

# Catherine Stinson

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- AOS** Philosophy of Science, Philosophy of Neuroscience, Philosophy of Mind  
**AOC** Philosophy of Psychiatry, Philosophy of Biology, Logic, History of Science
- Academic Appointments** (07/2015 – ) *Postdoctoral Fellow*: Rotman Institute of Philosophy  
University of Western Ontario
- (2014) *Assistant Professor* (Fixed term): Philosophy Department  
Ryerson University  
(Parental leave: 07/2014 – 06/2015)
- (2012 – 2013) *Postdoctoral Fellow*: Centre for Integrative Neuroscience  
University of Tübingen
- Education** (2013) **PhD**: *University of Pittsburgh*, History & Philosophy of Science  
Dissertation: “Cognitive Mechanisms and Computational Models: Explan-  
ation in Cognitive Neuroscience”  
(Parental leave, unofficial: 01/2010 – 09/2010)
- (2013) **Graduate Training Certificate**: Center for the Neural Basis of  
Cognition, *University of Pittsburgh* and *Carnegie Mellon University*
- (2002) **MSc**: *University of Toronto*, Computer Science  
Thesis: “Adaptive Information Filtering with Labeled and Unlabeled Data”
- (1999) **BSc**: *University of Toronto*, University College  
Majors: Cognitive Science & Artificial Intelligence, Computer Science
- Peer Reviewed Publications** (forthcoming) Back to the Cradle: Mechanism Schemata from Piaget to DNA.  
In *Eppur si muove: Doing History and Philosophy of Science with Peter Machamer*, Eds. M. Abrams, Z. Biener, U. Feest, J. Sullivan. Springer.
- (forthcoming) Mechanistic Explanation in Neuroscience. In *The Routledge Handbook of Philosophy of Mechanisms*, Eds. S. Glennan and P. Illari. Routledge. With J. Sullivan.
- (2016) Mechanisms in Psychology: Ripping Nature at its Seams. *Synthese*. 193(5), 1585-1614.

(2014) Owing an Overweight or Underweight Body: Distinguishing the Physical, Experienced and Virtual Body. *PLOS One* 9(8): e103428. Piryankova, I.V., Wong, H.Y., Linkenauger, S., Stinson, C., Longo, M., Bühlhoff, H.H., Mohler, B.J.

(2009) Searching for The Source of Executive Attention. *PSYCHE* 15(1): 137-154. (With commentary by Andy Clark.)

**Commentaries** (2014) Commentary on Philipp Koralus, The Erotetic Theory of Attention *Brains blog symposium for Mind & Language*.

**Manuscripts** The Absent Body in Psychiatric Diagnosis, Treatment, and Research. *Synthese: Special Issue on Philosophy and Psychiatry*, Eds. S. Tekin and E. Machery. (Revise and resubmit)

Explanation and Connectionist Models. *The Routledge Handbook of the Computational Mind*, Eds. M. Colombo and M. Sprevak. Routledge. (Invited)

What Artificial Neurons Tell us about Real Brains. (Submitted to *Philosophical Psychology*)

Golgi and the Neuron Doctrine. (Under revision)

**Awards and Fellowships** (2011) Best Student Paper Award, International Association for Computing and Philosophy: Epistemology of Modeling and Simulation Conference

(2010) Pre-doctoral Fellowship: Max Planck Institute for History of Science

**Scholarships and Grants** (2016) Minorities and Philosophy Grant, for workshop on The Social Impact of Medicalizing Psychiatry (with V. Arsiradam, D. Oswick, C. McLeod)

(2013) Dean's Tuition Scholarship, University of Pittsburgh

(2009, 2011) Wesley Salmon Grant, for archival research in Pavia, Italy

(2005, 2007, 2009) Graduate Fellowship, University of Pittsburgh

(2000, 2001) Computer Science Department Scholarship, University of Toronto

**Invited Talks** "Computational Models as Generic Mechanisms"  
Munich Center for Mathematical Philosophy, University of Munich, May 2014

