# BRAIN REPAIR

# **BRC KT Grants award history**

#### 2024

- Dr Alon Friedman Paroxysmal Slow Wave Events as a tool to diagnose and treat epilepsy
- Dr James Kramer A Drosophila diagnostic assay for assessing genetic variants involved in Autism and Intellectual Disability
- Dr Ian Weaver Untangling transcriptional control by Amyloid-beta 1-42 in Alzheimer's disease

## 2023

- Dr. Adam Johnston Development of a pre-clinical model to interrogate the function of Twist2-positive muscle stem cells in Duchenne muscular dystrophy
- Dr. George Robertson Alginate hydrogel formulation of Ru265 for the treatment of spinal cord injury
- Dr. Tamara Franklin Understanding the link between adolescent stress and postpartum depression

#### 2022

- Dr. Sean Christie Understanding Spinal Cord Blood Flow After Traumatic Injury
- Dr. Laura Dumas & Dr Vic Rafuse Unravelling Schwann Cell Diversity in Healthy and Injury Peripheral Nerve

#### 2021

- Dr. Aaron Newman A Speech Recognition-Based App for Aphasia Rehabilitation
- Dr. Jamie Kramer Development of humanized flies models for neurodevelopmental disorders
- Dr. George Robertson Development of an intranasal nanoparticle formulation of IRX4204 designed to promote functional recovery in multiple sclerosis by stimulating CNS repair mechanisms.

# 2020

- Dr. Gail Eskes Attention Training: Development and validation of SpyTrain, a web-based attention training tool in the Cognitive Repair Kit
- Dr. Steven Beyea Optimized MRI Acquisition & Reconstruction Technologies for Screening MRI in Emergency Medicine: An Innovation Partnership with Synaptive Medical
- Dr. Angelo Iulianella- A genetic method to scale neural organoid tissue size for disease modeling and cell replacement therapies.

## 2019

- Dr John Frampton Development of A Flexible Biomaterial Fiber for Nerve Guidance
- Dr James Fawcett Development of a mouse model for pre-clinical anxiolytic drug testing
- Dr Ying Zhang A Novel Treatment for ALS
- Dr George Robertson A novel lipid nanoparticle formulation to reduce ischemic/reperfusion brain injury
- Dr Raymond Klein The Attention Network Test Database: A structured resource accessible to clinicians, researchers and knowledge users

## 2018

- Dr Sean Christie Time Is Spine: Minimizing Secondary Spinal Cord Injury by Hyper-Acute Delivery of a Combination of Pleiotropic Neuroprotectants
- Dr Gail Eskes Assessing Attention: implementing and validating the Dalhouise Computerized Attention Battery (DalCAB) on an iPad tablet

#### 2017

- Dr Gail Eskes Business Case and Commercialisation Plan for a Cognitive Assessment and Repair Technology Start-up Company
- Dr Shaun Boe Motor Imagery (MI) Screen: Rapid and portable assessment of imagery ability for rehabilitation Dr Jeremy Brown - Integrated Ablation and Imaging Electronic Harware for Guided Neurosurgery
- Dr John Frampton Systems and Methods for High-Throughput 3D Neural Cell Culture

#### 2016

- Dr George Robertson Therapeutic support of peroxisomal and mitochondrial function as a combinatorial approach to promote spinal cord repair.
- Dr Alon Friedman customization, implementation and testing of an image analysis algoritmin in regards to UWFFA data.
- Dr Shaun Boe MiScreen: Rapid and portable assessment of imagery abiltiy for rehabilitation.
- Dr Michael Schmidt Neuroprotection using noble gases deeper insight and next steps in knowledge translation. In 2015, BRC KT grants were awarded to Drs. David Clarke, Gail Eskes, and George Robertson.

In 2014, the BRC awarded KT grants to three research teams.

In **2013**, the BRC awarded the very first round of KT grants to Dr. Ying Zhang, Dr. Sultan Darvesh, Dr. Alan Fine.