

SESBASS 2021 SCHEDULE

FRIDAY AUGUST 27		
8:30	30 min	Gather Space Acclimatization
9:00	10 min	Welcome and Introduction to SESBASS 2021
CLINICAL HEALTH RESEARCH		
Session 1 - Biomechanics		
Session Chair - Dr. Paolo Sanzo		
9:10	10 min	Dr. Paolo Sanzo to open the session and introduce Dr. Walter Herzog
9:20	40 min	KEYNOTE: WALTER HERZOG <i>The Many Faces of Knee Joint Osteoarthritis</i>
10:00	10 min	Dr. Sanzo will Introduce students and postdocs
10:10	10 min	Celia Barry (Dr. Zerpa) <i>Static Measures of Prosthetic Shoe Materials for Transtibial Amputees</i>
10:20	10 min	Jordan Bedel (Dr. Sanzo) <i>The Effects of Neurocognitive and Physical Tasks on End-Tidal Carbon Dioxide Levels in Healthy Reserve and Concussed Special Forces Military Members</i>
10:30	10 min	James Fimognari (Dr. Sanzo) <i>The Effects of Knee Bracing on Reactive Soccer Agility, Kicking Velocity, and Muscle Activation</i>
10:40	20 min	Social Break
11:00	30 min	LU Faculty Presentation - Dr. Carlos Zerpa Title: <i>Concussions in Sports: Biomechanics Measures</i>
11:30	30 min	PANEL: Biomechanics (Chair - Dr. Sanzo) Panelists: Dr. Carlos Zerpa, Dr. Walter Herzog, Dr. Salvatore Federico
12:00	50 min	POSTER SESSION – visit the virtual poster room to view the posters
Session 2 - Medical Imaging		
Session Chair – Dr. Sabah Mohammed		
12:50	10 min	Dr. Mitch Albert to open the session and introduce Dr. Charles Cunningham
1:00	40 min	KEYNOTE: CHARLES CUNNINGHAM <i>Hyperpolarized ¹³C MRI of the Human Brain</i>
1:40	10 min	Dr. Mohammed to introduce students and postdocs
1:50	10 min	Sarah Tribe (Dr. Campbell) <i>Developing a Procedure for Radiolabeling Chemotherapy Drugs</i>
2:00	10 min	Jonas Olsen (Dr. Hou) <i>Development of Small Molecule Ligands Targeting the Lysophosphatidic Acid Receptor 1 for PET Imaging</i>
2:10	10 min	Branden Mandaric (Dr. Campbell) <i>Development of an ¹⁸F Radiolabeling Method using Solid Phase Chemistry</i>
2:20	10 min	Clifford Agyei (Drs. Campbell and MacKinnon) <i>The Development of a New High-capacity Solid Resin for Use in Mo/Tc-99m Generators</i>
2:30	10 min	Jessica Allingham (Drs. Campbell and Floriano) <i>Brightening Up Brain Injuries: The Design, Synthesis, and Characterization of a PET Diagnostic Agent for Neuronal Trauma</i>

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2:40	10 min	Darien Sawyer (Drs. Fiaidhi and Mohammed) <i>Thick Data Analytics for Segmenting COVID-19 from CT-Scans</i>
2:50	10 min	Social Break
3:00	30 min	PANEL: Medical Imaging (Chair- Dr. Mohammed) Panelists: Dr. Amarjit Chahal, Dr. Yurii Shepelytskyi
Session 3 - Tissue Engineering		
<i>Session Chair - Dr. Ali Tarokh</i>		
3:30	10 min	<i>Dr. Ali Tarokh to open the session and introduce Dr. Ali Tamayol</i>
3:40	40 min	KEYNOTE: ALI TAMAYOL <i>Non-conventional Engineering Tools for the Treatment of Skin and Muscle Injuries</i>
4:20	10 min	Behrooz Afra (Dr. Tarokh) <i>A Deep Insight into the Applications of Computational Fluid Dynamics in Bio-Engineering Problem</i>

SATURDAY AUGUST 28 - morning		
8:30	30 min	Gather Space Acclimatization
DIGITAL HEALTH TECHNOLOGIES		
<i>Session Chair - Dr. Jinan Fiaidhi</i>		
9:00	10 min	<i>Dr. Jinan Fiaidhi to open the session and introduce Dr. Craig Kuziemy</i>
9:10	40 min	KEYNOTE: CRAIG KUZIEMSKY <i>Digital Health Systems Based Approaches for Health Care Transformation</i>
9:50	10 min	<i>Dr. Fiaidhi will Introduce students and postdocs</i>
10:00	10 min	Shiv Hansoti, Divarsh Patel (Dr. Fiaidhi) <i>Designing and Optimizing Hand Gesture Detection and Recognition using Advanced Computational Techniques</i>
10:10	10 min	Lisa Ewan (Dr. Mohammed) <i>Medical Workflow Design and Planning Using Node-Red Data Fusion</i>
10:20	10 min	Social Break
10:30	10 min	LU Faculty Presentation - Dr. Sabah Mohammed <i>QL4POMR: A Graph-Based Problem Oriented Medical Record</i>
11:00	30 min	Dr. Arnold Kim <i>Aurora Constellations: A novel modeling and design-oriented approach that leverages collaborative, iterative drafting and compositional approach in the construction, validation and implementation of clinical planning.</i>
11:30	30 min	PANEL: Problem Oriented Medical Records (POMR) (Chair - Dr. Fiaidhi) Panelists: Dr. Garima Bajwa, Dr. Arnold Kim, Dr. Sabah Mohammed
12:00	50 min	POSTER SESSION – visit the virtual poster room to view the posters

