39th Annual Meeting of the Canadian Biomaterials Society

CBS2025 May 21 - 23, 2025 | Queen's University Kingston, ON https://cbs2025.smithengineering.queensu.ca



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A welcome message from the CBS2025 Co-Chairs

Welcome to Kingston Ontario and Queen's University for the 39th Annual Meeting of the Canadian Biomaterials Society. Our goal this conference is to give our members and the general biomaterials community an opportunity to share great science and have meaningful conversations on biomaterials, particularly on challenges to overcoming barriers to translation, including understanding immune responses and the commercialization process. We are looking forward to learning and networking with you all!

Thank you to our generous sponsors who have supported sessions, awards, and the conference as a whole. Please drop by and say hello to those who have booths in the Biosciences Atrium. Also, thank you to the members of our Scientific and Organizing committee, our numerous abstract reviewers, the chairs and judges for the oral and poster sessions, and our amazing volunteers. This conference could not have been held without your dedication and support.

We hope you enjoy the conference and all that the "Limestone City" has to offer.

Laura Wells & Lindsay Fitzpatrick

Thank you to everyone who has made this conference possible!

Organizing Committee

Lindsay Fitzpatrick (Queen's University) Laura Wells (Queen's University) Brian Amsden (Queen's University) Kevin De France (Queen's University)

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Emilio Alarcon (University of Ottawa) Brian Amsden (Queen's University) Lindsay Fitzpatrick (Queen's University) Locke Davenport Huyer (Dalhousie University) Jayachandran Kizhakkedathu (University of British Columbia) Laura Wells (Queen's University)

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Thank you to our amazing sponsors for supporting the conference!



Conference Location

Biosciences Complex, 116 Barrie St, Kingston, ON K7L 3N6 (Main entrances off Barrie St and Arch St)



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CBS2025 Program Overview

For the detailed program, please scan the QR code:

May 20, 2025

Please join us in the Biosciences Atrium for an informal opening reception with light refreshments and appetizers.

Date: May 20th, 2025 Time: 7:00pm – 8:30pm Location: Biosciences Atrium, 116 Barrie St, Kingston, ON K7L 3N6



Day 1 – May 21, 2025

	Atrium	Biosciences 1101	Biosciences 1102	Biosciences 1120	Biosciences 2109
07:00 - 07:15	Registration DeskOpens (7:00 am - 6:30 pm)				
07:15 - 08:15					
08:15 - 08:30	Breakfast	Opening Remarks			
08:30 - 09:30		Plenary1: Dr. Grissel Trujillo de Santiago			
09:30 - 10:45		1A: Cell-Material Interactions and Biointerfaces	1B: Bone Tissue Engineering and Regeneration		Workshop A: Inclusion, Diversity,
10:45 - 11:15	Coffee Break				Equity, Accessibility, and Social Justice (IDEAS)
11:15 - 12:30		2A: Blood-ContactingMaterials	2B: Advanced Manufacturing 1		
12:30 - 13:30	LunchBreak				
13:30 - 14:30		3A: Controlled Release and Gene Therapy 1	3B: CardiovascularBiomaterials 1		
14:30 - 15:30	Poster Session 1 & Coffee Break				
15:30 - 16:30		4A: Biomaterial Design1	4B: Natural and Bio- inspired Materials 1	4C:Ophthalmic Biomaterials	
16:30 - 18:00			Annual General Meeting		
18:00 - 18:30					
18:30 - 22:00	Faculty & Student Networking Mixers	5			

Student Networking Event: 6:30 pm at The Grad Club (162 Barrie St. Kingston, ON, K7L 3K1)

Faculty Networking Event: 6:30 pm at Baja Craft Kitchen (253 Ontario St Suite A, Kingston, ON, K7L 4X8)

Day 2 – May 22, 2025

	Atrium	Biosciences 1101	Biosciences 1102	Biosciences 1120	Biosciences 2109
07:00 - 07:15	Registration DeskOpens (7:00am - 6:30pm)				
07:15 - 08:30	Breakfast				
08:30 - 09:30		Plenary 2: Dr. Ankur Singh Immunomodulatory Biomaterials Symposium			
09:30 - 10:30		5A: Immunomodulatory Biomaterials & Host Response 1 Immunomodulatory Biomaterials Symposium	5B: Biomaterial Design 2	5C:Antimicrobial Materials	
10:30 - 11:00	Coffee Break				
11:00 - 12:15		6A: Immunomodulatory Biomaterials & Host Responses 2 Immunomodulatory Biomaterials Symposium	6B: Natural and Bioinspired Materials 2	6C:Controlled Release and Gene Therapy 2	
12:15 - 13:15	LunchBreak				12:30 - 13:15 Workshop B: Bridging Innovation: Exploring NRC Research Opportunities and Collaborative Pathwaysfor Academia.and Industry
13:15 - 14:30		7A: Immunomodulatory Biomaterials & Host Responses 3	7B: Biomaterials in CancerResearch	7C:Mechanobiology	
14:30 - 15:30	Poster Session 2 & Coffee Break				
15:30 - 16:30		8A: Cell-Material Interactions and Biointerfaces 2	8B: CardiovascularBiomaterials 2	8C: Wound Healing	
16:30 - 16:45					
16:45 - 17:45		9A: Immunomodulatory Biomaterials & Host Responses 4	9B: CardiovascularBiomaterials 3	9C:CellDelivery	
17:45 - 18:15					
18:15 - 22:30	GalaDinner (Networking Event) Marriott Kingston (285 King St E, Kingston, ON	IK7L3B1)			

Day 3 – May 23, 2025

	Atrium	Biosciences 1101	Biosciences1102
07:00 - 07:15	Registration DeskOpens (7:00am - 4:30pm)		
07:15 - 08:30	Breakfast		
08:30 - 09:30		Plenary 3: Dr. May Griffith Translational Biomaterials Symposium	
09:30 - 10:30		Regulatory Keynote: Bruce Randall Translational Biomaterials Symposium	10B: AdvancedManufacturing 2
10:30 - 11:30	Poster Session 3 & Coffee Break		
11:30 - 12:30		11A: Translational Biomaterials Research and Development Translational Biomaterials Symposium	11B: Controlled Release and Gene Therapy 2
12:30 - 13:30	Lunch Break		
13:30 - 14:45		12A: Biosensors	12C:Biomaterial Design 3
14:45 - 15:30	Coffee Break		
15:30 - 16:30		Closing Remarks and Awards Ceremony	

