom	Turco	Show and Share
A new assessment of graph construction competency for undergraduate biology students	Meir	Workshop

Lunch Break

Wednesday, July 12th AFTERNOON

Title	First Author Surname	Event Type
Who does better in person or online, males or females? Gender differences in academic performance of undergraduate sciences students at the University of Ottawa.	AlBardan	Presentation
Student-centred Pedagogical Practices to Support Undergraduate Student Mental Health	McCullough	Presentation
Cultivating a Questioning Mind: Student-Led Question Composition in Large Courses	Levy-Strumpf	Presentation

WCSE PRELIMINARY SCHEDULE MAY 2023

Are we offering science students sufficient authentic assessments?	Ritchie	Presentation
Academic influencers: teaching faculty as potential departmental change agents for inclusive pedagogy	Grunspan	Presentation
Unpacking how instructors' past experiences influence pedagogical decisions	Mellary	Presentation
Rethinking norms in educational practices to promote appreciation of variation: Lessons from human anatomy	Vieno	Presentation
When well-meaning simplifications are potentially harmful: Lessons from pedigree analysis in biology.	Kalas	Presentation
SimBio: Introduction to science education resources	Meir	Show and Share
Using Free Teaching Resources from HHMI BioInteractive to Map out the Richness of the Scientific Process or Plan a Scientific Investigation	Prud'homme-Genereux	Workshop
Furthering decolonization and reconciliation via a portable planetarium	Cockcroft	Workshop
Creating a sense of belonging for all students using science storytelling	Larocque	Workshop

Refreshment Break

Title	First Author Surname	Event Type
Re-thinking flexibility in higher education: A shared responsibility of students and educators	El Galad	Plenary

Community Dinner sponsored by *SimBio*

Thursday, July 13th MORNING

Title	First Author Surname	Event Type
How can we incorporate Indigenous perspectives into science courses?	McLachlin	Plenary

Refreshment Break

Title	First Author Surname	Event Type
Discipline-based educational development: examples from four Canadian universities	Barrette-Ng	Panel
Adopting Open Educational Resources and Universal Design for Learning Principles in Undergraduate Nursing Education in Mental Health	Smith	Presentation
Pilot mentorship project promotes equity and diversity in STEM	Arnott	Presentation
Large science class WITH group work WITH creativity WITH painless grading - Impossible you say? I say possible!	Reid	Presentation
Facilitating a “Last Class Workshop” – A Tool for Course Evaluation and Evolution	Tourlakis	Presentation
A novel resource for problem-solving and peer evaluation	Ingram	Presentation
Students’ perceptions of research projects in a first-year integrated science program	McNutt	Presentation
Do I Belong? Impostorism in Science Students	Ménard	Presentation
Creating a waste free tomorrow: Assessing waste literacy and behaviour change in grade 5 students	Gutierrez	Presentation
Create your own degree: Empowering students to find belonging in science	Lyons	Presentation
Enhancing geological skills through tactile learning with interactive multi-layered three-dimensional printed geological models of southern Ontario.	Johnston	Show and Share
Box of Lessons: an OER for Exploring Biomolecular Structural Data to Learn Biology	Pettit	Show and Share
Integrating learning spaces: engaging students in-person and online	Levy-Strumpf	Show and Share
Adjusting teaching loads to recognize the new reality of teaching	Kelly	Workshop

Lunch Break

Thursday, July 13th AFTERNOON

Title	First Author Surname	Event Type
Fostering Community and Belonging in Diverse Science Backgrounds through Reflective Writing.	Tan	Plenary

Refreshment Break

Title	First Author Surname	Event Type
Why do we get cancer? Using the example of breast cancer to help students learn fundamental introductory biology concepts and processes.	White	Presentation
A Stroke of Genius: Teamwork Makes Dreamwork	Casserly	Presentation
Cultivating career ready skills: weaving Experiential learning opportunities throughout the curriculum	Levy-Strumpf	Presentation
How is ChatGPT perceived in a post-secondary education?	Rajabi	Presentation
The Art of the *Engaging* Video in Science Education	Jeffery	Workshop
A deep dive beyond the syllabus: Classification of cognitive processes & knowledge domains in post-secondary science courses	Jandu	Workshop

Wine and Cheese Poster Reception

The Poster session will begin with 1-min 'pitches' of the posters, followed by time for conference participants to view and interact with the posters and their presenter(s), all while enjoying "wine and cheese".

Title	First Author Surname	Event Type
The Geology of Southern Ontario - An ArcGIS StoryMap used as a Tool for Open Source Education & Science Communication	Hamid	Poster
A discipline-specific R manual improves students' skills and confidence in their chosen field	Raster	Poster
Authentic assessment design in human physiology using the students-as-partners model	Rocha	Poster
Increasing assessment authenticity in fourth-year nutritional science education using a students as partners model: from assessment re-design to the implementation and impact on student experience	Monk	Poster
Investigating how undergraduates process their e-mail inbox	Mascarenhas	Poster

WCSE PRELIMINARY SCHEDULE MAY 2023

Unpacking how undergraduate students form beliefs about undergraduate teaching	Mellary	Poster
Do students' attitudes toward active learning in science affect buy-in?	Mastroianni	Poster
Perspectives and Effects of Crib Sheets on Anxiety and Learning Strategies	Bhalerao	Poster
Impacts of pre/post examination metacognition prompts on study strategies and predicting grades	Doran	Poster
Understanding the emotional effects of competency-based education	Sinha	Poster
Using a Data-Focused Active Learning Worksheet to Improve Students Understanding of Molecular Interactions and Conformational Change	Scherle	Poster
Evolution of a first year Biology course to incorporate flexibility to promote inclusion and equity	Balaji	Poster
Sprinkling real life onto pedigrees: Helping students develop a more accurate view of genetics.	Kalas	Poster
Complexity genetics - determining levels of genetic deterministic thinking of undergraduate biology students.	DaSilva	Poster
Student perceptions of feedback, mindfulness, and stress	Bell	Poster

Friday, July 14th MORNING

Title	First Author Surname	Event Type
Cultivating a Belonging in the Science Community through “Little-C” Creativity	Istrate	Plenary

Refreshment Break

Title	First Author Surname	Event Type
A mentoring community in STEM: Fostering STEM identity within universities	Booker	Presentation
Who won the battle of the microbiology video sketch?	Beaulieu	Presentation
Integrating Team-Based Problem-Solving Modules into a Large, Undergraduate Science Class to Promote Belonging and Learning	Nemtsov	Presentation
Using Music in Science Class: A Bassist Dishes The Low-Down	Stone	Presentation
Sharing resources and experiences in growing soft-skills in large enrollment undergraduate classes.	Pinheiro	Presentation
The Canadian Consortium of Science Equity Scholars – a multi-institutional approach to improving equity and sense of belonging in the classroom.	Cantin	Presentation
Embracing the authentic complexity of phenotypes to enhance belonging	Da Sylva	Presentation
A team-based model that catalyzes sustained department-wide change	Wise	Presentation
Designing an inquiry-based semester theme that integrates data science and bioinformatics methods	Amtul	Presentation
Unlocking the Power of Zotero: Innovative Case Studies from the University of Waterloo	Ireland	Workshop
Building community in undergraduate laboratory courses	Zukowski	Workshop

Closing Remarks and Lunch-to-Go