

BE-STEMM 2024 2024 EN-STIMM

Academic Program



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THE UNIVERSITY
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Tuesday July 30, 2024

TUESDAY JULY 30th

TIME (EST)	Room: Events			
8:00AM	Foyer: Continental Breakfast			
9:00AM	LIVESTREAM / Auditorium: Opening Remarks & Keynote			
9:00 to 10:20AM	Opening remarks: Dr. Maydianne Andrade Special guest performance : Miss McLeod Remarks: Hon. Yasir Naqvi MP Ottawa Centre Moderator: Dr. Kafi Ealey			
	Keynote: Dr. Upton Allen. <i>Understanding Disease Susceptibility in Black Individuals: Examples and Insights of Relevance to Personalized Medicine</i>			
10:20 to 10:40AM	Foyer: Break & Networking			
	Concurrent sessions: Salons A & B			
	Salon A: Translational Research		Salon B: Equity & Justice	
	Moderators: Kafi Ealey, Denzel Lodge		Moderator: Jennifer Adams	
10:45PM	Ofosu Adjei-Afriyie	Investigating the molecular mechanisms of insulin resistance in Myotonic Dystrophy type 1	De-Lawrence Lamptey	Caregivers' perception of their children's health in Canada: a nationwide study
11:00AM	Kafi Ealey	Relationship between adipose tissue cellular heterogeneity, obesity, and metabolic disease	Titilola Omosho	Perceived racism and maternal mental health outcomes of Black mothers in Ontario
11:15AM	Lindyann Lessey	Roles for Kaiso and p120ctn in intestinal inflammation and colitis-associated cancer	Abimbola Saka	Dismantling healthcare inequities: anti-racism and anti-oppression training for systemic change
11:30AM	Emmanuel Zangio	The effects of tendon vibration on balance control and electromyography in chronic ankle instability	Timi Idris	Black women and the nonprofit sector
11:45AM Lightning talks (3min each)	Hanad Adan	Role of the transcription factor Kaiso in TGFβ-mediated triple-negative breast cancer metastasis	Temitayo Sodunke	Exploring multifactorial barriers and resources for accessing equitable mental health care among African Nova Scotians (EMBRACE-ANS)
	Stephanie Ali Fairbairn	Kaiso, androgen receptor and increased mortality of women of African ancestry with triple-negative breast cancer		
	Remarks: Hon. Lawrence MacAulay, Minister of Agriculture & AgriFood Canada			
Noon	Foyer: Pick up Lunch			
12:15pm to 2:15PM	Salon A: Inclusive Mentorship Workshop Dr. Jennifer D. Adams		1:00PM. Lobby: Library Tours	Room 156: Career Networking

[Click for Abstracts](#)

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Tuesday July 30, 2024

Concurrent Sessions: Salons A & B			
		Salon A: Mathematics and Statistics	Salon B: Medical & Public Health Research
		Moderators: Lucy Campbell, Jude Kong	Moderators: Francine Gasasira, Denzel Lodge
2:15PM	Lucy Campbell	Mathematical study of multi-scale atmospheric wave interactions	Toyib Olaniyan Understanding mortality differentials of Black adults in Canada
2:30PM	Jude Kong	Leveraging artificial intelligence and mathematical modelling for diseases outbreak support	Leonet Reid Differences in aspirin use among high-risk pregnancies and associated maternal-fetal outcomes - a retrospective cohort study
2:45PM	Chigozie Ugwu	Risk Factors of Human Mpox (Monkeypox) Infection: A Systematic Review and Meta-Analysis	Lawrence Goodridge Stopping enteric illnesses early through environmental surveillance
3:00PM Lightning talks (3 min each)			Jim Ayukekbong Identification of the transition point of COVID-19 from a pandemic to an endemic disease through respiratory viruses surveillance
			Keisha Jefferies Understanding the social and structural factors impacting people of African descent with uterine fibroids in Nova Scotia
			Nomusa Mngoma Development and evaluation of a training program to enhance care and support of victim/survivors of sexual violence
			Sacha Williams The impact of gender on pediatric surgical care in Africa
3:45PM to 4:10pm	Foyer: Break & Networking		
4:15PM	LIVESTREAM / Auditorium: Opening remarks & Keynote		
4:15 to 5:30PM	Opening remarks: Dr. Toyib Olaniyan Moderator: Dr. Jude Kong Keynote: <u>Dr Beatrice Ombuki-Berman</u>		
5:30 to 7:30PM	Cocktail Reception & Networking (grazing boards, cash bar)		
7:30PM	LIVESTREAM / Auditorium: Auditorium: Public Panel Discussion		
7:30PM to 9:00PM	Moderator: Dr. Juliet Daniel Remarks: Hon. Mark Holland, Minister of Health <i>Action on Black Health Panel: Mobilizing for Structural Change</i> Dr. OmiSoore Dryden, Dr. Kannin Osei-Tutu, Dr. Bukola Salami		
9:00PM	End of day		