CBS2025 | Day 1 | 21st May 2025

	Biosciences 1101	Biosciences 1102	Biosciences 1120
08:30 - 09:30	Plenary 1: Dr. Grissel Trujillo de Santiago Biosciences Complex, Room 1101 Chair: Laura Wells		
	[A1] Harnessing chaotic flows for biofabrication: Structuring complexity with simplicity <u>Grissel Trujillo de Santiago</u>		
09:30 - 10:45	 1A: Cell-Material Interactions and Biointerfaces Biosciences Complex, Room 1101 Brendan Leung, Sarah Spencer [1] Directing the biointerface of nanomaterials 	 1B: Bone Tissue Engineering and Regeneration Biosciences Complex, Room 1102 Alejandra Correa-Belloso, Heidi-Lynn Ploeg [5] From Nature to Innovation: Multiscale Approaches to Biomimetic Implant Design and 	
	to treat infections and inflammatory disease Joel Finbloom	Characterization Liza-Anastasia DiCecco	
	[2] Antithrombotic coating with sheltered positive charges prevents contact activation by controlling factor XII–biointerface interaction <u>Haifeng Ji</u> , Kai Yu, Mohosin Rana, Edward	[6] Multi-Pellet Bone Constructs Created from Human BMSC Spheroid Pellet Culture Peter Zastawny, Stephen Waldman	
	Conway, Jayachandran Kizhakkedathu	[7] Optimization and Characterization of a Collagen–Carbon Nanodot Nanocomposite for Osteogenic Differentiation of Human	
	styrene) (SIBS) as an alternative to silicone for biomaterial applications <u>Nikita Kalashnikov</u> , Joshua Vorstenbosch	Mesenchymal Stem Cells Parisa Hajimohammadi Gohari, Rafik Naccache, Fabio Variola	
	[4] Investigating impact of matrix composition on human lung fibroblasts and ECM reciprocal remodeling	[8] Injectable mineralized collagen fibril- containing hydrogel for bone regeneration	

	<u>Tünde Lapohos</u> , Nadia Abzan, Edana Cassol, Betty Li, Leila Mostaço-Guidolin	<u>Zi Xuan Zhang</u> , Samantha Paradi-Maropakis, Kenneth Kimmins, Sowmya Viswanathan, Eli Sone	
11:15 - 12:30	2A: Blood-Contacting Materials Biosciences Complex, Room 1101 Fredrick Bulondo, Kim Woodhouse	2B: Advanced Manufacturing 1 Biosciences Complex, Room 1102 Chair: Jean-Philippe St. Pierre	
	 [9] Multifunctional Biomaterials: Engineering Antifouling Biointerfaces and Beyond Maryam Bady [10] Comparing cord and adult plasma clotting in memory to biometerials on important 	[13] Advancing 3D bioprinted triple negative breast cancer tumor models for enhanced predictive natural killer cell immunotherapy Betty Li, Marina Rukhlova, Jez Huang, Jose Munguia-Lopez, Joseph Kinsella, Anna Jezierski	
	Consideration for blood-contacting devices Sarah Arnold, Kyla Sask	[14] 3D Printing of Anti-Fouling Implants Based on Alginate-Zwitterionic Interpenetrating Network Hydrogel Bioinks Norma Garza Flores, Eva Mueller, Melaina del Grosso, Todd Hoare	
	microfluidic blood oxygenators using antithrombin-heparin (ATH) and tissue plasminogen activator (t-PA) for enhanced antithrombotic activity Siyuan Li, Neda Saraei, Helen Atkinson, Christoph Fusch, Niels Rochow, Gerhard Gerhard, Bayi Selvagananathy, John Brash	[15] Machine Learning-Guided Optimization of Stem Cell Differentiation for Scalable Biomanufacturing Hamid Ebrahimi Orimi, Rohan Singh, Brenden Moeun, Praveen Pedabaliyarasimhuni, Nancy Mac Donald, Phyong Lan Pham, Robert Voyer	
	Anthony Chan, Kyla Sask [12] Plant mucus-derived microgels: Blood- triggered gelation and strong hemostatic adhesion <u>Tailai Yan</u> , Malcom Xing	Marce Donaid, Philolog Lan Pham, Robert Voyer,Moncef Chioua, Richard Leask, Corinne Hoesli[16] Engineered biofilm-based living hydrogelwith tunable properties for three-dimensionalbioprintingXinxin Hao, Zahra Abdali, Mario Alfonso ArenasGarcia, Dalia Jane Saldanha, Noemie-ManuelleDorval Courchesne	
13:30 - 14:30	3A: Controlled Release and Gene Therapy 1 Biosciences Complex, Room 1101	3B: Cardiovascular Biomaterials 1 Biosciences Complex, Room 1102	

	 13:30 - 13:45 [17] Antioxidants Integrated into Electrospun Fibers for Modulating Oxidative Microenvironments Ella-Louise Handley, Maria Heim, Lorna Westwood, Elaine Emmerson, Anthony Callanan 13:45 - 14:00 [18] Tara Gum-Enhanced Semi-IPN Hydrogels for Sustained Release of Bacitracin Esteban Duran, David Filho, Marcelo Guerrero, Adolfo Marican 14:00 - 14:15 [19] Macrophage Membrane-Coated ROS- Responsive Nanoparticles for Targeted Antibiotic Delivery and Enhanced Wound Healing Yawei Zhao, Wen Zhong [20] Direct quantification of PEGylation for intact bioconjugates and nanoparticules by the colorimetric barium/iodide assay Kevin Coutu 	 [21] Next-Generation of Biomimetic 3D Printed Tissue Engineered Heart Valves Arman Jafari, Christopher Moraes, Abdellah Ajji, Lyes Kadem, Negar Azarpira, Gregor Andelfinger, Houman Savoji [22] Evaluating Shear Stress Effects on Vascular Cells in a 3D-Printed Millifluidic Bioreactor with Electrospun Scaffold Topographies Andrew Johnston, Todd Burton, <u>Anthony Callanan</u> [23] Treatment and Prevention of Transplant Vasculopathy using immunoengineered Ti3C2Tx MXene Nanosystem Leena Regi Saleth, Alireza Rafieerad, Weiang Yan, Keshav N. Alagarsamy, Abhay Srivastava, Sanjiv Dhingra [24] E-cardiac patch sensing and repairing infarcted heart Xianglong Xing, Xingying Zhang, Malcolm Xing 	
15:30 - 16:30	 4A: Biomaterial Design 1 Biosciences Complex, Room 1101 Marta Cerutti, Ahmed Saad [25] Self-Assembly Peptide Hydrogels for the Prolonged Hypothermic Storage of Cell Therapies Victoria Muir, Ryan Wylie 	 4B: Natural and Bioinspired Materials 1 (Sponsored by Chitolytic) Biosciences Complex, Room 1102 Rida Hasan, Eli Sone [29] Developing an injectable, micro- and macro-porous scaffold encapsulating cells for cell targeted delivery and cell therapy application 	4C: Ophthalmic Biomaterials Biosciences Complex, Room 1102 Brian Amsden, Fateme Rezagholizade [33] A Biomimetic LiQD Cornea with Inflammation Suppressing Properties for Treatment of Full-Thickness Corneal Perforations

