

## **HONOURS FEST 2023**

Organized by department/unit and alphabetically by last name

#	Unit	First Name	and alphabetically by Last Name	Project Title
1	всмв	Natalie	Berry	Structural and Functional Characterization of a Novel S1_25 Sulfatase
10	ВСМВ	Natalie	Boraston	Developing an ATP-Assay to Detect Antibiotic Tolerance in Enterococcus faecalis
11	BCMB	Maddy	Brookall	Epigenetic Regulation of T cells by the Metabolite 1-Methylnicotinamide
19	BCMB	Jordan	Cucksey	MeCP2 Variation and Isoform Composition in Different Mice Tissues
20	BCMB	Sophie	Culos	Changes to Bacterial Lipids Induced by Variable Growth Conditions
27	BCMB	Jaden	Dedora	Discovering the Role of Tumour-infiltrating B Lymphocytes Antibodies
29 31	BCMB BCMB	John Mira	Evans Finkelstein	Investigating the Regulation of PI3Kγ  New Hope for Neurodegenerative Diseases: Binding of a Novel Agonistic Antibody to Tyrosine Kinase Receptor B
32	BCMB	Breeze	Gladwin	Discovering the Clonal Evolution and Antigen Reactivity of Tumour Infiltrating B Cells in Ovarian Cancer
38	BCMB	Courtney	Granger	New Discoveries of Nej1 in Alt-EJ: Implications for Cancer Therapeutics
39	BCMB	Megan	Greensill	SCRaMbLE in <i>Bacillus subtilis</i> : A Rapid Combinatorial Method for Generating Phenotypic Variation
41	ВСМВ	Arden	Grew	The Effects of the Intrinsically Disordered Loops of Fpr4 on Mediating Protein Interactions
42	ВСМВ	Ocean	Han	Hacking Co-stimulatory Receptors with Checkpoint Antibodies
44	всмв	Isabella	Kroker Kimber	Do Intravenous Antibiotics Impact the Gut Microbiome?
48	всмв	Angela	Mitchell	Development of a Direct Diagnostic Test for Syphilis
47	ВСМВ	Liam	Mitchell	RecQ Helicase SGS1's Important Role in Maintaining Genomic Stability
56	ВСМВ	Vicka	Pluzhnikova	The Role of Isovalerate in Small Intestinal Barrier Maintenance During Helminth Infection
57	ВСМВ	Andrew	Rodd	Investigating the Role of Dyskerin in DNA Damage Repair
59	BCMB	Mackenzie	Scott	Investigating the Interactions Between PI4KA and its Accessory Proteins
60	ВСМВ	Stephanie	Skalitzky	Constructing a Bacterial Tumor Infection Model in Cancer
64	BCMB	Cameron	Urquhart	Lipid Identities and Spatial Distributions within Tadpole Brains
65	BCMB	Annika	Weir	Characterization of Environmental Bacteria via Microbial Lipids  Crab Searce Differentiating Crab Species specific Repair Searce on Molluse Brow for Reconstructing Crab Abundance
2	BIOL	Paige	Amos	Crab Scars: Differentiating Crab Species-specific Repair Scars on Mollusc Prey for Reconstructing Crab Abundance Through Time
9	BIOL	Amran	Aujla	Investigating the Co-expression of Acetylcholine and γ-Aminobutyric Acid in the Pedunculopontine Tegmental
				Nucleus, Motor Cortex, Striatum, and Medial Septum
12	BIOL	Isabelle	Cliché	Effects of "The Blob" on Chaetognath Community Composition off the West Coast of Vancouver Island
18	BIOL	Hazel	de Haas	Within-species Variation in the Elemental Composition of Threespine Stickleback within the Cowichan Drainage
				Basin
21	BIOL	Nicole	Fung	Assessing the Effect of Long-term Formalin Preservation on Zooplankton Biovolume Estimates
26	BIOL	Adam	Gheis	How Do Salmon Get Past a Landslide Blockage: Investigating the Genetic Basis of Landslide Passage Ability in
28	BIOL	Kaitlin	Griffith	Chinook and Sockeye Salmon Investigating the Effect of the Loss of Complement Factor D on Complement Activity in the Stargardt Disease