[Click for Abstracts](#)

[Click for Detailed Poster Schedule](#)

Wednesday July 31, 2024

		WEDNESDAY JULY 31st	
TIME (EST)		Room: Events	
8:00AM		Foyer: Continental Breakfast	
9:00AM		LIVESTREAM/ Auditorium: Opening Remarks & Keynote	
9:00 to 10:20AM		Opening Remarks: Dr. Jennifer Adams Moderator: Dr. Burhan Hussein Keynote: <u>Dr. Swanne Gordon.</u> <i>Embracing Diversity: Insights from Nature and Academia in our Rapidly Changing World</i>	
10:20 to 10:40AM		Foyer: Break & Networking	
10:45AM to Noon		Concurrent Sessions: Salons A & B	
		Salon A: Advancements in AI & Physical Sciences	Salon B: Biomedical & Molecular Research
		Moderator: Burhan Hussein	Moderator: Tamara Franklin
10:45AM	Norman Israel	Inverse design of metamaterial waveguide gratings using	Serah Kimani Drugging the undruggable: Harnessing AI for discovery of novel DCAF1 WD40 domain ligands
11:00AM	Stephen Robinson-Enebeli	Investigating sintering of metal aggregates during laser-induced incandescence on metal nanoparticles	Tiara Mulder Establishing an optogenetic model of exercise-induced damage and repair in <i>Drosophila melanogaster</i>
11:15AM	Burhan Hussein	Correlated shapeshifting and conformational isomerization	Redaet Daniel Arl8b-KD cells have altered lysosome characteristics reducing Ebola entry
Lightning talks (3min each) 11:30 to 11:33AM	Jyoti Kotecha	Overview of C2MCI research and opportunities	11:30AM Chika Onochie Protein coation: a novel role of Coenzyme A in redox regulation of human sperm capacitation
11:33 to 11:48AM	Effah Antwi	Advancing Inclusive Science in the Scientific Research Enterprise: Lessons from the NRCan Inclusive Science Research Study (ISRS).	Lightning talks 11:45AM Raliat Abioye Functional significance of food-derived peptides in inhibiting islet amyloid polypeptide (IAPP) fibrillation in type 2 diabetes management
			11:48AM Sheri McDowell Investigating the impact of host physiology on anti-tumor immunity
			11:51AM Mulu Geletu Investigating covalent HDAC inhibitors for the treatment of Duchenne muscular dystrophy
Noon to 12:05PM	Foyer: Moderator: Dr. Maydianne Andrade		
	Remarks: MP Sameer Zuberi, Ministry of Diversity, Inclusion & Persons with Disabilities (in person)		
12:05PM	Pick up Lunch		
12:15 to 2:10PM	Salon A: Panel on Industry & Entrepreneurship Moderator: Dr. Trevor Charles Panelists: Kareem Abdur-Rashid, Melisa Ellis, Dr. Christopher Dixon		1:00PM Lobby: Library Tours Room 156: Career Networking