[26] Optimizing Lung-Derived Hydrogels for Applications in Regenerative Medicine Simran Jaffer, Tera Dria Kispa, Indra Putra Wendi, Nika Gyazaya, Hani Alsafadi, Darcy E.	Pakshid Hosseinzadeh, Baptiste Marin, Réjean Lapointe, Ali Ahmadi, Sophie Lerouge	<u>Mostafa Zamani Roudbaraki</u> , Michel Haagdorens, Neethi Thathapudi, Marc Groleau, Isabelle Brunette, Malcolm Latorre, Mona Moradi, Solange Muhayimana, Christos
Wagner	Polynorepinephrine Composite for Uterine Tissue Regeneration	Boutopoulos, Marie-Claude Robert, May Griffith
[27] Transplantable Fungi: Enhancing	<u>Elena Rainone</u> , Alexander Steeves, Fabio	
Resilience in Production of Composite Myco- materials	Variola	[34] The evaluation of collagen-based hydrogels with nicotinamide on lens epithelial
Alexandre Leblond, Kori Zhang, Christopher	[31] Extrusion 3D-bioprinting of brain tissue	monolayer wound closure.
Moraes	using stem cell-derived neural progenitor cells and fibrin/hyaluronic acid-based hydrogels	<u>Kathryn Jalink</u> , Laura A. Wells, Lindsay E. Fitzpatrick
[28] Advancements in GelMA-Based Bioinks	Farnoosh Kalantarnia, Stephanie Willerth, Mina	
with Additives for Diverse Biomedical	Hoorfar	[35] A novel ophthalmic phantom for
Applications		improving intraocular injections, and for
<u>Nima Tabatabaei Rezaei</u> , Keekyoung Kim	[32] Designing Advanced Antimicrobial	measuring nanoparticles intraocular diffusion.
	Materials from Lysozyme Nanofibers	Raquel Espino López, Théophraste Lescot,
	Brigitte Gaudert, Mia Rondinelli, Lenka Vitkova,	Solange Landreville, Claudine Bellerive, Marc-
	George diCenzo, <u>Kevin De France</u>	André Fortin
		[36] In-situ repair of corneal wounds with laser-assisted bioprinting
		Hamid Goodarzi, Marc Groleau, Mona Moradi,
		Boda Om, Janet Laganiere, Ahad Mohammadi,
		Jennyfer Zapata-Farfan, Mostafa Zamani-
		Roodbaraki, Michel Meunier, Marie-Claude
		Robert, May Griffith, Christos Boutopoulos

CBS2025 | Day 2 | 22nd May 2025

	Biosciences 1101	Biosciences 1102	Biosciences 1120
08:30 - 09:30	Plenary 2: Dr. Ankur Singh Biosciences Complex, Room 1101 Chair: Lindsay Fitzpatrick		
	[A2] Human Immune Organoids and Complex Organ-on-Chip Technologies Ankur Singh		
09:30 - 10:30	5A: Immunomodulatory Biomaterials & Host Responses 1	5B: Biomaterial Design 2 Biosciences Complex, Room 1102	5C: Antimicrobial Materials Biosciences Complex, Room 1102
	Biosciences Complex, Room 1101 Locke Davenport Huyer, Kyle Medd	Kevin Coutu, Marc Gauthier	Joel Finbloom, Chinekwu Nwagwu
		[41] Nanobiomaterials for diagnostics,	[45] Inherently Anti-infective Microgels for
	[37] Immunological Compatibility of Novel Enzyme-Converted Universal Blood Cells Haisle Moon, Peter Rahfeld, Iren	Tohid Didar	<u>Mya Sharma</u> , Elaina Piliouras, Luc Gauthier, Todd Hoare
	Constantinescu, Freda Ho, Dana Devine,	[42] Compact Polyelectrolyte Complexes of	
	Stephen Withers, Jayachandran Kizhakkedathu	Poly(I-Lysine) and Anionic Polysaccharides Jaehak Yu, Burak Tavsanli, Micah Tamminga,	[46] Evaluating Current Surgical Infection Prevention Protocols and Alternatives
	[38] Macrophage-Modulating Materials for Local Drug Delivery Vehicles	Elizabeth Gillies	<u>Behzad Bolandi</u> , Bukola Rhoda Aremu, Wence Giuseppe Herrera Rondon, Adam Pillon,
	<u>Michael Celejewski</u> , Mandeep Marway, Ryan Wylie	[43] Adapting an all-atom molecular dynamics code to simulate the elastic response of	Gregory Jasey, John Trant
		centimetre-scale biomaterials	[47] Gradually-frozen bacterial nanocellulose
	[39] Glycopolymer-Based Organ Engineering	Laurent Karim Béland, Keyvan Ferasat, Mahsa Zojaji, Hao Sun, Boshni Bainbow, Heidi-Lynn	membranes modified with gallic acid and
	Rejection Prevention	Ploeg	synergistic antibacterial and antithrombotic
	Md Mohosin Rana, Peyman Malek Mohammadi		behavior
	Nouri, Haiming D. Luo, Lyann Sim, Jiao-Jing	[44] "Engineering a cannabinol-rich polyvinyl	Emma Stephens, Fereshteh Oustadi, Hunter
	Javachandran N. Kizhakkedathu	inflammation."	Marvam Badv
		<u>Maryam Bahraminia</u> , Shujun Cui, Ze Zhang, Mahmoud Rouabhia	

