Prepared by the Neuroethics research unit at the IRCM

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BRAINSTORM

A newsletter about ethics, neuroscience, and society
Un bulletin sur l'éthique, les neurosciences et la société

Brainstorm

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IRCM
INSTITUT DE RECHERCHES CLINIQUES DE MONTRÉAL

Profile | Profil

Tim Brown is a Doctoral Candidate in Philosophy at the University of Washington. He works with the Center for Sensorimotor Neural Engineering's (CSNE) Neuroethics Thrust on the ethics of implantable neural technologies broadly. Through the CSNE's support, Tim is also a fully-integrated member of the University of Washington's BioRobotics Lab. In this lab, he investigates potential complications of identity, autonomy, and agency that might arise for people who use Deep–Brain Stimulation (DBS) to manage the symptoms of motor disorders like Parkinson's disease, essential tremor, and dystonia. Currently, Tim conducts a long-term, qualitative study with people testing next-generation, "closed-loop" deep–brain stimulators (CL-DBS): devices that are capable of recording from and stimulating the brain simultaneously. One of the goals of Tim's work is to keep track and make sense of how CL-DBS could change users' experiences of being an agent in beneficial and disconcerting ways. One higher-order goal of his work is to explore deeper modes of collaboration between humanists, technologists, scientists, medical practitioners, and end users.

Statement on Neuroethics: Neuroethics is a young field, and so we each play our part in producing the field's identity. So far, that identity is interdisciplinary—or even transdisciplinary—reaching across disparate traditions to make sense of new moral problems within neuroscience and neural technology. This, I believe, is our greatest strength: the diversity of perspectives within neuroethics gives us the collective ability to foresee moral consequences we would not be able to otherwise. In the coming years, however, one of our greater challenges be to build on this strength. I believe we must make an effort to diversify our field even further—by welcoming marginalized voices in our conversations and taking their perspectives seriously—so that we are better able to anticipate the impact of neuroscience and neural engineering on marginalized communities.

Selected Publications:

Brown, T, Margaret C Thompson, Jeffrey Herron, Andrew Ko, Howard Chizeck, and Sara Goering. "Controlling Our Brains – a Case Study on the Implications of Brain-Computer Interface-Triggered Deep Brain Stimulation for Essential Tremor." *Brain-Computer Interfaces*, 2016, 1–6.

Herron, Jeffrey A, Margaret C Thompson, **Timothy Brown,** Howard J Chizeck, Jeffrey G Ojemann, and Andrew L Ko. "Chronic Electrocorticography for Sensing Movement Intention and Closed-Loop Deep Brain Stimulation with Wearable Sensors in an Essential Tremor Patient." *Journal of Neurosurgery*, 2016, 1–8.

Brown, T, Patrick Moore, Jeffrey Herron, Margaret Thompson, Tamara Bonaci, Howard Chizeck, and Sara Goering. "Personal Responsibility in the Age of User-Controlled Neuroprosthetics," *2016 IEEE International Symposium on Ethics in Engineering, Science and Technology (ETHICS),* Vancouver, BC, 2016, 1-12.

Website: tmbrwn.com **Twitter:** @keyofnight

If you would like to post any events, announcements, or news of interest please contact us at neuroethics@ircm.qc.ca (subject line: Brainstorm Events and Announcements)

Announcements | Annonces

Call for Participation: Symposium on Mind-Body-Violence, University of Edinburgh, June 28

Defining, researching and understanding the concept of 'violence' is challenging and contested. At the centre of debates around violence is the enduring problematic of a mind/ body dualism. Ongoing developments in the fields of disability studies, the health humanities, illness studies, and violence studies place conversations about mind and body at the centre of their disciplines; in part, this symposium seeks to address some of the following questions: What is the effect of bodily violence on the mind? How do we categorise and understand the intersections of body and mind through the experiences of violence? What can the emerging field of health humanities offer to understandings of mind-body-violence?

This one-day symposium will provide an engaging and innovative forum in which to explore and interrogate intersections between violence, mind, and body. Attendance is free, but limited to 25-30 delegates, which we hope will draw from a wide range of working scholars, graduate students, and non-scholars with interest in the topic. We invite contributions from a range of disciplinary perspectives allied to health humanities (e.g. literature, drama, history, gender studies, sociology, and anthropology) who are interested in violence and how this intersects with wider understandings of what Margaret Price, among others, suggests calling "bodyminds."

Submission deadline: May 4
Click here for more information.

