REALISE *the* News – March 2019

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MEET YOUR HBITO EXECUTIVES

Michael McLaren-Gradinaru, Webmaster, HBITO

By Carly Pontifex

HBITO webmaster Michael McLaren-Gradinaru graduated from Ontario's Brock University with a Bachelor's degree in Neuroscience with an honors thesis in Neurobiology. Michael attended the University of Calgary for the last year of his undergraduate degree and shortly after began his Master's degree in Neuroscience. Michael was drawn to a project proposed by his supervisor Dr. Giuseppe Iaria, who wanted to develop a game that could train patients in a virtual environment. When he saw the posting on Dr. Iaria's website, he thought, "hey, I like games!" Michael was tasked with designing a game that could help patients develop spatial navigation skills. If successful, this type of training may be beneficial to patients that suffer from a disorder called developmental topographic disorientation – a developmental disorder where people fail to navigate familiar environment in the absence of neurological disorders or brain damage. Through the HBITO, Michael has begun expanding his community involvement and volunteers with the Association for Rehabilitation for Brain Injured. Michael plans to complete his Master's this year and is looking forward to his PhD, where he intends to expand upon his spatial navigation project to include the structural and functional changes observed following training in the virtual environment.

Michael began working with the HBITO as a volunteer on several committees. Since Michael works on main campus, he began to notice a lack of engagement between the HBI students on Foothills campus and main campus. He remarked that many students were missing out on HBITO opportunities and events because they are typically hosted at the Foothills campus. With this in mind, Michael was motivated to run for the position as the HBITO webmaster so that he could pursue his goal of integrating students on main campus with the HBITO. Beyond managing the HBITO website, he felt that this role fit well with his interest in social media and communication. In his free time he and two friends generate videos for a popular short-video platform called TikTok (@feedingthehungry). He is currently working to upgrade and streamline the HBITO website as it transitions to a new platform.

Learn more about the HBITO at https://hbito.ucalgary.ca/

CALL FOR INNOVATORS FOR THE NEURONEXUS SPRING 2019 HACKATHON

NeuroNexus is seeking innovators to address challenges in brain science and mental health. Projects could be anything from the development of novel hardware and software tools to simplify and accelerate research, to computational models of neural systems, and neurotechnologies. **Apply by March 22, 2019 at www.innovation4health.com/neuronexus.**

UPCOMING HBI REALISE TRAINING MODULES

To sign up for any of the following modules:

1. Go to the **REALISE Intranet Site** at https://ecs.ucalgary.ca/faculty/medicine/realise and enter your UCalgary username and password
2. Navigate to the **REALISE Calendar** and click on the module you'd like to register for
3. Click **Register** in the top left corner, then **Start**

Design Thinking and Rapid Prototyping Module Series

The Design Thinking and Rapid Prototyping Module Series will provide graduate students with a hands-on introduction to the design thinking process and rapid prototyping techniques. The series is part of a larger initiative involving three real-world projects sourced from basic science and clinical research laboratories in the HBI, see attached for more information.

The following rapid prototyping skill development sessions will focus on structure, function and control are open to all REALISE program participants.

Skill development I – Structure

March 14, 2019 | 3 – 5 pm | Location: HSC O1504/O1506

In this session, students will be introduced to CAD modeling, structural analysis, and fabrication (3D printing, machining) techniques. With this knowledge, students will be able to design and print simple structures/components for use in the lab setting.

Skill development II – Function

March 21, 2019 | 3 – 5 pm | Location: HSC O1504/O1506

In this session, students will be introduced to electrical circuits, basic electronics, and common sensors. With this knowledge, students will be able to select sensors relevant to their needs in the lab setting and build simple circuits to extend the functionality of existing tools in the lab.

Skill development III – Control

March 28, 2019 | 3 – 5 pm | Location: HSC O1504/O1506

In this session, students will be introduced to digital logic, sequential programming, and simple state machines. With this knowledge, students will be able to communicate with simple microcontrollers and program them to realize automation needs in the lab.

Writing Bias

March 19, 2019 | 1 – 3 pm | Location: HSC 1405B

Presenter: Jenna Slobozian

Module in brief: This session will look at gendered language from two perspectives: the first examining the differences and similarities in the ways in which men and women write and the second being the differences and similarities in the way men and women are written about. The session will cover topics such as writing of grant/fellowship/scholarship applications as well as letters of support or recommendation.