Wednesday July 31, 2024

		Concurrent Sessions: Salons A & B	
		Salon A: Ecology, Sustainability, & Evolution	Salon B: Neuroscience and Psychology
		Moderator: Burhan Hussein	Moderator: Francine Gasasira
2:15PM	Emmanuel Galiwango	Plastic waste-to-hydrogen: accelerating a low-carbon circular economy	Jasmine Ali-Gami Long-term functional brain outcomes in youth with Enterovirus-71 central nervous system involvement: a multi-echo resting-state fMRI study
2:30PM	Abdel Halloway	A mutualism-parasitism gradient plus control over nodule access leads to trait variation in bacteria-plant mutualists	Tamara Franklin The long-term and multi-generational impact of chronic psychological stress during adolescence
2:45PM	Opeyemi Lawal	Phylogenomics of novel clones of <i>Aeromonas veronii</i> recovered from a freshwater lake reveals unique biosynthetic gene cluster	Lydia Muyingo Examining the healthy immigrant effect on alcohol use in emerging adults
3:00PM	Chinyere Ottah	Quantifying wildfire carbon emissions: a machine learning approach leveraging combustion measurements	
3:15PM	Francois Gonothi Toure	Optimizing Dairy Cow Health and Productivity with Efficient Movement Monitoring Using Data Augmentation and Computer Vision	
Lightning Talks (3min each)	3:30PM Angela Kross	Shedding light on shadow effects: assessing vegetation indices across different lightning conditions	
	3:33PM Kerrice Bailey	A synthesis of the state of fast fashion in the top garment-producing countries: China, Turkey, India, Bangladesh, Vietnam, and Indonesia	
	3:36PM Alannah Grant	City living: the influence of urban stress on early rates of neurogenesis in eastern grey squirrels (<i>Sciurus carolinensis</i>)	
	3:39PM Sherif Shuaib	A mechanistic stage structure model to estimate the growth and mortality parameters of five fish species in Canadian waters	

[Click for Abstracts](#)

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July 31, 2024

4:00PM	Morley-Callaghan Room (Salon C): Poster Session, Grazing Boards & Refreshments	
4:00PM to 5:15PM	Poster Presentations: EVEN NUMBERS	P1 - P10 : Biomedical & Molecular Research P11 - P17: Ecology, Sustainability, Evolution P18 - P22: Equity & Justice P23 - P33: Medical & Public Health Research P34 - P35: Neuroscience & Psychology P36 - P38: Computational & Physical Sciences P39 - P40: Science Education P41 - P44: Translational Research P45: Science Education P47: CBSN Science Fair Student Research (4 posters) P48: Art Submission
5:30PM to 6:45PM	Poster Presentations: ODD NUMBERS	
7:00PM	End of Day	

Thursday August 1, 2024

THURSDAY AUGUST 1: EMANCIPATION DAY			
TIME (EST)	Room: Events		
8:00AM	Foyer: Continental Breakfast		
9:00AM	Auditorium: Special Guest, Network Meeting & Raffle		
9:00AM	Moderator: Dr. Maydianne Andrade		
	<i>Remarks: Hon. Greg Fergus, Speaker of the House of Commons (in person)</i>		
9:15 to 9:25AM	Foyer: Break		
9:25AM to 10:45AM	General Meeting: The year in Review & Future of the Network : Have Your Say! Door prize raffle		
10:45AM to 11:00AM	Foyer: Break & Networking		
Concurrent Sessions: Salons A & B			
	Salon A: Immunology / Microbiology		Salon B: Science Education
	Moderator: Tiara Mulder		Moderator: Jennifer Adams
11:00AM	Jonathan Burnie	Applying methods in flow virometry to study viral surface proteins	Nathan Andrews The visible and the hidden: racism, whiteness and epistemic oppression in the Canadian academy
11:15AM	Emmanuel Alimo	Site of antibody affinity modification in the gut of zebrafish (<i>Danio rerio</i>)	Eddia Copeland Solas Exploring effective teaching practices for Black students learning science in Nova Scotia – initial findings
11:30AM	Maya George	Unveiling novel protein translation inhibitors against mycobacteria through reporter-guided analysis	Alannah Grant Assessing the impact of accessible experiential learning for BIPOC students at FREED
11:45AM	Safia Omer	Ninein is required for phagocytosis in macrophages	Maydianne Andrade Opening the eyes of undergraduate students to hidden impacts of bias in stem
Noon	Foyer: Pick up Lunch		
12:15PM to 2:10PM	Salon A: Regional Node Meet-and-Greet Facilitator: Dr. Jude Kong		1:00PM Lobby: Library Tours Room 156: Career Networking