Call for Papers: CiNaPS 2018: Causality in the Neuro- and Psychological Sciences, Centre for Philosophical Psychology, University of Antwerp, Belgium, September 19-21

Causality is one of the key concepts that require clarification if we want to understand scientific practice. Causal knowledge is useful for prediction and scientific explanation and is indispensable when we endeavour to intervene in the world. Causal relations are ubiquitous, but sometimes hard to discover. This holds for science in general, and for neuroscience and the psychological sciences in particular.

Questions relating to causality can best be answered in an inter- and transdisciplinary way, involving researchers from as many scientific disciplines as possible. This, at least, is the view underlying the Causality in the Sciences (CitS) conference series. Therefore this conference aims to bring together philosophers and scientists to explore the notion of causality at the interplay of the neurological and psychological sciences. We invite submissions on a wide range of topics, including:

- *The nature of causality in the neuro- and psychological sciences*
- *The methods used to test for causal relations in these disciplines*
- *The roles of evidence and theory in grounding causal claims in the neuro- and psychological sciences*
- *Empirical (cognitive, neurological, ?) studies into actual causal reasoning*
- *What philosophers can learn from neuro- and psychological scientists? perspectives on causality, and vice versa*
- *Causal modeling (including machine learning and AI) in relation to the neurological and psychological sciences*
- *The causal efficacy of psychiatric drugs and their relation to non-pharmaceutical therapies*
- *The relation between the topics of causation and of extended/ embodied/ situated/ enactive/ cognition*
- *The relation between neurological causation and causality in the psychological sciences*
- *The (im)possibility of inter-level causal relations in relation to these sciences*
- *Causality as it relates to reduction and other inter-theoretic relations*

Application Deadline: May 15
Click here for more information.

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Announcements | Annonces

Call for Applications: Assistant Professor in the Division of Medical Ethics, New York University School of Medicine: Population Health

The Division of Medical Ethics in the Department of Population Health of NYU School of Medicine (http://pophealth.med.nyu.edu/divisions/medical-ethics), seeks to recruit an Assistant Professor level faculty member for a position, possibly tenure track, beginning as soon as September 1, 2018. Starting date is negotiable.

- *Teaching one course per year or co-teaching with another instructor one course*
- *Teaching in existing medical school courses and electives*
- *Mentoring one or more graduate students/postdoctoral fellows*
- *Working with the Division Head on organizing meetings, conferences, and research projects*
- *Pursuing a line of bioethical research and inquiry that leads to presentations at national meetings and publications in peer-reviewed journals*
- *Helping create and teach continuing education programs*
- *Consultation on ethics issues for IRBs, clinical trial sponsors, investigators, patient groups, NGOs*
- *Develop and seek funding for research studies in the candidate's area of interest within bioethics*

Click here for more information.

Call for Applications: Assistant Professor Ethics of Technology (fixed-term), Eindhoven University of Technology

The Department of Philosophy and Ethics at Eindhoven University of Technology in the Netherlands seeks a lecturer for a fixed-term appointment of one year. Candidates will have earned a PhD in philosophy by the date of application and demonstrate evidence of excellence in both teaching and research. The department has particular needs in teaching engineering ethics to engineering students (BSc and MSc levels), with particular emphasis on data science and biomedical technologies. Fluency in English is required. Since the Department strives for a better gender balance, women are especially encouraged to apply.

The Department of Philosophy and Ethics has a strong tradition in fundamental research in ethics and philosophy of science, as well as applied philosophy in an interdisciplinary setting. It is carried out in the dynamic environment of a cutting-edge, innovative science and technology university with a diverse, international faculty.

Application deadline: March 1
Click here for more information.

Events | Événements

Montreal Neuroethics Network Seminar: "Ability Expectations and Brain-Computer Interface Development"

Delivered by Gregor Wolbring, PhD, University of Calgary

Date: 4:00-5:00pm, May 2, 2018

Location: Institut de recherches cliniques de Montréal (IRCM), salle André-Barbeau

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Events | Événements

HUMANITIES, SOCIAL SCIENCES AND MEDICINE NETWORK

MONASH University

Australian Research Council Centre of Excellence for Integrative Brain Function

THE BRAIN IN CONTEXT

Neuroscience is primarily concerned with differences in brain structure or function that are believed to underpin or explain people's aberrant behaviour and the emergence of mental illness. The brain is frequently viewed as a privileged organ residing within an isolated individual. In reality, our brains are deeply embedded within a social, cultural and physical world that can affect how our brains function and respond to the world, as well as the way in which we interpret and conduct neuroscience research. Recognition of the way in which our brains are deeply embedded within the social, cultural and physical world can have profound ethical and social implications for the application of developments in neuroscience research. *The Brain in Context* will explore three different ways in which the social, cultural and physical world impacts upon our reflections on brain science.

