CONGRATULATIONS TO:

Ivette Menendez, of the Facchini lab, who successfully defended her doctoral thesis on August 11, 2022!

Kurtis Marno Jones, of the Chua lab, for their publication in G3 titled "Genetic-interaction screens uncover novel biological roles and regulators of transcription factors in fission yeast"!

Sadaf Sangari, of the Hansen lab, who successfully defended their MSc thesis on August 4, 2022.

Nikhil Pradhan, of the Turner lab who successfully defended his MSc thesis on August 22, 2022.

Andrii Lekhan, of the Turner lab, for their publication in ACS Applied Material Interfaces titled "Comparison of antimicrobial and antibiofilm activity of Proflavine co-crystallized with Silver, Copper, Zinc, and Gallium salts."

Damon Brown, of the Turner lab, whose manuscript titled "Exploration into the presence and abundance of multidrug resistance efflux pumps in oil and gas environments."

Dr. Ali Pormohammad, of the Turner lab, whose manuscript titled "Antibacterial, Anti-biofilm, and Antioxidant Activity of 15 different Plant-based Natural compounds in Comparison with Ciprofloxacin and Gentamicin" was published in Antibiotics!

Dr. Daniel Gittins, of the Hubert lab, for their publication in Science Advances titled "Geological processes mediate a microbial dispersal loop in the deep biosphere"!

If you or someone in your lab have something to celebrate, including successful defences and awards, please contact biogs@ucalgary.ca to have your accomplishment included in the next newsletter!
Ph.D. Candidacy Oral Examination - Candidacy Exams are Closed Exams.

Thesis Oral Examinations - Exams are “Open” unless otherwise noted.

**Tyson Bookout** (Supervisors: Dr. Lisa Marie Gieg and Dr. William Shawn Lewenza) will be holding their MSc Thesis Examination titled "Metabolite-Sensing Transcription Factors for Developing Whole Cell Naphthenic Acid Biosensor Technology" on September 6, 2022 at 2:15 pm. (Exit Seminar at 1:15 pm).

**Lisa Sims** (Supervisor: Dr. Robert Barclay) will be holding their MSc Thesis Examination titled "Effects of Hurricane Maria on the Bat Community on the Caribbean Island of Dominica" on September 9, 2022 at 1:00 pm. (Exit Seminar at 12:00 pm).

**Elena Fekete** (Supervisors: Dr. Andre Buret and Dr. Khrisendath Chadee) will be holding their PhD Defence titled "Physical and chemical alterations to the intestinal mucus barrier during Giardia spp. infection" on September 15, 2022 at 10:00 am. (Exit Seminar at 9:00 am).

**Meruyert Kudaibergenova** (Supervisor: Dr. Elmar Prennar) will be holding their PhD Defence titled "Exploring hERG1: unlocking molecular underpinnings of a drug block by linking molecular simulations with experiments" on September 26, 2022 at 2:00 pm. (Exit Seminar at 1:00 pm).
University of Calgary researchers have identified a promising new approach to treating bacterial skin infections. In a study recently published in Nature, first author Dr. Rachel Kratofil, PhD, and co-senior authors Drs. Paul Kubes, PhD, Justin Deniset, PhD, and their research team show new insight which could lead to advancements in treating bacterial infections and wounds.

“While translating our research from bench to bedside will require many more experiments and involve a model more closely related to human disease, it is exciting that we have made a fundamental discovery that could improve infections and tissue repair in humans, especially hard-to-treat cases,” says Kratofil.

Traditionally, researchers have thought that both neutrophils and monocytes (white blood cells) were recruited to clear bacteria from an infected site on the skin. When these cells work together, they act as the immune system’s first line of defense in our bodies.

However, the new research reveals that monocytes alone are capable of facilitating faster healing of wounds. Monocytes help the healing process by regulating leptin levels and blood vessel growth during wound repair. They also produce ghrelin, a hormone that helps wounds heal more efficiently.

OTHER NEWS

Congratulations to Carly Chan for winning the August Puzzle of the month!

COURSE OFFERINGS

BIOLOGY 607.82 – Molecular Ecology and Evolution (W2023)

Molecular Ecology utilizes genomic tools to address questions in ecology, evolution, behaviour and conservation. Topics will include principal and emerging molecular techniques for characterizing and analyzing genetic variation to test quantitative predictions from ecological and evolutionary theory. Students will learn all of the steps required to undertake a molecular ecology project of an applied or fundamental nature.

No pre-reqs required, but knowledge of evolutionary biology an asset.
Questions? Contact Sean Rogers (srogers@ucalgary.ca)

Attention Graduate Students!
Register for Basic Principles in Pharmacology (MDSC 621.01)

This, in-person, graduate course focuses on the principles and mechanisms of drug action and signal transduction. For more information, contact Mark Giembycz (giembycz@ucalgary.ca) or Andy Braun (abraun@ucalgary.ca)

Tues and Thurs 3-4:30 pm | Fall semester, 2022
Cumming School of Medicine
PUZZLE OF THE MONTH

Campus Knowledge

Down:
1. EEEL stands for _______ Environment Experiential Learning
2. The area where you find the Barrier Lake Field Station
3. The university of Calgary was _______ in 1966
4. The numbers of campuses that the University of Calgary has
5. The name of the Dinos Mascot

Across:
2. A hall with many food options
4. This library is found in the Earth Sciences building
7. This building is home to a lovely atrium

Complete the puzzle and email a screen shot or photo to biogsa@ucalgary.ca to have your name put in a draw to win a prize!

Prizes are for graduate students only. Please submit answers by September 20, 2022.