



The Brain Injury Cluster (BRC) and The Blood-Brain Barrier Group Retreat Oak Island Resort October 21-22, 2022

Supported by: The Brain Repair Center and The Dennis Chair in Epilepsy Research

Meeting ID: 842 4496 4301

Passcode: 947664

Alon Friedman is inviting you to a scheduled Zoom meeting

Topic: BBB Lab meeting

Join Zoom Meeting

[https://us02web.zoom.us/j/84244964301?pwd=QzVFbzNxMHZETWwrM0xjb](https://us02web.zoom.us/j/84244964301?pwd=QzVFbzNxMHZETWwrM0xjbVBmV3FDdz09)

VBmV3FDdz09



Van departs Tupper Building Friday 21st at **7:30am** for Oak Island
Van departs Oak Island Resort Saturday 22nd at **5:00pm** for Halifax

Check in time Friday October 21st- **3:00pm**

Check out time Saturday October 22nd- **8:30am**

(Parents have till 11:00am)

All activities are weather dependent.

Please bring sweaters, wet weather and hiking clothes and swimsuit.

(Indoor pool available)

Friday October 21st 9:30am Tancook Conference Room

Breakfast Trays available **9:00-9:30am**

Welcome- Alon Friedman

Daniela Kaufer-Review projects in the UC Berkeley Lab **9:40-10:00am**

Alon Friedman-Review projects Dalhousie / Ben-Gurion Labs **10:00-10:15am**

Session 1

Traumatic Brain Injury I

Chair Dr. Karl Schoknecht

Shayna Cort Dalhousie PhD. candidate - TGFB receptor antagonists as a novel treatment for moderate TBI **10:15-10:35am**

Pooyan Moradi Dalhousie PhD. candidate- Anti-TGF beta signaling therapy for the prevention of post-traumatic epilepsy and associated comorbidities following repetitive mild TBI **10:35-10:55am**

Sammy Pham Dalhousie Honours student-The effect of neuroinflammation on blood-brain barrier repair after traumatic brain injury **10:55-11:15am**

Caitlin McKenna Dalhousie Honours student-The effect of hypoxia on blood-brain barrier opening following traumatic brain injury **11:15-11:35am**

DISCUSSION 11:35-12:20pm

Lunch Break-buffet 12:20-1:00pm

Session 2

Stress

Chair Dr. Gerben van Hameren

Dr. Saara Mansoor Dalhousie PhD. candidate- Understanding, predicting and treating concussion susceptibility in a repetitive mild traumatic brain injury model **1:00-1:20pm**

Alexander J. Ehrenberg UC Berkeley PhD. candidate-Chronic mild stress effects on the blood-brain barrier **1:20-1:40pm**

Alaa Abu Ahmad BGU PhD. candidate -Traumatic stress-induced neural network alteration **1:40-2:00pm**

DISCUSSION 2:00 - 2:45pm

Break to check in to rooms /Afternoon snack trays 2:45-3:15pm

Session 3

Cellular response to injury

Chair Hamza Imtiaz

Dr. Karl Schoknecht- Fluorescein in astrocytes and ATP in neurons during spreading depolarizations' **3:15-3:35pm**

Dr. Laura Dumas Dalhousie Post-Doctoral Fellow- Exploring the origin of cortical astrocyte diversity using multicolor strategies **3:35-3:55pm**

Dr. Gerben van Hameren Dalhousie Post-Doctoral Fellow-Cell specific analysis of mitochondrial morphology and function after cortical spreading depolarization **3:55-4:15pm**

Keiran Andrews Dalhousie Honour student-Mitochondrial dysfunction and oxidative stress – Na⁺/K⁺ ATPase activity during neurometabolic challenges **4:15-4:35pm**

Lynn Yang UC Berkeley PhD. candidate -The role of endothelial-to-mesenchymal transition in blood-brain barrier deterioration **4:35-4:55pm**

