

Megan T. deBettencourt

Curriculum Vitae

CONTACT INFORMATION

Mailing 940 East 57th St
Institute for Mind and Biology
Chicago, Il 60637

Email debetten@uchicago.edu

EDUCATION AND TRAINING

2016 – present *Post-doctoral scholar*
University of Chicago, Institute for Mind and Biology & Department of Psychology
Advisors: Ed Awh & Ed Vogel

2016 *PhD Neuroscience*
Princeton University, Princeton Neuroscience Institute
Advisors: Ken Norman & Nick Turk-Browne

2012 *MA Neuroscience*
Princeton University, Princeton Neuroscience Institute

2010 *BS Applied Mathematics, magna cum laude*
Columbia University, School of Engineering and Applied Sciences
Advisor: Paul Sajda

PUBLICATIONS

deBettencourt MT, Norman KA, Turk-Browne NB (2017) Forgetting from lapses of sustained attention. *Psychonomic Bulletin & Review*.

deBettencourt MT & Norman KA (2016) Neuroscience: Incepting associations. *Current Biology*. 26(14): R673 – 5

Schnyer DM, Beavers CG, **deBettencourt MT**, Sherman SM, Cohen JD, Norman KA, Turk-Browne NB (2015) Neurocognitive therapeutics: from concept to application in the treatment of negative attention bias. *Biology of Mood & Anxiety Disorders*. 5: 1

deBettencourt MT, Cohen JD, Lee RF, Norman KA, Turk-Browne NB (2015) Closed-loop training of attention with real-time brain imaging. *Nature Neuroscience*. 18(3): 470 – 475

Stoekel, L, Garrison, KA, Ghosh, S, Wighton, P, Hanlon, CA, Gilman, JM, Greer, S, Turk-Browne, NB, **deBettencourt, MT**, Scheinost, D, Craddock, C, Thompson, T, Calderon, V, Bauer, CC, George, M, Breiter, HC, Whitfield-Gabrieli, S, Gabrieli, JD, LaConte, SM, Hirshberg, LM, Brewer, JA, Hampson, M, van der Kouwe, A, Mackey, S, Evins, AE (2014) Optimizing real-time fMRI for neurotherapeutic discovery and development. *NeuroImage: Clinical*. 5: 245 – 255

Kalbfleisch ML, **deBettencourt MT**, Kopperman R, Banasiak M, Roberts JM, Halavi M (2013) Environmental influences on neural systems of relational complexity. *Frontiers in Psychology*. 4: 631

deBettencourt MT, Goldman RI, Brown TR, Sajda P (2012) Adaptive thresholding to improve sensitivity in single-trial simultaneous EEG/fMRI. *Frontiers in Psychology*. 2: 91

CONFERENCE PRESENTATIONS

deBettencourt MT, Turk-Browne NB, Norman KA. Enhanced perceptual processing of visual context benefits later memory. Poster presented at Vision Sciences Society annual meeting, St. Pete Beach, FL, May 2017.

deBettencourt MT, Turk-Browne NB, Norman KA. Externalizing the internal process of context reinstatement through closed-loop neurofeedback. Poster presented at Society for Neuroscience annual meeting, San Diego, CA, November 2016

Mennen AC, Poppenk J, **deBettencourt MT**, Norman KA. Weakening memories through closed-loop modulation of perceptual distraction. Poster presented at Society for Neuroscience annual meeting, San Diego, CA, November 2016

deBettencourt MT, Turk-Browne NB, Norman KA. Externalizing mental context reinstatement with closed-loop neurofeedback to support memory retrieval. Poster presented at the 6th International Conference on Memory, Budapest, Hungary, July 2016.

deBettencourt MT, Norman KA, Turk-Browne NB. Lapses of sustained attention cause later forgetting in visual long-term memory. Talk presented at Vision Sciences Society annual meeting, St. Pete Beach, FL, May 2016.

deBettencourt MT, Turk-Browne NB, Norman KA. Reinstating mental context with closed-loop neurofeedback. Poster presented at Society for Neuroscience annual meeting, Chicago, IL, October 2015.

deBettencourt MT, Norman KA, Turk-Browne NB. Relating sustained attention to visual long-term memory. Poster presented at Vision Science Society annual meeting, St. Pete Beach, FL, May 2015.

deBettencourt MT, Turk-Browne NB, Norman KA. Using real-time fMRI neurofeedback to manipulate mental context. Talk presented at Context and Episodic Memory Symposium, Philadelphia, PA. May 2015.

deBettencourt MT, Turk-Browne NB, Norman KA. Real-time fMRI neurofeedback of context to support memory retrieval. Poster presented at Real-time Functional Imaging and Neurofeedback Conference, Gainesville, FL. February 2015.