Thursday August 1, 2024

2:15PM	LIVESTREAM / Auditorium: Keynote & Performance
	Moderator: Dr. Chinyere Nwafor-Okoli
2:15PM to 3:30PM	Keynote: Dr. Karl-Frédéric Vieux Unraveling the regulation and function of RNA tailing in reproductive and developmental biology
	Moderator: Mr. Oluwatimilehin Adebayo <i>Special guest performance: Afro Dance Crew</i>
3:30 to 4:30PM	Foyer: Refreshments & Networking
4:40PM	LIVESTREAM / Auditorium: Awards Ceremony
	MC: Dr. Lawrence Goodridge
	Remarks: Rt. Hon. Michaëlle Jean (in person)
4:40PM to 6:30PM	Presentation of Conference Awards Dr. Kimberley Gauthier, Dr. Loydie Jerome-Majewska
	Presentation of Career Awards Dr. Trevor Charles
	Remarks: Hon. Arielle Kayabaga, MP (live, online)
	<i>Special Guest Performance: Dr. El Jones (in person)</i>
	President's Remarks & Closing: Dr. Maydianne Andrade & Dr. Lawrence Goodridge
6:45PM to 9:00PM	Emancipation Day Banquet (Separate registration required) Pellan room (2nd floor)
	MC: Dr. Maydianne Andrade <i>Special guest performance: Miss McLeod (Redemption Song)</i> <i>Banquet: A tribute to Freedom in the Caribbean & the Streets of Johannesburg</i>
	Closing Remarks & Farewell

[Click for Abstracts](#)

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WEDNESDAY JULY 31st: Poster Session