	[40] Leveraging the anti-inflammatory potential of itaconate in Co2+-induced metabolic shift and interleukin-1b release in macrophages <u>Nasteho Abdoulkader</u> , Eric A. Lehoux, Isabelle Catelas		[48] Antimicrobial surface treatments to reduce microbial transmission by touch contact <u>Ben Hatton</u> , Desmond van den Berg
11:00 - 12:15	 6A: Immunomodulatory Biomaterials & Host Responses 2 Biosciences Complex, Room 1101 Thamali Kariyawasam, Kimberly Woodhouse [49] Macrophage metabolism in pathological implant fibrosis: from novel phenotyping tools to biomaterial-based therapeutics Locke Davenport Huyer [50] Novel immunomodulatory bladder cell surface engineering approach for the treatment of Interstitial Cystitis/ Bladder Pain Syndrome Peyman Malek mohammadi nouri, Meredith Clark, Haiming Luo, Morgan Pugh, Jayachandran Kizhakkedathu [51] Methacrylic acid-based hydrogel and tuned inflammatory response enable subcutaneous allogeneic islet survival Sean Kinney, Jagroop Dhaliwal, Alexander Upenieks, Michael Sefton [52] Effects of Cr2O3 particles vs. Cr³⁺ ions on energy metabolism in murine bone marrow- derived macrophages 	 6B: Natural and Bioinspired Materials 2 Biosciences Complex, Room 1102 Kevin De France, Lenka Vitkova [53] Biomimetic Scaffold To Support Growth of an ACL Replacement Nathan Holwell, Brian Amsden [54] Developing a novel electroconductive peptide for cardiac regeneration after myocardial infarction Ana Spasojevic, David Garcia-Schejtman, Maxime Comtois-Bona, Erik Suuronen, Emilio Alarcon [55] Effects of Autologous Endothelial Cell- Support Cell Co-culture on the Formation and Character of the Endothelial Monolayer Kate MacQuarrie, Sahej Kaur Saini, Jeremy Antonyshyn, Stefan Hofer, Paul Santerre [56] Decellularized Extracellular Matrix from Healthy and Fibrotic Lungs Differentially Modulates Human Lung Fibroblast Biology Mohammadhossein Dabaghi, Ryan Singer, Alex Noble, Aidee Veronica Arizpe Tafoya, David A González-Martínez, Tamaghna Gupta, Cécile 	 6C: Controlled Release and Gene Therapy 2 Biosciences Complex, Room 1102 Norma Garza Flores, Todd Hoare [58] Lipid Modified PEI Derivatives Based Binary/Ternary Polyplexes Formulations for Delivery of mRNA in Primary Cells Amarnath Praphakar Rajendran, Daniel Nisakar Meenakshi Sundaram, Luis Carlos Morales, Cezary Kucharski, Mohammad Nasrullah, Burcak Bulut, Pavlo Michailo Tsisar, Aislinn D. Maguire, Bradley J. Kerr, Hasan Uludağ [59] Oligo-urethane nanoparticles combined with lipid additives enhances EGFP mRNA transfection in C2C12 cells Elaine Yan, Suja Shrestha, J. Paul Santerre [60] Co-assembly of oligo-urethane nanoparticles with defined lipid composition to tailor RNA delivery in difficult-to-transfect cells Suja Shrestha, Elaine Yan, Beining Yang, Allen C.T. Teng, Ryan Marks, Ronald Cohn, Evgueni Ivakine, Anthony O. Gramolini, J Paul Santerre [61] Tuning the Potency of Farnesol-Modified
	Jesse Corbin, Eric Lehoux, Isabelle Catelas	Formosa-Dague, Ivan O Rosas, Martin Kolb,	Polyethylenimine with Polyanionic Trans- Booster to Enhance DNA Delivery

		Yaron Shargall, Jose M Moran-Mirabal, Jeremy A Hirota [57] Decellularized Plant Scaffolds for Cartilage Tissue Engineering <u>Melis Toker-Bayraktar</u> , Bora Garipcan, Stephen D. Waldman	Amarnath Praphakar Rajendran, <u>Burcak Bulut</u> , Luis Carlos Morales, Daniel Nisakar Meenakshi Sundaram, Cezary Kucharski, Hasan Uludağ
13:15 - 14:30	7A: Immunomodulatory Biomaterials & Host Responses 3 Biosciences Complex, Room 1101 Nasteho Abdoulkader, Isabelle Catelas	7B: Biomaterials in Cancer Research Biosciences Complex, Room 1102 Matt Kinsella, Omar Peza Chavez	7C: Mechanobiology Biosciences Complex, Room 1102 Alessandra Merlo, Kyla Sask
	[62] Tissue Blueprints: Mapping ECM Landscapes with Multimodal Label-Free Imaging Leila Mostaço-Guidolin	[66] The effect of changing surface polyethylene glycol architecture on model tumour penetration of elongated nanoparticles <u>Megan Roberts</u>	[70] Heart-on-a-chip with Integrated Ultrasoft Mechanosensors for Continuous Measurement of Cell- and Tissue-scale Contractile Properties <u>Ali Mousavi</u> , Christina Boghdady, Shihao Cui, Sabra Rostami, Amid Shakeri, Naimeh Rafatian,
	[63] Profiling active extracellular matrix proteins in a fibrotic environment using	[67] Understanding Cardiac Resistance to Cancer Metastasis Using an innovative 3D-	Gregor Andelfinger, Mark Aurousseau, Milica Radisic, Christopher Moraes, Houman Savoji
	Multimodal Raman Microspectroscopy and Second Harmonic Generation with Machine Learning Natasha N. Kunchur, Leila B. Mostaço-Guidolin,	Amid Shakeri, Dhana Abdo, Sargol Okhovatian, Matthew Lei, Richard Jiang, Milica Radisic	[71] Probing mechanobiological aspects of disseminated prostate cancer cell quiescence using in vitro organotypic niches with tunable extracellular matrices
	[64] Differential temporal expression of matrix	Reveals the Synergistic Effect of Iron Chelation and Ferroptosis Induction in Overcoming	[72] Mitigating Irradiation-Induced Osteocyte
	metalloproteases associated with subcutaneous polymer implantation. <u>Kyle Medd</u> , Lauren Fong-Hollohan, Christian Rempe, Zachary Froom, Neal Callaghan, Locke	<u>Meitham Amereh</u> , Amir Seyfoori, Patrick Walter, Mohsen Akbari	Damage via Low-magnitude High-frequency Vibration Xin (Suzie) Song, Kimberly Seaman, Amel Sassi, Chun-Yu Lin, Lidan You
	Davenport Huyer [65] Long-Term Hydrophilic and Anti-	[69] Immunoactive hydrogel promotes antitumor efficacy of T-cells therapy in solid cancer	[73] Transepithelial hydrostatic pressure differentials as a biophysical basis for air-liquid
	Thrombogenic Dynamic Covalent Silicone- Based Biomaterials	<u>Baptiste Marin</u> , Paméla Thébault, Nicholas Cunningham, Réjean Lapointe, Sophie Lerouge	interface differentiation

