

VOLUME 2 • JANUARY 2021

Department of Biological Sciences Newsletter

FROM BIOMOLECULES TO THE BIOSPHERE

IMPORTANT DATES

START OF TERM

JAN. 4

START OF CLASSES

JAN. 11

GSA BURSARY INTAKE

JAN. 4 - 18

GRADUATE AWARDS COMPETITION (GAC) DEADLINE

JAN. 15

QUALITY MONEY APPLICATION DEADLINE

JAN. 15

PROFESSIONAL DEVELOPMENT GRANT INTAKE

FEB. 1 - 15

CONGRATULATIONS TO:

Ryan Toth, of the Moorhead lab, who successfully defended his MSc thesis titled "*Arabidopsis thaliana D group MPK interactions with RLPH2 and PP1*" on December 22, 2020!

Ishrat Jalal, of the Vogel lab, who successfully defended her PhD thesis titled "*Periplasmic peptidoglycan binding proteins from Escherichia coli*" on December 3, 2020!

Mariia Borbuliak, of the Tieleman lab, who passed her Ph.D. Candidacy Exam on December 10, 2020!

Julie Paulssen, of the Gieg lab, who successfully defended her MSc Thesis titled on "*Biodegradation of Naphthenic Acids by Microorganisms Originating from Alberta's Oil Sands Surface Mining Operations*" on December 10, 2020!

Nicole Taylor, of the Gieg lab, who successfully defended her MSc thesis titled "*Biodegradation of aromatic hydrocarbons by methanogenic consortia and groundwater-associated microbial communities*" on December 11, 2020!

Nabiha Mehina, of the Storey lab, who successfully defended her MSc thesis titled "*The influence of non-inhibitory concentrations of purified pyocin S2 on Pseudomonas aeruginosa isolates*" on December 11, 2020!

Dimitri Desmonts de Lamache, of the Lewis lab, who passed his PhD Candidacy Exam on December 16, 2020!



CONGRATULATIONS CONTINUED:

Nicole Jervis, of the Storey lab, who successfully defended her MSc thesis titled "*The effects of diketopiperazines on the virulence of Burkholderia cepacia complex species*" on December 18, 2020!

Ji Huang and Dr. Marie Fraser, for their publication in the journal Acta Crystallographica Section F Structural Biology Communications titled, "*Tartryl-CoA inhibits succinyl-CoA synthetase*"!

If you or someone in your lab have something to celebrate, including successful defences and awards, please contact biogsa@ucalgary.ca to have your accomplishment included in the next newsletter!

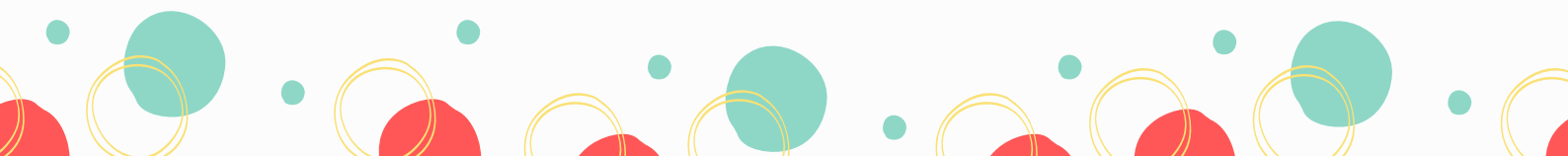


GRADUATE STUDENT AFFAIRS

Thesis Oral Examinations - Exams are "Open" unless otherwise noted.

Caroline Jasper (Supervisor: Dr. J. Vamosi) will be holding her MSc Thesis Examination on "The history and future of the rare, endemic plant species, *Draba yukonensis* (Yukon Draba)" on January 22, 2021 @ 10 am (Exit Seminar @ 9am)

Mahdi Mousseai (Supervisor: Dr. S. Noskov) will be holding his PhD Thesis Examination on "Mapping ligand binding sites in hERG1 channel with biomolecular simulations" on February 9, 2021 @ 1:30 pm (Exit Seminar @ 12:30 pm)





SEMINARS

ICB601 Seminar - Friday 3:00pm

January 8 - **Dan Zhang** - To differentiate or not to differentiate: does VIG-1 have the answer?

ECOL601 Seminar - Monday 12:00pm

January 11 - **Estefania Roldan Nicolau** - How do trees grow on cliffs? A problem of water transport.

ICB601 Seminar - Friday 3:00pm

January 15 - **Vicki Tran** - Effects of larger skeletal size and compromised maternal bone on offspring quantity and evolutionary fitness in mice artificially selected for longer limbs.

ECOL601 Seminar - Monday 12:00pm

January 18 - **Emily Baumgertner** - An integrative demographic approach to estimating the population viability of at-risk long-toed salamanders in the Bow River Corridor.

BCEM601 Seminar - Monday 4:00pm

January 18 - **Dimitri Desmots de Lamache** - TBD

ICB601 Seminar - Friday 3:00pm

January 22 - **Priyal Panchal** - Determining the role of Clr6 histone deacetylase complex and transcriptional regulation of the Gsf2 Flocculin in the flocculation of fission yeast

BioSci Connected - Friday 4:00pm

January 22 - **Dr. Mindi Sommers**.

ECOL601 Seminar - Monday 12:00pm


January 25 - **Jared Conroy** - Reconstructing historical population abundance in a crashed population of Pacific salmon.

CMMB601 Seminar - Wednesday 12:00pm

January 27 - **Janine McCaldler** - Wastewater-based monitoring of the SARS-CoV-2 pandemic in Calgary, Alberta.

ICB601 Seminar - Friday 3:00pm

January 29 - **Tabitha Festa** - Identifying the vital role of Shox2 gene regulation in mammalian brain development.



BIOSCI IN THE NEWS

Stories summarized from UToday Features

Bug-eyed for research: Undergrads catalogue Calgary's insects

Dr. Mindy Summer, PhD, Faculty of Science

Kevin Duclos, Faculty of Science

How do we continue to provide experiential learning in an online learning setting? It's a question our instructors have been grappling with since the pandemic first shifted our learning environment onto the Zoom call. But Dr. Mindy Summers from our department has had a very successful semester in Zoology 435: Entomology, while piloting a Course-based Undergraduate Research Experience (CURE), supported by the College of Discovery, Creativity and Innovation (CDCI). Her students experienced hands-on research as they were asked to create their own insect collection from specimens they found in their own lives! These collections were contributed to an online, crowd-sourced global repository and community for identifying species called iNaturalist and helped catalogue biodiversity for the City of Calgary. Dr. Summers commented on student engagement in the course, "In a remote learning context, CURE students have taken initiative with their research and gained confidence in their abilities to work independently." Students were also encouraged to develop critical science communication skills in an assignment asking them to write a piece communicating the need for Albertans to care more about insect biodiversity. The Fall 2020 offering of the course contributed over 3,300 insect observations to the iNaturalist database, with over 880 verified at the species level. Kevin Duclos, a TA for the course, emphasized the impact the experiential learning opportunity had on his students, "This course, and others like it, allows students to take more ownership in what they're doing to actually feel like they're scientists."

IF TV SCIENCE WAS MORE LIKE REAL SCIENCE

