2022 CHARBONNEAU TRAINEE AWARD WINNERS

Howard Research Excellence Awards

Aditya Mojumdar Amy Frederick Devin Van Elburg Joseph Madasemila Karys Hildebrand Natasha Cholowsky Robert Basmadjian Alexandra Guebert Dylan O'Sullivan Jesse Irvine Kailyn Stenhouse Liam Sutherland Mariel Kleer

Sarah Moradi Fard

Ana Nikolic Justin Simms Dustin Pearson Selim Khan Sara Cho Manuel Ester Victoria Armstrong



Director's Award for Leadership, **Volunteerism and Mentorship** Hiba Omairi, PhD

Daniel Family Foundation Scholarship for Excellence in Community Engagement, Impact and Outreach
Mannat Bansal, MSc

Catherine Joan Mills Graduate Scholarship Emily Niu, MSc

Charbonneau International Trainee Award Robab Jamadi, PhD

Charbonneau Postdoctoral Fellowship Awards

Ayan Chanda, CSM-Ohlson Postdoctoral Scholar Anita Brobbey, Charbonneau-CSM Scholar Jérémie Fages, CSM-Robson Scholar

2022 CSM Microscopy Facility Image Competition

Hamed Hojjat (Gold) Hiba Omairi (Silver), John Danforth (Bronze)

Artistic Category: Hiba Omairi, First Prize, Luc Provencher, Second Prize



KEYNOTE SPEAKER

Miguel Ramalho-Santos, MD

Senior Investigator Lunenfeld-Tanenbaum Research Institute, Mount Sinai Hospital

Dr. Ramalho-Santos grew up in Coimbra, Portugal, and attended the University of Coimbra for his undergraduate degree in Biology and a Masters' degree in Cell Biology. He moved to the US in 1997 for his PhD at the Department of Molecular and Cellular Biology of Harvard University.

At Harvard, he pioneered the transcriptional profiling of mouse stem cells and used mouse genetics to dissect developmental pathways. He received his PhD in 2002 and in 2003 moved to San Francisco to become a UCSF Fellow. He became an Assistant Professor at UCSF in 2007, and was promoted to Associate Professor in 2013. In 2018, he was recruited to the Lunenfeld-Tanenbaum Research Institute and the Department of Molecular Genetics at the University of Toronto as the Canada 150 Research Chair in Developmental Epigenetics.

His lab has uncovered key epigenetic control systems that govern early mammalian development and pluripotent stem cell biology. His team discovered that pluripotent stem cells have an open chromatin state that allows for hypertranscription, a phenomenon of global elevation of nascent transcription that supports stem cell expansion. His lab identified the factors that sustain this chromatin state and discovered that it acutely depends on high levels of translational output, providing an elegant tuning of transcription and translation in pluripotent stem cells.

Dr. Ramalho-Santos' team further discovered new mechanisms by which pluripotent stem cells coordinate environmental cues with cell fate decisions, using an interdisciplinary approach that involves new methodologies in developmental biology, stem cell biology, genomics, epigenetics and bioinformatics. Examples include the discovery that Vitamin C promotes DNA demethylation and the finding that inhibition of mTor induces a reversible state of suspended animation in pluripotent stem cells and blastocysts, whereby they are dormant in their cellular activities but remain capable of giving rise to all cell types of the body. Dr. Ramalho-Santos' research has broad ranging impact in regenerative medicine, reproductive health, maternal-fetal medicine and cancer.





Cancer Institute

7th Annual Charbonneau Cancer Research Symposium



SCHEDULE

HRIC ATRIUM

8:30-9:00 am	Registration desk in the foyer of Theatre 4 (coffee and tea will be available)				
9:00-9:05 am	Welcome address from Dr. Jennifer Chan , Director of the Charbonneau Cancer Institute	SESSION 2	Chair: Dr. Steven Yip	SESSION 3	Chair: Jennifer Corcoran
9:05-10:00 am	VIRTUAL KEYNOTE LECTURE Dr. Miguel Ramalho-Santos, Professor, Department of Molecular Genetics, University of Toronto	1:45-2:10 pm	Dr. Pierre Billon, Assistant Professor Department of Biochemistry & Molecular Biology, University of Calgary "Beyond CRISPR-Cas9: Next-Generation CRISPR technologies"	3:20-3:35 pm	2022 CSM Microscopy Facility Image Competition Awards, Presented by Dr. Aaron Goodarzi Poster Presentation Awards in each category, Presented by Dr. Jennifer Corcoran
	"Exploring the high dynamic range of transcription in development, regeneration and cancer"	2.45.2.25		3:40-4:05 pm	Dr. Ayan Chanda , Postdoctoral Fellow, Supervised by Dr. Pinaki Bose
SESSION I	Chair: Dr. Gareth Williams	2:15-2:35 pm	Dr. Anita Brobbey, Postdoctoral Fellow, Supervised by Dr. Cheryl Peters		"Identification of novel oncogenic drivers of oral cancer"
10:05-10:30 am	Dr. Khara Sauro , Assistant Professor, Community Health Sciences, University of Calgary		"Estimation of radon exposure among indoor workers in Canada"	4:10-4:30 pm	Dr. Miranda Fidler-Benaoudia, Research
	"Quality of head and neck cancer care: complexity and Innovation"	2:40-2:50 pm	Mannat Bansal, Daniel Family Scholarship Award for Community Engagement, Impact		Scientist, Department of Cancer Epidemiology and Prevention Research, Cancer Care Alberta
10:35-10:45 am	Hiba Omairi, Institute Director's Award for Leadership, Volunteerism		And Outreach		"Understanding outcomes for adolescent and young adults across the cancer continuum"
	and Mentorship		AFTERNOON BREAK	4:35-5:00 pm	Dr. Gregory Cairncross, Professor, Department of Clinical Neurosciences, University of Calgary
10:45-11:00 am	Poster Judges to pickup assignments from Carmen Coelho, HRIC Atrium				"An ounce of prevention"
11:00-12:30 pm	POSTER SESSION HRIC ATRIUM			5:00 pm	Closing Remarks by Dr. Jennifer Corcoran
12:30-1:30 pm	CONFERENCE LUNCH				5, 5.1.76mmor corcordii