	<u>Norma Garza Flores</u> , Eva Mueller, Robert Bui, James Fredenburgh, Ruiqi Yin, Rawaa Hussain, Rida Malik, Dabeer Abdul-Azeez, Fei Xu, Michael Brook, Jeffrey Weitz, Todd Hoare		<u>Chen Li</u> , Kalin Arnauts, Tanvi Javkar, Syeda Zaidi, John Hanrahan, Alex Gregorieff, Christopher Moraes [74] Effects of Microbubble Size and Acoustic Pressure on Mechanical Stimulation within Viscoelastic Tissue <u>Ruicheng Li</u> , Cun Wang, Zhaokai Wang, Xian Wang
15:30 - 16:30	 8A: Cell-Material Interactions and Biointerfaces 2 Biosciences Complex, Room 1101 Malcom Xing, Xianglong Xing [75] Microencapsulation of Intestinal Bacteria: Enhancing Cell Activity via RGD Lisa Dupeyroux, Sydney Wheatley, Melanie Rodger, Sophie Lerouge, Corinne F. Maurice, Ali Ahmadi [76] Protein immobilization on thermoplastic polyurethane (TPU) using diazirine molecules for surface modification. Jie Li, Zain Bhaila, Stefania Musolino, Liting Bi, Jeremy Wulff, Kyla Sask [77] Nanoparticles for the Delivery of Pro- Regenerative Cardiac Progenitor Secretory Proteins Targeting Cellular Senescence and Vasculogenesis Shirley Chung, Zach Gouveia, Suja Shrestha, John G. Coles, Jason T. Maynes, J Paul Santerre [78] The Role of Fetuin-A on Cellular Attachment and Proliferation of Osteoblast- 	 8B: Cardiovascular Biomaterials 2 Biosciences Complex, Room 1102 Kibret Mequanint, Meng Wang [79] The Selection of Support Cells to Produce a Fully Endothelialized and Biomimetic Vascular Construct Kate MacQuarrie, Katya D'Costa, Jeremy Antonyshyn, Uros Kuzmanov, Anthony Gramolini, Stefan Hofer, Paul Santerre [80] Collagen-inspired Peptides as Methylglyoxal Trapping Agents Sergio David Garcia Schejtman, Juan David Figueroa Alegria, Ramis Ileri, Jessica Hernandez Juarez, Bryan Liu, Erik Suuronen, Emilio Alarcon [81] Investigating the mechanical response of neuronal cells to strain loading as a model for mild traumatic brain injury Gia Kang, Oren Petel, Andrew Harris 	 8C: Wound Healing Biosciences Complex, Room 1102 Lauren Flynn, Xindi Zhao [82] Sprayed Cold Atmospheric Plasma-Infused Hydrogel Dressing for Skin Wound Management mo chen, qiujie fang, bingzhen shen, zhitong chen, guojun chen 15:45 - 16:00 [83] Peptide therapeutic biomaterials for regenerative medicine applications Marcelo Munoz, Cagla Cimenci, Aidan MacAdam, Alex Ross, May Griffith, Isabelle Brunette, Erik Suuronen, Emilio Alarcon 16:00 - 16:15 [84] Harnessing genetically modified microalgae for innovative diabetic foot ulcer wound care Thamali Kariyawasam, Lindsay Fitzpatrick 16:15 - 16:30 [85] Electrospun hydrogel-based dressings for chronic wound healing applications

	like Cells on Bare and Functionalized Gold Surfaces <u>Alessandra Merlo</u> , Kathryn Grandfield, Kyla N. Sask		incorporating co-operative anti-infective comonomers <u>Evelyn Cudmore</u> , Fei Xu, Sadru-Dean Walji, Todd Hoare
16:45 - 17:45	9A: Immunomodulatory Biomaterials & Host Responses 4 Biosciences Complex, Room 1101 Mark Filiaggi, Karla Valenzuela	 9B: Cardiovascular Biomaterials 3 Biosciences Complex, Room 1102 Chair: Marc-Andre Fortin 16:45 - 17:00 [90] 	9C: Cell Delivery Biosciences Complex, Room 1102 Maryssa Bizier-Stern, Patricia Comeau 16:45 - 17:00 [94]
	16:45 - 17:00 [86] Modelling human macrophage-material interactions using a 2D adsorbed human fibroblast lysate model. <u>Fredrick Bulondo</u> , Lindsay Fitzpatrick 17:00 - 17:15 [87]	MXene quantum dots for maturation of induced pluripotent stem cells derived cardiomyocytes <u>Keshav Narayan Alagarsamy</u> , Leena Regi Saleth, Emily Hamm, Abhay Srivastava, Sanjiv Dhingra 17:00 - 17:15 [91]	Magnetic Nanoparticles for MRI-assisted Monitoring and Extraction of Alginate Microbeads Containing Insulin-producing Cells Samila Leon Chaviano, Jenny Roy, Théophraste Lescot, Florent Lemaire, Corinne Hoesli, Marc- André Fortin
	A Tunable Co-Culture Model for Investigating Microbe-Driven Lung Immune Responses Sarah Spencer, Brendan Leung	Engineering Human Stem Cell-Derived Cardiac Tissues Using Sound-Induced Morphogenesis Ariane Léonard, Saeideh Maleki, Houman Savoji	17:00 - 17:15 [95] Investigation of the effects of pepsin versus papain digestion in designing novel composite hydrogels derived from decellularized adipose
	17:15 - 17:30 [88]Development of an Adipocyte-MacrophageTranswell Co-Culture Model to ExploreInsulin's Impact on Macrophage InflammatoryResponses.Yuxi Zhang, Lindsay Fitzpatrick, KimberlyWoodhouse	17:15 - 17:30 [92]Exploring The Role of Oxygen in ECMRemodelingNadia Abzan, Malak Al Daraawi, CaroleBeaulieu, Duale A. Ahmed, AmulyaKaianathbhatta, William G. Willmore, EdanaCassol, Leila B. Mostaço-Guidolin	Connor Gillis, Yasmeen Shamiya, John Walker, Arghya Paul, John Ronald, Lauren Flynn 17:15 - 17:30 [96] Optimization of a cell-seeded, injectable micro-carrier to support cardiomyocytes for cardiac tissue regeneration
	17:30 - 17:45 [89] ROS Scavenging and Degradation-driven Differentiation of iMSCs on L-Methionine Substituted Polyphosphazene Electrospun Fibers <u>Meng Wang</u> , Kibret Mequanint	17:30 - 17:45 [93] Exploring the potential of butyrate- functionalized trimethylene carbonate for proangiogenic peptide drug delivery Isaac Thevathasan, Zachary Froom, Locke Davenport Huyer, Brian Amsden	Alexandra Jucan, Yizhou Chen, C.W. Brian Webb, Kate D. MacQuarrie, Stefan Hofer, Paul Santerre 17:30 - 17:45 [97]