Mukerji A, **deBettencourt MT**, Lewis-Peacock JA. Real-time neurofeedback of working memory usage during prospective remembering. Poster presented at Real-time Functional Imaging and Neurofeedback Conference, Gainesville, FL. February 2015.

deBettencourt MT, Cohen JD, Lee RF, Norman KA, Turk-Browne NB. Training sustained attention using real-time fMRI in healthy individuals. Talk presented at the Association for Behavioral and Cognitive Therapies 48th annual convention, Philadelphia PA. November 2014.

deBettencourt MT, Turk-Browne NB, Norman KA. Manipulating mental context in a memory task using real-time fMRI. Poster presented at Society for Neuroscience 44th annual meeting, Washington DC. November 2014.

Schnyer DM, **deBettencourt MT**, Beevers CG, Sherman S, Cohen JD, Norman KA, Turk-Browne NB. Development of real-time fMRI neurofeedback attention training for depression. Poster presented at Society for Neuroscience 44th annual meeting, Washington DC. November 2014.

Mukerji A, **deBettencourt MT**, Lewis-Peacock JA. Real-time neurofeedback of working memory usage during prospective remembering. Poster presented at Society for Neuroscience 44th annual meeting, Washington DC. November 2014.

Jackson-Hanen VE, Tomparay A, **deBettencourt MT**, Turk-Browne NB. Training of visual categories through real-time fMRI neurofeedback. Poster presented at Context and Episodic Memory Symposium, Philadelphia, PA. May 2014.

deBettencourt MT, Cohen JD, Lee RF, Norman KA, Turk-Browne NB. Closed-loop training of sustained attention with real-time fMRI neurofeedback. Talk presented at Society for Neurosciences 43rd annual meeting, San Diego, CA. November 2013.

Jackson-Hanen VE, Tomparay A, **deBettencourt MT**, Turk-Browne NB. Training of visual categories through real-time fMRI neurofeedback. Poster presented at Society for Neurosciences 43rd annual meeting, San Diego, CA. November 2013.

deBettencourt MT, Cohen JD, Lee RF, Norman KA, Turk-Browne NB. Closed-loop training of sustained attention with real-time fMRI neurofeedback. Poster presented at Learning to Attend, Attending to Learn: Neurological, Behavioral and Computational Perspectives Workshop, San Diego, CA. November 2013.

deBettencourt MT, Lee RF, Cohen JD, Norman KA, Turk-Browne NB. Externalizing internal states with real-time neurofeedback to train visual attention. Poster presented at Vision Sciences Society annual meeting, Naples, FL. May 2013.

deBettencourt MT, Lee RF, Cohen JD, Norman KA, Turk-Browne NB. Decoding and training sustained attention with real-time fMRI. Poster presented at Society for Neuroscience 42nd annual meeting, New Orleans, LA. October 2012.

deBettencourt MT, Lee RF, Cohen JD, Norman KA, Turk-Browne NB. Real-Time Decoding and Training of Attention. Poster presented at Vision Sciences Society 12th annual meeting, Naples, Florida. May 2012.

deBettencourt MT, Goldman RI, Brown TR, Sajda P. Adaptive Thresholding to Improve Sensitivity in Single-Trial Simultaneous EEG/fMRI. Poster presented at Organization of Human Brain Mapping 16th annual meeting, Barcelona, Spain. June 2010.

Roberts JM, Stoneham ET, Halavi M, Serpati LA, **deBettencourt MT**, Donohue ME, Loughan AR, Zhang DX, Kalbfleisch ML. Differential Neural Systems of State-Dependent Reasoning. Poster presented at Society For Neuroscience 39th annual meeting, Nanosymposium, Chicago, IL. October 2009.

deBettencourt MT, Halavi M, Banasiak ME, Roberts JL, Serpati L, Stoneham ET, Donohue ME, Sandford C, Kalbfleisch ML. The Role of Visual Contrast in Relational Complexity. Poster presented at Organization of Human Brain Mapping 15th Annual Meeting, San Francisco, CA. June 2009.