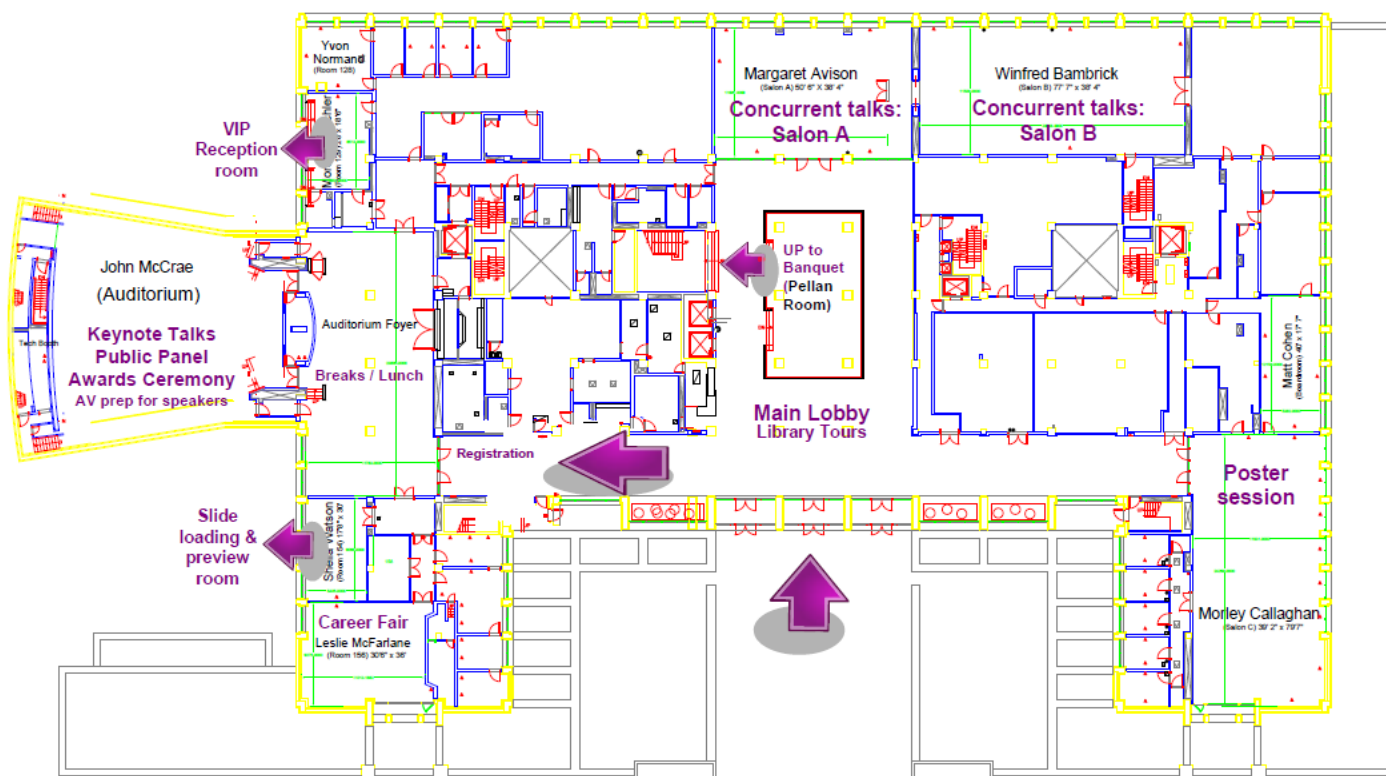
SECTION	#	Name	Title
Biomedical & Molecular Research	P1	Raliat Abioye	Functional significance of food-derived peptides in inhibiting islet amyloid polypeptide (IAPP) fibrillation in type 2 diabetes management
	P2	Yanchen Dong	Modeling cerebro-costo-mandibular syndrome (CCMS) with tamoxifen-induced SNRPB deletion
	P3	Anissa Francis	Alternative oxidase unlocked: developing an experimental tool for protein expression in <i>Saccharomyces cerevisiae</i>
	P4	Mulu Geletu	Investigating covalent HADC inhibitors for the treatment of Duchenne muscular dystrophy
	P5	Amirah-Iman Hicks	Tanycytes in sensory circumventricular organs
	P6	Sasha McDowell	Mechanisms of salt taste detection and modulation in <i>Drosophila melanogaster</i>
	P7	Sheri McDowell	Investigating the impact of host physiology on anti-tumor immunity
	P8	Cassandra Millet-Boureima	The role of TMED2 in craniofacial development
	P9	Sami Sedraoui	Lack of Compensatory Mitophagy in Skeletal Muscles During Sepsis
	P10	Abdoulie Touray	A phosphoinositide and cAMP crosstalk regulate quorum sensing in trypanosomes
Ecology, Sustainability & Evolution	P11	Kerrice Bailey	A synthesis of the state of fast fashion in the top garment-producing countries: china, turkey, india, bangladesh, vietnam, and indonesia.
	P12	Tamara Franz-Odendaal	Fundamental and applied research in skeletal biology: evo-devo to space biology
	P13	Kenzie Givens	Microbiome transmission mode influences host capacity for adaptation
	P14	Alannah Grant	City living: the influence of urban stress on early rates of neurogenesis in eastern grey squirrels (<i>Sciurus carolinensis</i>)
	P15	Samantha Jones	The lake ice pump: a conceptual model for carbon delivery from inland waters to the coastal ocean
	P16	Angela Kross	Shedding light on shadow effects: assessing vegetation indices across different lightning conditions
	P17	Patrick Ndayambaje	Enhancing green roof performance through native plant diversity: implications for urban ecosystem services
Equity & Justice	P18	Dara Dillon	Enhancing diversity in stemm: the role of predictive analytics and mobile technology in supporting black participation
	P19	Parnor Madjitey	Exploring the perspectives of Liberian frontline health workers on ethical tensions experienced during the Ebola epidemic and COVID-19 pandemic
	P20	Tanya Matthews	The impact of race, culture, and income inequality on literacy practices in the black communities of montreal
	P21	Temitayo Sodunke	Exploring multifactorial barriers and resources for accessing equitable mental health care among african nova scotians (embrace-ans)
	P22	Nomusa Mngoma	Equitable access to mental health care for black and indigenous peoples in canada: a scoping review
Medical & Public Health Research	P23	Jim Ayukekbong	Identification of the transition point of covid-19 from a pandemic to an endemic disease through respiratory viruses surveillance
	P24	Yumi Dille	Impact of Health Inequity-Induced Risk Factors on Midline Brain Malformations
	P25	Nomusa Mngoma	Development and evaluation of a training program to enhance care and support of victim/survivors of sexual violence
	P26	Keisha Jefferies	Understanding the social and structural factors impacting people of african descent with uterine fibroids in nova scotia
	P27	Keisha Jefferies	Uterine fibroids and black people of african descent: a scoping review
	P28	Queen Jacques	Blazing a trail - validation of a cannabis health literacy tool
	P29	Divine-Favour Ofili	Risk of comorbidity with cardiovascular diseases in people living with diabetes in Africa
	P30	Stephen Ogbodo	Population-level effect of COVID-19 vaccination coverage on transmission and mortality during Omicron variant dominance: a global longitudinal analysis
	P31	Dharamdeo Singh	Characterizing salmonella enterica serovars from dry foods
	P32	Sacha Williams	The impact of gender on pediatric surgical care in africa
	P33	Queen Jacques	Insights from the ground: a qualitative investigation of specific factors influencing cannabis retailers in nl
Neuroscience & Psychology	P34	Bailey Agard	The impact of repetition on the development of memory functions
	P35	Renée Lawson	Assessing baseline tms-eeeg markers of anxiety symptoms in patients with major depressive disorder (mdd)