Large-Scale Expansion of Human N	lesenchymal
Stem Cells Using Thermoresponsiv	e
Microcarriers in a Stirred Bioreact	r
Saeideh Maleki, Mouna Kammoun,	Ali Mousavi,
Arman Jafari, Amir Seyfoori, Mohse	n Akbari,
Houman Savoji	

CBS2025 | Day 3 | 23rd May 2025

	Biosciences 1101	Biosciences 1102	Biosciences 1120
08:30 - 09:30	Plenary 3: Dr. May Griffith Biosciences Complex, Room 1101 Chair: Laura Wells		
	[A3] Biomaterials from Bench to Bedside: Corneal Blindness as a Model Disease <u>May Griffith</u>		
09:30 - 10:30	Regulatory Keynote: Bruce Randall Biosciences Complex, Room 1101 Chair: Lindsay Fitzpatrick		
	[A4] Canadian Regulatory Framework for Medical Devices Bruce Randall		
09:30 - 10:30		10B: Advanced Manufacturing 2 Biosciences Complex, Room 1102 Pakshid Hosseinzadeh, Sophie Lerouge	
		09:30 - 09:45 [98] Coextrusion of Nanocomposite Biomaterials Enhanced the Damage Tolerance of Direct Ink Writing Printed Bioinspired Microstructure Haresh Patil, Dibakar Mondal, Thomas Willett	
		09:45 - 10:00 [99] High-fidelity extrusion 3D bioprinting of GelMA-Carbopol bioinks with low total solids contents at physiological temperatures David Gonzalez Martinez, Mabel Barreiro Carpio, Aidee Arizpe Tafoya, Eduardo Gonzalez	

		Martinez, Mohammadhossein Dabaghi, Jeremy Hirota, Jose Moran-Mirabal 10:00 - 10:15 [100] Development of a Pectin-stabilized Albumin- based Foam Support Bath for Embedded Bioprinting Melanie Rodger, Sophie Lerouge, <u>Ali Ahmadi</u> 10:15 - 10:30 [101] Development of Novel Alginate-Based Bioinks for 3D Bioprinting of Cartilaginous Tissue Engineering <u>Olivia Steiner</u> , Jean-Philippe St-Pierre	
11:30 - 12:30	11A: Translational Biomaterials Research and Development Biosciences Complex, Room 1101	11B: Controlled Release and Gene Therapy 2 Biosciences Complex, Room 1102 Jay Kizhakkedathu, Haisle Moon 11:30 - 11:45 [102] Exploration of Ring-Opening Copolymerization of Poly(cyclohexene Succinate) and Poly(propylene Succinate) As Degradable Biomaterials Sara Murrin, Alison Scott, Locke Davenport Huyer 11:45 - 12:00 [103] Modeling In Vitro Clearance to Evaluate Drug Delivery Systems using IFlowPlate™-T Mandeep Marway, Michael Celejewski, Ryan Wylie, Boyang Zhang 12:00 - 12:15 [104] Magnetic Soft Continuum Robot for Targeted Drug Delivery in Head and Neck Surgery	

		<u>Griffin Smith</u> , Sanna Tayabali, Onaizah Onaizah
13:30 - 14:45	12A: Biosensors	12B: Biomaterial Design 3
	Biosciences Complex, Room 1101	Biosciences Complex, Room 1102
	Kimberly Seaman, Lidan You	Kate MacQuarrie, Paul Santerre
	13:30 - 14:00 [105]	13:30 - 13:45 [109]
	From Delivery to Detection: Reimagining Drug	Facile Creation and Characterization of
	Delivery Systems as Diagnostics	Tunable Highly Oriented Marine Collagen
	Simon Matoori	Fibers
		Adaline Farrow, Nathalie Singh, Matthew J.
	14:00 - 14:15 [106]	Harrington
	Development of a polymersome blood	
	ammonia assay coupled with a portable near-	13:45 - 14:00 [110]
	infrared fluorometer	Engineering Injectable Hydrogels from
	<u>Marie-Lynn Al-Hawat</u> , Justine Caron, Sarah	Decellularized Adipose Tissue: Enhanced
	Djebbar, Simon Matoori	Gelation via Photocrosslinking and GAG
		Replenishment
	14:15 - 14:30 [107]	Jay Sangameswar, Connor Gillis, Yasmeen
	Comparing the effect of three bacteria culture	Shamiya, Arghya Paul, Lauren Flynn
	mediums on Microbial volatile organic	
	compounds (MVOCs) profile measured by	14:00 - 14:15 [111]
	optical sensors array	Optimizing Compliance in Vascular Phantoms
	<u>Mostafa Azimzadeh</u> , Mina Hoorfar, Mohsen	for Reliable Embolic Agent Evaluation
	Akbari	<u>Elie Daoust</u> , Ali Ahmadi, Gilles Soulez, Sophie
		Lerouge
	14:30 - 14:45 [108]	
	Non-contact and continuous sensing method	14:15 - 14:30 [112]
	for assessing bacterial adhesion and biofilm	Optimization of a detergent-free cartilage
	formation on biomaterials	decellularization protocol for the fabrication of
	Mitchell Rhead, Amirhossein Yazdanicherati,	cartilage ECM-based hydrogels
	Davood Zaeim, Zahra Abbasi, Maryam Badv	Rayehe Ghofrani, Jean-Philippe St-Pierre
		14:30 - 14:45 [113]
		Incorporation of curli-containing biofilm into
		polylactic acid