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SATURDAY AUGUST 28 - afternoon		
ENVIRONMENTAL SUSTAINABILITY		
<i>Session Chair - Dr. Sreekumari Kurissery</i>		
12:50	10 min	<i>Dr. Sreekumari Kurissery to open the session and introduce Dr. Lesley Lovett-Doust</i>
1:00	40 min	KEYNOTE: LESLEY LOVETT-DOUST <i>Environmental Sustainability: Aristotle and the Anthropocene</i>
1:40	10 min	Social Break
1:50	10 min	<i>Dr. Jinan Fiaidhi to introduce Dr. Christopher Henry</i>
2:00	40 min	KEYNOTE: CHRISTOPHER HENRY <i>Digital Agriculture: The Terrabyte Project</i>
2:40	10 min	<i>Dr. Sreekumari Kurissery will introduce environment related students and postdocs</i>
2:50	10 min	Nadia Sufdar Ali (Dr. Qin) <i>Production of Laccase from Serratia proteamaculans and its Potential in Decolourisation of an Anthraquinonoid Dye - Remazol Brilliant Blue R</i>
3:00	10 min	Sarita Shrestha (Dr. Qin) <i>A Newly Characterized Streptomyces sp. is of High Potential Value in Converting Organic Wastes into Value-added Bioproducts</i>
3:10	10 min	Xuantong Chen (Dr. Qin) <i>The Effect of Photoperiod on Pleurochrysis Dentata Lipid and Calcium Carbonate Accumulation and the Novel Discovery of Calcium Carbonate Shell Function</i>
3:20	10 min	Chris Chio (Dr. Qin) <i>Optimization and Purification of Amylase Production from Bacillus velezensis and Recovering of Its Derived Value-added Products</i>
3:30	10 min	Janak Khatiwada (Dr. Qin) <i>Malting Effluent for Microalgae Cultivation and Subsequent Biomass and Lipid Production</i>
3:40	10 min	Afrooz Tarokh <i>Point-of-Care Detection of Salmonella in Food and Water Using an Optical Aptasensor Based on G-C3N4@Cu2O Composites</i>
3:50	30 min	LU Faculty Presentation - Dr. Nandakumar Kanavillil <i>Formation, impacts and removal of biofilms from surfaces of interest</i>
4:20	30 min	PANEL: Current Issues in Environmental Sustainability (Chair - Dr. Kurissery) Panelists: Dr. Ali Tarokh, Dr. Wensheng Qin, Dr. Florin Pendea, Dr. Nandakumar Kanavillil, Dr. Lesley Lovett-Doust
4:50	10 min	Concluding session – Thank you to everyone for participating; awards to be announced later

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POSTERS
Digital Health Technology
Desiree Dmello , MSc, student in Computer Science, Lakehead University. Developing a Descriptive Chatbot for Mental Health Awareness Among Youth in Canada
Environmental Sustainability
Dr. Yanwen Wu , Co-innovation Center for Sustainable Forestry in Southern China, Jiangsu Province Key Laboratory of Soil and Water Conservation and Ecological Restoration, Nanjing Forestry University, China; Department of Biology, Lakehead University, Canada Genome and Transcriptome Sequencing of Novel <i>Pseudomonas</i> sp. NLX-4 Strain Involved in Bio-restoration of Over Exploited Mining Sites
Dr. Yuen Zhu , College of Environmental & Resource Sciences, Shanxi University, Shanxi, China Effects of nZVI modified biochar and earthworms on the dissipation of sulfamethoxazole, microbial antibiotic resistance genes and microbial community structures in soil
Dr. Guixiang Zhang , Taiyuan University of Science and Technology Changes in abiotic dissipation rates and bound fractions of antibiotics in biochar-amended soil
Aristide Mokale , Biotechnology PhD Student, Lakehead University. Production of Glucose Isomerase from Soil Bacterial Isolates
Clinical Health Research
Wenjie Liu , Chemistry and Materials Science PhD Student, Lakehead University Development of PET Molecular Probes for Lysophosphatidic Acid Receptor Type 1
Dong Zhao , Chemistry and Materials Science PhD Student, Lakehead University The Development of PET Radiotracers for Imaging Aurora Kinases
Austin Hopkins , Student, Lakehead University. The Design and Synthesis of a PAR2 Imaging Agent
Nicholas Renyard , Student, Lakehead University. Concussion Symptoms Related to Head and Neck Injuries
Halen Kovacs , Student in Chemistry, Lakehead University. Design, Synthesis and Analysis of Small Molecule Aurora Kinase Inhibitors as Possible Cancer Diagnostics and Therapeutics
Joseph Deschamps , Student in Chemistry, Lakehead University. Design and Synthesis of Aurora Kinase Inhibitors
Abdollah Hozhabrnia , Center for Healthcare Data Modeling, Department of Biostatistics and Epidemiology, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran. Cut-off values of anthropometry indices to predict cardiovascular disease incidence by ROC curve analysis in 10 years follow-up in study of Yazd healthy heart cohort (YHHC) of Iran