Social Media and Science

March 27, 2019 | 9 am – 12 pm | Location: TBD

Presenters: Samantha Paterson, UCalgary Social Media and Dr. Lauren Drogos, Postdoctoral Scholar

Presented in partnership with ACHRI. See https://research4kids.ucalgary.ca/trainee-seminars-and-workshops for more information and to register.

Supported Conversation for Adults with Aphasia (SCA™) Workshop

March 29, 2019 | 9 am – 12 pm* | Location: HSC 1500

*Lunch provided at the conclusion of the workshop

Presenter: Heather A. Tomlinson, M.Sc. (A), R.SLP, S-LP (c)

Workshop in brief: Aphasia is an acquired communication disorder, typically the result of a stroke or brain injury, which affects peoples' ability to speak, understand, read and/or write. By limiting individuals' ability to engage in conversation, aphasia impacts all aspects of life including our roles and relationships with family, friends and work colleagues. This interactive workshop will help participants understand what aphasia is and how to communicate with adults with aphasia.

Project Management Principles for Research and Beyond

April 10, 2019 | 9 am – 12 pm | Location: HSC 1405B

Presenter: Rachel Sondergaard BSc, EIT, PhD Student (Neuroscience)

Module in brief: Interested in learning more about project management principles, tools and techniques to apply to your own research project? Following the Project Management Book of Knowledge (PMBOK), the gold standard resource in project management, trainees we will be introduced to the 5 project management processes (initiating, planning, monitoring and controlling, executing and closing). Trainees will learn about integration, scope, schedule, communication, stakeholder, quality and risk management, and will be given tools and techniques to apply project management to their own research or lab project.

An Introduction to Programming and Python

April 25, 2019 | 9 am – 12 pm | Location: HSC O1501

Presenter: Christopher Krasnichuk

Module in brief: This introductory session is designed for anyone interested in the Python programming language, absolutely no experience necessary! The session is divided into two parts: part one (9 – 10:15 am) covers the very basics of programming: types of data, logical statements, and loops. Part two (10:30 am – 12 pm) provides the trainees with hands-on practice on the applied use of programming, particularly for the sciences. The session uses Python in Jupyter Notebook. Note that trainees may be required to sign up for a free web-based cloud version of Jupyter Notebooks.

OTHER UCALGARY WORKSHOPS, EVENTS AND SEMINARS

HBI Events

[HBI Seminar Series](#)
Every Friday in March and beyond

[Science in the Cinema: Love and Other Drugs](#)
March 13, 2019 | 6:30 pm – 9:15 pm

[Inaugural Snyder Institute and Hotchkiss Brain Institute Research Symposium](#)
March 18, 2019 | 9 am – 4:30 pm

[12th Annual Calgary Brain Bee Competition](#)
April 13, 2019 | 10 am – 4 pm

Business in LIM Seminar Series

[Personalized Healthcare: The Future is Now!](#)
Invited Speaker: Robert Fraser, PhD, President and Chief Executive Officer, "Molecular You"
March 28, 2019 | 1 – 2pm

UCalgary & Cumming School of Medicine Events

[2019 Southern Alberta Scientific Equipment Trade Show](#)
March 6, 2019 | 9 am – 2 pm

[Global Impact Local Beginnings: Global Health Conference](#)
March 9, 2019 | 10 am – 4 pm

[Data Science & Analytics Professional Graduate Program Information Sessions](#)
March 12, 2019 | 10:30 – 11: 30 am

Workshops @ Health Sciences Library

[EndNote Desktop](#)
March 7, 2019 | 2 – 3:30 pm

[Systematic Review Searching](#)
March 19, 2019 | 9 am – 12 pm

[EndNote Desktop](#)
March 27, 2019 | 12:30 – 2 pm

[Understanding Systematic Reviews](#)
April 3, 2019 | 9 – 10 am

[Searching MEDLINE Systematically](#)
April 3, 2019 |10 – 11 am

[Introduction to Qualitative Data Analysis Using NVivo 12](#)
April 10, 2019 | 10:30 am – 12 pm