# **BRAIN DAY** FREE PUBLIC EVENT FREE PUBLIC EVEN I SATURDAY 10 MARCH 2018 | 10am-3:30pm OTAGO MUSEUM, HUTTON THEATRE, 419 GREAT KING STREET, DUNEDIN NORTH YOUR BRAIN; THE SECRETS THAT MATTER

THE NEUROLOGICAL FOUNDATION AND THE UNIVERSITY OF OTAGO ARE PLEASED TO PRESENT A PROGRAMME OF FOUR THOUGHT-PROVOKING LECTURES DURING BRAIN DAY 2018.

VARIOUS COMMUNITY SUPPORT GROUPS AND THE NEUROLOGICAL FOUNDATION WILL HAVE STAFF PRESENT AT INFORMATION STANDS DURING THE DAY.

NO BOOKINGS REQUIRED TO ATTEND LECTURES. PLEASE ARRIVE EARLY TO SECURE YOUR SEAT.

WITH THANKS TO



**otago**museum







### 10:00AM – 11:00AM LECTURE DR LOUISE PARR-BROWNLIE, UNIVERSITY OF OTAGO PARKINSON'S DISEASE AND THE CHAMBER OF SECRETS



For the last 30 years, treatments for Parkinson's disease have been focused on an area of the brain called the basal ganglia. While these treatments are helpful, side effects develop in the majority of patients. During this talk, Dr Parr-Brownlie will share the journey from discovering that motor thalamus connections and cell activity are changed in the parkinsonian brain, and outline how this knowledge is being applied to develop and test a potential new treatment.

# 11:00AM – 12:00PM LECTURE PROFESSOR RUTH EMPSON, UNIVERSITY OF OTAGO MOVEMENT MATTERS; FOR YOUR BRAIN AND BODY



The part of the brain called the cerebellum controls and guides movement by constantly listening to signals from the body and using these to predict and refine movement; but growing evidence suggests that the predictive function of the cerebellum goes beyond "just" movement and includes regulation of perceptions and emotions. In this talk Professor Empson will

explore these key roles of the cerebellum and how cerebellar dysregulation could also contribute to conditions as diverse as autism, traumatic stress and dementia.

#### 1:00PM – 2:00PM LECTURE PROFESSOR DARRYL TONG, UNIVERSITY OF OTAGO AN ANATOMICAL HEAD: ITS IMPACT ON TRAILING RESEARCH



Understanding the implications of subconcussive forces to the head and how it relates to potential long-term brain injury especially in sports and the martial arts is an important topic and Professor Tong is part of a team who has developed an anatomical head model (which incorporates a simulant skin, skull and brain) for forensic blunt and ballistic trauma research. In this lecture he will discuss his research and how this could help future generations.

## 2:00PM – 3:00PM LECTURE PROFESSOR JOHN SULLIVAN, UNIVERSITY OF OTAGO SPORT-RELATED CONCUSSION: IT'S EVERYBODY'S BUSINESS



Concussive brain injuries arising from participation in sport are of growing concern both in New Zealand and internationally. Professor Sullivan will survey the "concussion landscape" and discuss aspects of his research on concussion recognition and awareness and whether the message is getting through to those who need it. He will also explore

research investigating possible consequences in later life from concussive injuries received while playing sport and the challenges associated with this avenue of research.

12:00PM - 1:00PM LUNCH TIME TIME WITH COMMUNITY GROUPS AND INTERACTIVE BRAIN DISPLAYS.