	Mario Arenas Garcia, Jia Yi Zheng, Noémie- Manuelle Dorval Courchesne	

Poster Session 1: 21st May 2025 | 14:30 – 15:30 | Biosciences Complex Atrium

[P1] Evaluation of metal ion-releasing glass particles to enhance antibiotic efficacy against cystic fibrosis infection <u>Maxwell Wolverton</u>, Brendan Leung

[P2] Antibacterial green light-activated tissue adhesive for skin wound healing <u>Aidan MacAdam</u>, German Mercado Salazar, Alex Ross, Erik Suuronen, Emilio Alarcon

[P3] Discovering the role of an α-helix in self-assembly of a hydrophobin from *Phanerochaete carnosa* <u>Raymond He</u>, Kathleen Vergunst

[P4] Evaluation of Collagen Coatings on PEEK for Enhanced Soft Tissue Integration in a 3D Oral Mucosal Model <u>Ahmed Saad</u>, Apurva Mishra, Gopu Sriram, Marta Cerruti

[P5] Dbfp7 – DOPA-deficient freshwater mussel adhesive protein self-assembles into amyloid fibrils <u>Rida Hasan</u>, Angelico Obille, Kate Li, Kenneth Kimmins, Jonathan Rocheleau, Karina Carneiro, Eli Sone

[P6] Nanoparticles loaded with collagen-like peptide for methylglyoxal trapping as a post-myocardial infarction treatment. Jéssica Hernández Juárez, Sergio David Garcia Schejtman, Juan David Figueroa Alegria, Emilio I. Alarcón, Erik J. Suuronen

[P7] *In vivo* evaluation of engineered gingival grafts seeded with human adipose-derived stem cells <u>Genevie Tran</u>, W.C. Brian Webb, Kirtana Devaraj, Uros Kuzmanov, Anthony Gramolini, Stefan O.P. Hofer, J. Paul Santerre

[P8] Engineered Composite Hydrogels for In Situ Tissue Repair: Enhanced Adhesion, Porosity, and Immunomodulation <u>Sara Nejati</u>, Luc Mongeau

[P9] Biomimetic Strategies for Tunable Hard Tissue Porous Implant Design <u>Iris Quan, Liza-Anastasia DiCecco</u>

[P10] Photoactivated collagen-like peptide hydrogels Alex Ross, Daniel Nguyen, Erik Suuronen, Emilio Alarcon

[P11] Vascularized crypt-patterned miniature colons with immune cell recruitment for IBD modelling <u>Elizabeth Keane</u>, Feng Zhang, Anushree Chakravarty, Alexander Sotra, Boyang Zhang

[P12] In vitro 3D Modeling of Dilated Cardiomyopathy in a Beating Heart-on-a-chip Using Patient-derived Human Induced Pluripotent Stem Cells

<u>Ali Mousavi</u>, Ludovic Mouttet, Shihao Cui, Mehran Mottahedi, Yasaman Hekmatnia, Ida Derish, Naimeh Rafatian, Amid Shakeri, Mark Aurousseau, Milica Radisic, Nadia Giannetti, Renzo Cecere, Houman Savoji

[P13] FABRICATION OF A 3D-PRINTABLE, CONDUCTIVE, AND POROUS SCAFFOLD FOR CARDIAC TISSUE ENGINEERING Richard Jiang Jiang, Amid Shakeri, Anna Popovic, Dhana Abdo, Shira Landau, Milica Radisic

[P14] Polymeric microreactor for blood urea sensing at the point-of-care <u>Cléa Belin</u>, Emma Lenglet, Marie-Lynn Al-Hawat, Sarah Djebbar, Simon Matoori

[P15] Trehalose Enhanced Cold Atmospheric Plasma-Mediated Cancer Treatment Tasnuba Tabassum Mourin, Guojun Chen

[P16] SMART-EYE Revolutionizes Corneal Endothelial Dysfunction Treatment Roza Vaez Ghaemi

[P17] Hydroxypropyl Guar Gum-Based Hydrogel Wound Dressings Reinforced With Silicon For Promoting Healing Of Fragile Chronic Skin Wounds

Hugo Lopes, Kushal Panchal, Roozbeh Mafi, Todd Hoare

[P18] Developing Guar Gum Based Hydrogels for Wound Treatment of Patients with Epidermolysis Bullousa (EB) Parizad Katila

[P19] Peptide-based tunable photosealant for wound closure. Andres Mercado, Adam Macadam, Alex Ross, Emilio Alarcon

Poster Session 2 | 22st May 2025 | 14:30 – 15:30 | Biosciences Complex Atrium

[P20] Polyglyoxylamides for nucleic acid delivery – Effect of structure, molar mass and end-cap <u>Chuanfeng Li</u>, Cian Ward, Patrick O'Donoghue, Elizabeth Gillies

[P21] Investigation of region-specific effects of pepsin-digested decellularized meniscus on human adipose-derived stromal cells within alginate hydrogels

Sheradan Doherty, Xindi Zhao, Anna Kornmuller, Pascal Morissette Martin, Lauren Flynn

[P22] Bioresponsive Immunomodulator Nanocomplex for Selective Immunoengineering in Metastatic Lymph Node <u>Yueyang Deng</u>, Mo Chen, Tianxu Fang, Tianwen Luo, Xiaona Cao, Guojun Chen

[P23] Oxygen-rich hydrogels to meet the oxygen demand of encapsulated cells in hypoxia <u>Élisabeth Poirier</u>, Réjean Lapointe, Sophie Lerouge

[P24] Engineering Hepatocytes cell membrane-derived nanoparticles for fatty liver disease: A robust biomimetic drug delivery platform <u>Alap Ali Zahid</u>, Aishik Chakraborty, Arghya Paul

[P25] Nanocomposite hydrogels stabilized by self-assembled ascorbyl palmitate nanofibers through intermolecular interactions for drug delivery: *in vitro* and *in vivo* analysis

Yasmeen Shamiya, Aishik Chakraborty, Alap Ali Zahid, Arghya Paul

[P26] Nanoparticles-Mediated Intratumoral Gene Editing Targeting PD-L1 and Galectin-9 for Improved Cancer Immunotherapy Tianxu Fang, Yueyang Deng, Mo Chen, Tianwen Luo, Tianqin Ning, Guojun Chen

[P27] Synthesis of PLA-Based Core-Shell Nanoparticles with Tunable Anti-Fouling Surfaces Jonathan Buiel, Jean-Michel Rabanel, Xavier Banquy

[P28] Platelet-Mimetic Red Blood Cells: A Novel Intravenous Hemostat for Noncompressible Internal Hemorrhage Evan Johnston, Jianyu Li