20	DIOL	Naitiiii	Giiiidi	Mouse Model
33	BIOL	Cierra	Hart	Rock the Boat: An Investigation into the Effects of Vessel Noise on Rockfish Communication
37	BIOL	Alistair	Knox	Establishing a Breeding Program for <i>Pteridophyta</i>
40	BIOL	Rebecca	Krohman	What Stress Sequence Will Kill Me? The Perspective of <i>Tigriopus californicus</i>
43	BIOL	Bethany	Robson	A Comparison of Drought Tolerance in Two Conifers with Contrasting Mycorrhizal Associations
49	BIOL	Kirsten	Suesser	School of Hard Knocks: Young Adult Concussions (Repeated mTBI Modulation of Synaptic Plasticity in Female Rat Hippocampi)
55	BIOL	Angus	Townsend	Two Separate Strategies, or Sequential Age and Life-history Connected Reproductive Tactics? An Analysis of Plainfin Midshipman ( <i>Porichthys notatus</i> ) Otolith Annuli to Estimate Age
58	BIOL	Olivia	Waller	Calbindin and ChR2 Expression in the Dopaminergic SNc and VTA of DATcre::ChR2-EYFP Mice
3	CHEM	Sarah	Bryan	Weeding out THC Isomers Using Mass Spectrometry
8	CHEM	Holly	Celuszak	Predicting Chemical Reactivity of a Key Step in Common Chemical Reactions
13	CHEM	Odhran	Cruise	Direct Alkenylation of Vinyl Halides: Reaction Discovery Through High-Throughput Experimentation
17	CHEM	Tyler	Curtz	The PEPPSI Challenge: A Catalyst that Allows for Mechanistic Analysis
22	CHEM	Tiago	Fisher	A Small Mercury Drop and a Quick Catalytic Stop: A Toxic Test for Homogeneity
25	CHEM	Maria	Hangad	From Droplets to Drug Delivery: Lab-on-a-Chip Device for Dosing Retinoic Acid in Polycaprolactone Microparticles
30	CHEM	Manon	Latrille	Impact of Using Weekly Quizzes on Student Learning of Introductory Organic Chemistry
34	CHEM	Doug	Miller	Unlocking Pathways for Novel Molecules
46	CHEM	Maximilian	Strasser	Examining the Effects of the Acceptor on the Optoelectronic Properties of Phenol-based Donor-Acceptor Pairs
50	CLIENA	Martin	Trapero Sempere	The Synthesis of Cyclic Phosphonates: Towards Stable and Recyclable Main Group Plastics
	CHEM			
54	CHEM	Jade	Watson	Isolation of Unstable Heavy Analogues of Nitroso- and Nitro-benzene: Stabilization Through Extreme Steric Hindrance
61	CHEM	Jade Peter	Watson	Hindrance Optical Properties of Molecules at the Air-water Interface
61 4	CHEM CHEM EOSC	Jade Peter Isabelle	Watson  Yang Beaupré-Olsen	Hindrance Optical Properties of Molecules at the Air-water Interface The Mineralogy of Fe-bearing Hydrothermal Vent Particles at the Endeavour Mid-ocean Ridge
61 4 7	CHEM EOSC EOSC	Peter Isabelle Matteo	Watson  Yang Beaupré-Olsen Ferri	Hindrance Optical Properties of Molecules at the Air-water Interface The Mineralogy of Fe-bearing Hydrothermal Vent Particles at the Endeavour Mid-ocean Ridge Graphite Thermometry of the Big Salmon Range, South-Central Yukon
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61 4 7 14 16	CHEM EOSC EOSC EOSC EOSC	Peter Isabelle Matteo Anna Sophia	Watson  Yang  Beaupré-Olsen  Ferri  Nickoloff  Olim	Hindrance Optical Properties of Molecules at the Air-water Interface The Mineralogy of Fe-bearing Hydrothermal Vent Particles at the Endeavour Mid-ocean Ridge Graphite Thermometry of the Big Salmon Range, South-Central Yukon Oceanic Response to Widespread Ocean Thermal Energy Conversion Mitigating Anthropogenic Climate Change with Aqueous Green Energy: Direct Air Carbon Dioxide Capture and Storage Powered by Ocean Thermal Energy Conversion