WEDNESDAY 2 MAY 2018, 10AM-12:30PM
LECTURE THEATRE M1, 35 RAINFOREST WALK
MONASH UNIVERSITY, CLAYTON CAMPUS
A light lunch will be provided
RSVP by Friday 27 April here
Any queries, please contact Eugenia: eugenia.pacitti@monash.edu

This HSSM symposium is proudly supported by the ARC Centre of Excellence for Integrative Brain Function

Click here for more information.

Events | Événements

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MONASH University

Ethics in Neurotechnological Innovation

A MIME and MICCN Symposium

Tuesday, 1 May 2018, 1.00 – 5.30 pm

Monash University, New Horizons, 20 Research Way, Level 4 Collaboration Lounge

RSVP Tuesday, 24 April 2018 to Adrian Carter adrian.carter@monash.edu

Synopsis

Brain science is experiencing a boom. Global brain initiatives (e.g. US BRAIN Initiative, EU Human Brain Project) are investing billions of dollars into neuroscience R&D. The global neurotechnology market will reach US$12 billion by 2020 with Elon Musk, *Facebook*, *IBM* and *Google* entering the neuromarket. These technologies may transform our health, workforce, and how we learn and age. The ability to monitor and manipulate brain and behaviour raises significant ethical, legal and social issues, such as: privacy; agency, identity and moral responsibility; and the regulation of commercial devices. It is important that we consider these important issues throughout the R&D of emerging neurotechnologies if we are to realise their potential. This symposium will highlight neurotechnologies being developed in Australia and research being done to meet the ethical, social and legal issues that they raise.

Symposium – Distinguished Lecture

Professor Judy Illes (University of British Columbia):

An Imperative for Neuroethics on the Landscape of Modern Neurotechnology

Judy Illes is Professor of Neurology and Canada Research Chair in Neuroethics at the University of British Columbia (UBC). She is the Director of Neuroethics Canada, established in 2007 at UBC, Vice Chair of the Standing Committee on Ethics of the Canadian Institutes of Health Research (CIHR), and Vice Chair of the Internal Advisory Board of the Institute for Neuroscience, Mental and Addiction of CIHR. Dr. Illes is Immediate Past President of the International Neuroethics Society, and a Board Member of the International Brain Research Organization. She is an elected Fellow of the Royal Society of Canada (Life Sciences), of the Canadian Academy of Health Sciences, of the American Association for the Advancement of Science (Neuroscience). Prof Illes was appointed to the Order of Canada in 2017.

Interdisciplinary Speakers:

Prof Arthur Lowery (Monash Institute of Medical Engineering)
Monash Vision Group's Brain-Machine Interface: A practical benchmark

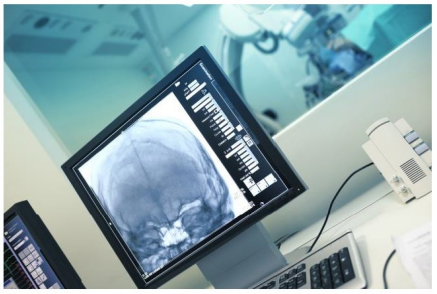
Prof Paul Fitzgerald (Monash Alfred Psychiatry Research Centre)
Brain Stimulation: A new wave of therapies for Psychiatric Disorders

Prof Robert Sparrow (Philosophy, Monash)
Windows Brain '98: What could possibly go wrong?

Dr Frederic Gilbert (Neuroethics, University of Tasmania)
Implantable Brain Computer Interfaces: Exploring Estrangement and Embodiment

Prof Anne-Maree Farrell (Health Law, La Trobe)
Regulating Consumer Use of Transcranial Direct Current Stimulation (tDCS) Devices? Ethical, Safety and Legal Issue

The symposium will conclude with a Q&A with the panel.

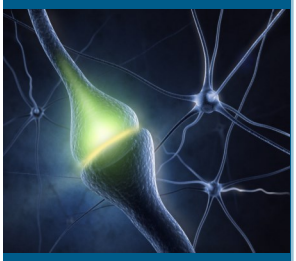


Canapés and drinks will follow the event.

This is an initiative of the Australian Neuroethics Network

[Click here for more information.]