[P29] Stimuli-Responsive Nanocomplexes for Targeted Antibiotic and Enzyme Codelivery to Treat Chronic Biofilm Infections Chinekwu Nwagwu, Alaleh Yourdkhani, Joel Finbloom

[P30] Bovine Serum Albumin-Based Nanocarriers for Psychedelic Drug Delivery: Interaction, Stability, and Therapeutic Potential Khalilalrahman Dehvari, <u>Behzad Bolandi</u>, Farsheed Shahbazi-Raz, John Trant

[P31] Loading and material-based strategies to extend the release of active curcumin from poly(2-hydroxyethyl methacrylate) copolymers

Christopher A. Rayner, James Cameron-Hamilton, Laura A. Wells

[P32] Stability of hydrogel biomaterials for cornea implants Solange MUHAYIMANA

[P33] Plasma-treated Micropatterned FEP Films as a Biomaterial Platform for Cell Culture Ahmed Mahmoud, Balaji Ramachandran, Katie Campbell, Corinne Hoesli, Pierre-Luc Girard-Lauriault

[P34] Thermoresponsive polymer brush grafted-GelMA microgels facilitate fibroblast cell expansion <u>Esfandyar Askari</u>, Amir Seyfoori, Mohsen Akbari

[P35] Towards bioorthogonal protein networks Lenka Vitkova, Ina Tachom, Brian Amsden, Kevin De France

[P36] Influence of Digestion Parameters on Mechanical and Biological Performances of Decellularized Extracellular Matrix Hydrogels Mariana Pires Figueiredo, Francesco Copes, Silva Rodríguez-Fernádez, Diego Mantovani

[P37] High-throughput screening of topographical cues for enhanced nonviral gene delivery Daichen Liu, Abigail Conner, Huiyi Liang, Evelyn Yim, Kam W Leong

[P38] Controlled and sustained release of clinical dose carbamazepine oral tablets using photocrosslinkable and surface-erodible polyanhydrides

Hamzeh Ghaempanah, Jorge Burneo, Kibret Mequanint

[P39] Development of *in situ* forming hydrogels containing decellularized nucleus pulpous tissue as a platform to induce intervertebral disc regeneration with human induced pluripotent stem cells.

Emma Punkari, Courtney Brooks, Brian Amsden, Cheryle Séguin, Lauren Flynn

Poster Session 3 | 22st May 2025 | 10:30 - 11:30 | Biosciences Complex Atrium

[P40] Generation of an Artificial Esophagus using Induced Pluripotent Stem Cells and Melt Electrowriting Alireza Nemati, Anu David, Yuxuan Zhang, Selma Beuchat, Houman Savoji, Christophe Faure

[P41] Nanocellulose-based Regenerated Filaments Made from Jute Waste: Preparation, Structure and Properties Jiawei Li, Ze Zhang, Mahmoud Rouabhia, Chongwen Yu

[P42] Optimizing Extrudable Bioinks: Mechanical and Chemical Properties for Tailored Tissue Engineering Victor da Silva, Stephanie Willerth

[P43] Multi-material 3D Bioprinting of Complex Constructs for In-vitro Mechanobiology Studies <u>Aidee Arizpe-Tafoya</u>, David González-Martínez, Mouhanad Babi, Jeremy Hirota, Jose Moran-Mirabal

[P44] Analysis of mechanical properties of dehydrated and rehydrated Gelatin-Methacrylate-Carbopol hydrogels Laura Daniela Serrano Andrade, Aidee V. Arizpe Tafoya, David A. González Martínez, Jeremy A. Hirota, Jose M. Moran-Mirabal

[P45] Optimizing Granular Hydrogel Stability via Surface Roughness Engineering of Microgels <u>Navid Tavoosi</u>, Luc Mongeau

[P46] Enzymatic Crosslinking of Decellularized Extracellular Matrix to Generate Mechanically Tunable Hydrogels Omar Peza Chavez, Joseph M. Kinsella

[P47] Development of a High-Throughput 3D Bioprinted Human Skin Model for Drug and Biosensor Testing on Infected Wounds Mostafa Azimzadeh, Mina Hoorfar, Mohsen Akbari

[P48] Varying transglutaminase-mediated crosslinking of bioinks: characterization and application for 3D bioprinting of neural tissue models.

Amanda Orr, Stephanie Willerth

[P49] Methacrylated isosorbide provides antioxidant potential to biomedical polymer nanocomposites <u>Elizabeth Diederichs</u>, Dibakar Mondal, Thomas Willett

[P50] Bioinspired Peptide Amphiphile Nanofibre (PANF) Hydrogels for the Encapsulation of Bacteria Noah Y Brittain, Joel A Finbloom

[P51] Evaluation of the angiogenic properties of phosphorylcholine-based biomaterials <u>mona moradi</u>, Bijay Poudel, Erika Hooker, Mozhgan Aghajanzadeh Kiyaseh, Diana Rusu, bruno larrivee, may griffith [P52] Design Viability Assessment Of A 3D Printable Bioreactor Chamber For Ex Vivo Trabecular Bone Core Testing With Mechanical Stimulation <u>Alejandra Correa-Belloso</u>, Mahsa Zojaji, Brian Kunath, Roshni Rainbow, Heidi Ploeg

[P53] Cationic Lipopolymers for siRNA Delivery in Lung Cancer Therapy Remant KC, Mohammad Nasrullah, Hasan Uludag

[P54] Concave Magnetic-Responsive Hydrogel Discs for Enhanced Bioassays <u>Amin Ghaffarzadeh Bakhshayesh</u>, Huiyan Li

[P55] RSL3-loaded Nanoparticles Amplify the Therapeutic Potential of Cold Atmospheric Plasma By Enhanced GPX4 Inhibition <u>Guojun Chen</u>

[P56] RSL3-loaded Nanoparticles Amplify the Therapeutic Potential of Cold Atmospheric Plasma <u>Tianwen Luo</u>, Mo Chen, Tianxu Fang, Yueyang Deng, Guojun Chen

[P57] Advancing In Silico Biomechanical Models for Fracture Risk Prediction in Knee Joints with Benign Bone Tumours Emily Cameron, Daniel Borschneck, John Rudan, Heidi Ploeg

[P58] Quantification of Reverse Micelle Templated Gold Nanoparticles (AuNPs) and Their Role in Protein Binding for Biosensing Linan Cui, Pedro Oliveira, Ayse Turak, Kyla Sask