Marie-Elisabeth Burkart MD. candidate Carl-Ludwig Institute-DEND mutation disrupts hippocampal network activity and nocturnal gamma shifts **4:55-5:15pm**

DISCUSSION 5:15 – 6:00pm

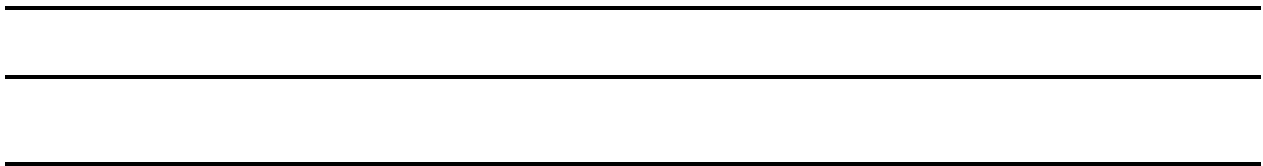
Supper buffet 6:00-7pm

7:00pm-midnight (weather dependent)

Take in a sunset walk on the breakwater / Bonfire-Beach

Three Sheets Bar-Lounge area with fireplace

DRINKS and MUSIC/ Indoor swimming pool (weather independent)



Saturday October 22 7am-9am

32 acres of green space and pristine coastlines to wander

Indoor Pool

Walking Trail

Fat Bike Rentals

Rum Runner's Trail

Take in a sunrise walk on the breakwater

Except for parents, please check out of your room before the morning session starts.

Breakfast Trays available 8:30-9:00am

Saturday October 22nd 9:00am Tancook Conference Room

Session 4

Imaging in epilepsy

Chair Sheida Mirloo

Hamza Imtiaz Dalhousie PhD. candidate - Paroxysmal slow wave events as a biomarker of epilepsy **9:00-9:20am**

Sina Lash Dalhousie Honours student- Sudden slow electroencephalography (EEG) activity in untreated epilepsy patients in Zambia compared to treated epilepsy patients in the United States **9:20-9:40am**

Florent Boyer BGU PhD. candidate -Paroxysmal slow wave events as synchronized disturbance of neuronal activity in a rat model of temporal lobe epilepsy **9:40-10:00am**

Dr. Ben Whatley MD - FDG-PET and SPECT: procedural and statistical methods to improve estimation of the epileptogenic zone **10:00-10:20am**

DISCUSSION 10:20-11:00am

Session 5

Traumatic Brain Injury II

Chair Ben Whatley

Dr. Mark MacLean MSc. MD-NMDA-Receptor antagonism for the prevention of neurological dysfunction in traumatic brain injury: Result of a randomized pre-clinical trial **11:00-11:20am**

Jamil Muradov Dalhousie PhD. candidate -Targeting post-traumatic cortical spreading depolarization for prevention of secondary brain injury **11:20-11:40am**

Casey Jones MSc Dalhousie Medical Student - Exposure to head impacts and blood-brain barrier dysfunction in university football players **11:40-12:00pm**

DISCUSSION 12:00-12:45pm

Lunch Break-buffet 12:45-1:30pm

Session 6

Blood-brain barrier dysfunction: From the lab to the bedside

Chair Dr. Lyna Kamintsky

Moussa Hamati Dalhousie PhD. candidate - Microvascular pathology as a therapeutic target for epilepsy **1:30-1:50pm**

Sheida Mirloo Dalhousie PhD. candidate - Data-driven platform for region-specific assessment of blood-brain barrier function, based on age, sex, and pathology **1:50-2:10pm**

Drs. Alon Friedman, Lyna Kamintsky and Ben Whatley- Clinical Study: Microvascular pathology as a therapeutic target for epilepsy **2:10-2:30pm**

DISCUSSION 2:30 - 3:15 pm

Closing Remarks- Alon Friedman

Van departing Oak Island Resort at 5:00pm for return trip to Halifax