Morley Callaghan Room

4:00 - 5:15PM Even Numbers
5:30 - 7:00PM Odd Numbers

WEDNESDAY JULY 31st: Poster Session

SECTION	#	Name	Title
Advancements in AI and Physical Sciences	P36	Norman Israel	Inverse design of metamaterial waveguide gratings using machine learning
	P37	Jyoti Kotecha	Overview of C2MCI research and opportunities
	P38	Peter Mensah	Noise Exposure Assessment of Montreal Metro's Orange Line
Science Education	P39	Ryan Bossou Tihoun	Homemade spectrophotometer: affordable science for educational innovation.
	P40	Terkuma Chia	Assessments in Anatomy: Exploring Faculty Perspectives, Challenges, and Solutions Through a Focused Group Discussion
Translational Research	P41	Hanad Adan	Role of the transcription factor Kaiso in TGFβ-mediated triple-negative breast cancer metastasis
	P42	Stephanie Ali Fairbairn	Kaiso, androgen receptor and increased mortality of women of African ancestry with triple-negative breast cancer
	P43	Ibukunoluwa Naiyeju	Development of Co-Culture Spheroids as potential models for Atherosclerotic Disease Modelling
	P44	Joab Ogato	Fabrication of bone marrow extracellular matrix scaffolds with 3D printed predefined internal microarchitecture promoting vascularization
Science Education	P45	Luciana Baruffaldi	Two Bugs / One Stone: Breaking Barriers to Biology for Underserved Students Through Interactive Invertebrate Behaviour Experiences
Science Fair Projects		Noah Bryan	Is the water safe to drink? The rapid test is the missing link!
	P47	Munir Altaher	Changing the way we refill electric cars
		Joy Akinkunmi	Pill smart 2.0
		Simisolaoluwa Shodunke	Eco-Life Smart App
Art & STEMM Advocacy	P48	Ezinne Ekediegwu	The Enduring Struggle of Endometriosis: Art as Advocacy



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A Book Sale During the poster session

Used books from the Friends of the Library & Archives

Perfect Books (Ottawa)- Carrying books by El Jones and George Elliott Clarke
(The authors will be available for a book signing on August 1)

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