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61 4 7 14 16 23 35 51	CHEM  CHEM  EOSC  EOSC  EOSC  EOSC  EOSC  EOSC  EOSC	Jade  Peter Isabelle Matteo Anna Sophia  Meghan Taylor Matthew	Watson  Yang Beaupré-Olsen Ferri Nickoloff Olim  Reyda-Molnar Rushton Stephens	Hindrance Optical Properties of Molecules at the Air-water Interface The Mineralogy of Fe-bearing Hydrothermal Vent Particles at the Endeavour Mid-ocean Ridge Graphite Thermometry of the Big Salmon Range, South-Central Yukon Oceanic Response to Widespread Ocean Thermal Energy Conversion Mitigating Anthropogenic Climate Change with Aqueous Green Energy: Direct Air Carbon Dioxide Capture and Storage Powered by Ocean Thermal Energy Conversion Investigating the Timing of Saanich Inlet's Summer Mini-blooms Pressure Compensation of RBR Optical Dissolved Oxygen Sensor Using Stream Data to Measure Phanerozoic Dolomite Frequency
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61 4 7 14 16 23 35 51 53 62	CHEM  CHEM  EOSC  EOSC  EOSC  EOSC  EOSC  EOSC  EOSC  EOSC  EOSC  EOSC	Peter Isabelle Matteo Anna Sophia Meghan Taylor Matthew Andrea Savanna	Vatson  Yang Beaupré-Olsen Ferri Nickoloff Olim  Reyda-Molnar Rushton Stephens Valcourt Yamamoto	Hindrance Optical Properties of Molecules at the Air-water Interface The Mineralogy of Fe-bearing Hydrothermal Vent Particles at the Endeavour Mid-ocean Ridge Graphite Thermometry of the Big Salmon Range, South-Central Yukon Oceanic Response to Widespread Ocean Thermal Energy Conversion Mitigating Anthropogenic Climate Change with Aqueous Green Energy: Direct Air Carbon Dioxide Capture and Storage Powered by Ocean Thermal Energy Conversion Investigating the Timing of Saanich Inlet's Summer Mini-blooms Pressure Compensation of RBR Optical Dissolved Oxygen Sensor Using Stream Data to Measure Phanerozoic Dolomite Frequency Canada's Most Complete Merycoidodon Fossil Mapping Aquifers Using Electrical Resistivity Surveying on Eastern Vancouver Island in the Beaufort Watershed
61 4 7 14 16 23 35 51 53 62 6	CHEM  CHEM  EOSC  EOSC  EOSC  EOSC  EOSC  EOSC  EOSC  PHYS	Peter Isabelle Matteo Anna Sophia Meghan Taylor Matthew Andrea Savanna Nathan	Watson  Yang  Beaupré-Olsen  Ferri Nickoloff Olim  Reyda-Molnar Rushton  Stephens Valcourt Yamamoto Clements	Hindrance Optical Properties of Molecules at the Air-water Interface The Mineralogy of Fe-bearing Hydrothermal Vent Particles at the Endeavour Mid-ocean Ridge Graphite Thermometry of the Big Salmon Range, South-Central Yukon Oceanic Response to Widespread Ocean Thermal Energy Conversion Mitigating Anthropogenic Climate Change with Aqueous Green Energy: Direct Air Carbon Dioxide Capture and Storage Powered by Ocean Thermal Energy Conversion Investigating the Timing of Saanich Inlet's Summer Mini-blooms Pressure Compensation of RBR Optical Dissolved Oxygen Sensor Using Stream Data to Measure Phanerozoic Dolomite Frequency Canada's Most Complete Merycoidodon Fossil Mapping Aquifers Using Electrical Resistivity Surveying on Eastern Vancouver Island in the Beaufort Watershed Maximizing Normal Tissue Sparing: Ultra-high Dose Rate GRID Radiotherapy Using Very-high Energy Electrons
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