Literature | Littérature



ARTICLES

Advance care planning for patients with amyotrophic lateral sclerosis.
Levi BH, Simmons Z, Hanna C, Brothers A, Lehman E, Farace E, Bain M, Stewart R, Green MJ. Amyotroph Lateral Scler Frontotemporal Degener. 2017 Aug; 18(5-6): 388-96. Epub 2017 Mar 5.

Ethical challenges faced by healthcare professionals who care for suicidal patients: a scoping review.
Saigle V, Racine E.Monash Bioeth Rev. 2018 Apr 17. [Epub ahead of print]

The ethics of experimenting with human brain tissue
Farahany NA, Greely HT, Hyman S, et al. Nature. 2018 Apr;556(7702):429-432.

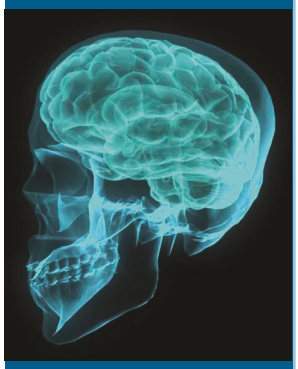
Supplementing research ethics training in psychiatry residents: A five-tier approach.
Viswanath B, Jayarajan RN, Chandra PS, Chaturvedi SK. Asian J Psychiatr. 2018 Apr 3; 34: 54-6. [Epub ahead of print].

Sustainability of a person-centered ward atmosphere and possibility to provide person-centered forensic psychiatric care after facility relocation.
Alexiou E, Wijk H, Ahlquist G, Kullgren A, Degl' Innocenti A. J Forensic Leg Med. 2018 Apr 11; 56: 108-13. [Epub ahead of print].

The social sciences, humanities, and health
Pickersgill M, Chan S, Haddow G, Laurie G, Sridhar D, Sturdy S, Cunningham-Burley S. Lancet. 2018 Apr 14; 391(10129): 1462-3.

[Level of Development of Clinical Ethics Consultation in Psychiatry - Results of a Survey Among Psychiatric Acute Clinics and Forensic Psychiatric Hospitals].
Gather J, Kaufmann S, Otte I, Juckel G, Schildmann J, Vollmann J.Psychiatr Prax. 2018 Apr 17. [Epub ahead of print]. German.

Ethical considerations of neuro-oncology trial design in the era of precision medicine.
Gupta S, Smith TR, Broekman ML. J Neurooncol. 2017 Aug; 134(1): 1-7.



NEWS

On Hans Asperger, the Nazis, and Autism: A Conversation Across Neurologies
Sparrow M & Silberman S. Thinking Person's Guide to Autism. April 19, 2018.

We're Good At Recognizing Distorted Faces
Neuroskeptic. Discover. April 22, 2018.

Aneurysm strikes baseball pitcher, but why? A neurosurgeon explains the mysterious condition
The Conversation. Hoh B. April 23, 2018.

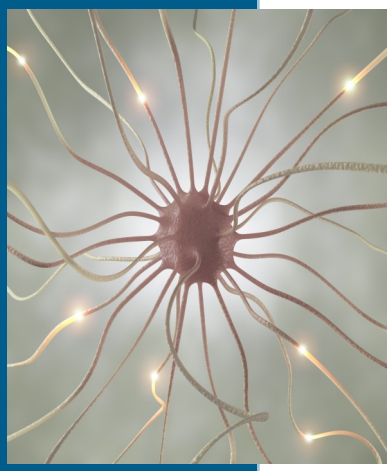
Infinitesimal Odds: A Scientist Finds Her Child's Rare Illness Stems From the Gene She Studies
Belluck P. The New York Times. April 23, 2018.

We're underestimating the mind-warping potential of fake video
Resnick B. Vox. April 23, 2018.

What Happens When Geneticists Talk Sloppily About Race
Holmes I. The Atlantic. April 25, 2018.

A continuum of consciousness: The Intrinsic Consciousness Theory (Interview with Kathinka Evers)
Meylan G. The Human Brain Project. April 25, 2018.

Resources | Ressources



[University of British Columbia, Neuroethics Canada]

[Neuroethics at the University of Pennsylvania]

[International Neuroethics Society]

[Neuroethics Research Unit / L'Unité de recherche en neuroéthique]

[Journal of Ethics in Mental Health]

[Novel Tech Ethics]

[Neuroethics at the Stanford Center for Biomedical Ethics]

[Berman Institute of Bioethics' Program in Ethics and Brain Sciences]

[Centre interfacultaire en bioéthique et sciences humaines en médecine]

[The Neuroethics Blog]

[Emory Program in Neuroethics]

[American Journal of Bioethics Neuroscience]

[Neuroethics Women (NEW) Leaders]

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