"Are 'Computational Experiments' Experiments?"  
Philosophy Department, York University, April 2014

"Epistemology of Computational Modeling in the Social Sciences"  
Institute of Social Sciences, University of Kiel, May 2012

“What Mechanisms Can Do (for You)”  
Centre for Integrative Neuroscience, University of Tübingen, December 2011

“Searching for The Source of Executive Attention”  
*Consciousness in a Natural and Cultural Context*, Edinburgh, June 2008

**Presentations**

“The Body in Mental Illness”  
Neuroscience and Society Lecture Series, Rotman Institute of Philosophy, October 2016

“Mechanistic and Mathematical Explanation Unified”  
*Mechanistic Integration and Unification in Cognitive Science*, Warsaw, June 2016

“Grounding Inferences from Model Organisms”  
*First Principles in Science: Their Epistemic Status and Justification*, MCMP Munich, June 2016

“The Absent Body in Psychiatric Classification, Diagnosis, and Treatment”  
*Canadian Society for History & Philosophy of Science*, Calgary, May 2016

“Interoception, Eating Disorders, and the Rubber-Hand Illusion”  
*Body Perception: Clinical, Experimental, and Philosophical Approaches*, Tübingen, November 2013

“Computational Models as Experimental Systems”  
*Society for Philosophy of Science in Practice*, Toronto, June 2013

“Abstract Models, Generic Mechanisms”  
*Models & Mechanisms*, Tilburg, December 2012

“Is Explanation in Psychology Mechanistic?”  
*Explaining Mental Phenomena*, University of Tübingen, July 2012

“Computational Models as Mechanistic Explanations”  
*Models and Simulations 5*, Helsinki, June 2012

“Computational Models as Mechanistic Explanations”  
*Computability in Europe: Turing Centenary Conference*, Cambridge, June 2012

“The Role of Computational Models in Cognitive Neuroscience”  
*Epistemology of Modeling and Simulation*, Pittsburgh, April 2011

“Aristotle’s Argument against Functionalism”  
*International Society for History of Philosophy of Science*, Budapest, June 2010 (with B. Hennig)

“The Role of Computational Models in Cognitive Neuroscience”  
*European Conference on Computing and Philosophy*, Barcelona, July 2009

“The Role of Computational Models in Cognitive Neuroscience”  
*Association for the Scientific Study of Consciousness*, Berlin, June 2009 (poster)

“Locating Executive Attention: Explanation and Levels of Description”  
*Graduate Conference in Philosophy, Psychology, Neuroscience and Biology*,  
Edinburgh, June 2008 (poster)

“Attention, Volition, and the Ghost in the Machine”  
*European Society for Philosophy and Psychology*, Geneva, July 2007

“On-line Learning from Labeled and Unlabeled Data”  
*Neural Information Processing Systems: Workshop on Machine Learning Methods for Text and Images*, Vancouver, December 2001 (poster)

## Teaching Experience

### Instructor:

*University of Toronto*, Cognitive Science Program:

- COG401 Seminar in Cognitive Science: Moral Psychology, Spring 2017
- COG401 Seminar in Cognitive Science: Delusions, Spring 2016

*Ryerson University*, Philosophy Department:

- SSH105 Critical Thinking, Winter 2014
- PHL214 Critical Thinking 1, Winter 2014 (2 sections)

*University of Tübingen*, Philosophy Department &

*Max Planck Institute*, Neuroscience Graduate School:

- Epistemology of Experimentation, Summer 2013 (co-taught)
- Mental Architectures, Winter 2012 (co-taught)

*University of Pittsburgh*, History & Philosophy of Science Department:

- HPS0610 Causal Reasoning, Spring 2009 (hybrid-online course)
- HPS0611 Principles of Scientific Reasoning, Fall 2008

### Teaching Assistant:

*University of Pittsburgh*, History & Philosophy of Science Department:

- HPS0612 Mind and Medicine, Spring 2007
- HPS0605 The Nature of the Emotions, Fall 2006

*University of Toronto*, Computer Science Department:

- CSC309 Web Programming, Fall 2001, Fall 2002
- CSC258 Computer Organization, Fall 2000, Spring 2002

- CSC238 Discrete Math for Computer Science, Fall 1998, Fall 1999, Summer 2000
- CSC384 Introduction to Artificial Intelligence, Spring 1999, Spring 2000
- CSC324 Programming Languages, Summer 1999
- CSC148 Introduction to Computer Science, Fall 1997

**Students Supervised**

*Ryerson University:*

- Rebecca Kovacs, RA project: literature review on philosophy of psychiatry, 2014
- Oliver Hutchison, RA project: professional development tools for MA students, 2014

*University of Tübingen:*

- Eva Engels, Magister thesis: beliefs/desires in developmental psychology, 2013 (co-supervision)
- Felix Wolff, BSc project: experiment on action and interoception, 2013

**Professional Service**

**Conferences and Lecture Series:**

Lead Organizer: *The Social Impact of Medicalizing Psychiatry*, Rotman Institute of Philosophy (2017)

Lead Organizer: *Body Perception: Clinical, Experimental, and Philosophical Approaches*, Tübingen (2013)

Lead Organizer: *Body Perception Seminar Series*, Centre for Integrative Neuroscience (2012 – 2013)

Program Committee: *Models & Mechanisms*, Tilburg (2012)

Program Committee: *Annual Lecture Series*, Center for Philosophy of Science, University of Pittsburgh (2009)

**Reviewer for:**

Synthese, Philosophy of Science, Philosophical Studies, Journal of Cognitive Science

**Session Chair:**

*Philosophy of Science Association*, Atlanta (2016)

*Canadian Society for History and Philosophy of Science*, Calgary (2016)

*Philosophy of Science Association*, Chicago (2014)

*Models & Mechanisms*, Tilburg (2012)

*Current Topics in the Philosophy of the Human Sciences*, Berlin (2010)

**Memberships:**

Philosophy of Science Association

Canadian Society for History & Philosophy of Science

International Philosophy of Medicine Roundtable

Gesellschaft für Wissenschaftsphilosophie

**Scientific Research** (2016 – 2017) CoNCH Lab, Brain and Mind Institute, Western University  
Cognitive neuropsychology tests on patients with focal epilepsy to determine functional correlates of fMRI findings

(2012 – 2013) Max Planck Institute for Biological Cybernetics  
Full-body and non-visual extensions to Rubber-Hand Illusion paradigm

(2002 – 2003) Researcher: University of Toronto, Machine Learning Lab  
Bayesian learning algorithms for letter recognition and text classification

(1998 – 1999) Researcher: University of Toronto AI Lab  
Computational vision for gesture recognition in a communications robot

**Languages** English: first language  
French: fluent reading, good spoken and written  
German: good reading, spoken, and written

**Computer Skills** C, C++, Java, FORTRAN, LISP, PHP, Perl, LaTeX, Matlab

**References** **Tim Bayne** <tim.bayne@gmail.com>  
Future Fellow, Australian Research Council  
Monash University

**Peter Machamer** <pkmach@pitt.edu>  
Professor, History & Philosophy of Science  
University of Pittsburgh

**Kenneth Schaffner** <kfs@pitt.edu>  
Distinguished University Professor, History & Philosophy of Science  
Professor, Psychiatry  
University of Pittsburgh

**Uljana Feest** <feest@philos.uni-hannover.de>  
Professor, Philosophy  
Leibniz Universität Hannover

**Ana Perez-Leroux** <at.perez.leroux@utoronto.ca> (teaching reference)  
Professor, Linguistics, Spanish & Portuguese Languages  
Director, Cognitive Science Program  
University of Toronto

**Elizabeth Irvine** <elizabethirv@gmail.com> (teaching reference)  
Lecturer, Philosophy  
Cardiff University