Stoneham ET, **deBettencourt MT**, Halavi M, Shaw A, Donohue M, Kopperman R, Serpati L, Roberts J, Kalbfleisch M. Neural Systems of Color Relational Complexity. Talk presented at Society for Neuroscience 38th annual meeting, Nanosymposium, Washington DC. November 2008.

HONORS AND AWARDS

2017 – 2018 *Scientific Teaching Fellow*
Center for Teaching and Learning, Summer Institute on Scientific Teaching

2015 *Student Travel Award*
Real-time Functional Imaging and Neurofeedback Conference, Gainesville, FL

2014 *Summer Institute in Cognitive Neuroscience Fellowship*
University of California, Santa Barbara

2013 *Cognitive Science Society Best Student Presentation*
Learning to Attend, Attending to Learn Workshop, San Diego, CA

- 2011 *Graduate Research Fellowship*
National Science Foundation
- 2011 *Herbert Lewis Fellowship*
The Graduate School, Princeton University
- 2010 *Magna Cum Laude*
School of Engineering and Applied Sciences, Columbia University
- 2010 *Senior Marshal, 2010 Commencement*
School of Engineering and Applied Sciences, Columbia University
- 2009 *Summer Undergraduate Research Fellowship*
Department of Biological Sciences, Columbia University
- 2009 *Summer Enhancement Fellowship Research Grant*
Columbia University Scholars Program
- 2007 – 2008 *Wayne K. Kao Scholarship*
School of Engineering and Applied Sciences, Columbia University
- 2006 – 2010 *C. Prescott Davis Scholar*
Columbia University Scholars Program

PEDAGOGICAL WORKSHOPS

- 2017 *HHMI Midwest Summer Institute on Scientific Teaching*
University of Chicago
- 2013 *Learning to Attend, Attending to Learn: Neurological, Behavioral, and Computational Perspectives*
San Diego, CA
- 2013 *Optimizing Real Time fMRI for Neurotherapeutic Discovery and Development*
Radcliffe Institute for Advanced Study, Harvard University

EXTERNAL & INVITED TALKS

- Feb 2016 Rutgers-Princeton Center for Computational Cognitive Neuropsychiatry Rutgers,
New Brunswick NJ
- Feb 2016 University of Chicago, Chicago IL
- Dec 2015 UC Davis, Davis CA
- Nov 2015 MIT, Cambridge MA
- Apr 2015 NIH, Bethesda MD
- Apr 2015 MIT, Cambridge MA

TEACHING EXPERIENCE

- 2016 *Guest Lecturer, Princeton University*
From Molecules to Systems to Behavior
- 2015 – 2016 *Guest Lecturer, Princeton University*

Neurotechnologies for Analysis of Neural Dynamics

- 2015 *Guest Preceptor*, Princeton University
Memory and Cognition
- 2014 – 2015 *Guest Lecturer*, Princeton University
Laboratory in Principles of Neuroscience
- 2012 – 2013 *Guest Lecturer*, Princeton University
Biophysics and Computation in Neurons and Networks
- 2012 *Assistant in Instruction*, Princeton University
From Molecules to Systems to Behavior
- 2011 *Assistant in Instruction*, Princeton University
Fundamentals of Neuroscience
- 2007 – 2010 *Teaching Assistant*, Columbia University
Engineering Design Fundamentals Using Advanced Computational Technology

ACADEMIC ADVISING AND SERVICE

- 2017 *Program Committee*
Real-time Functional Imaging and Neurofeedback Conference, Nara, Japan
- 2015 – 2016 *Graduate Teaching Fellow*
McGraw Center for Teaching and Learning, Princeton University
- 2015 *Co-organizer*
Manhattan Area Memory Meeting
- 2011 – 2014 *Resident Graduate Student*
Forbes College, Princeton University
- 2011 – 2012 *Faculty Curriculum Committee, Student representative*
Princeton Neuroscience Institute, Princeton University
- 2011 *Graduate Student Recruitment Coordinator*
Princeton Neuroscience Institute, Princeton University
- 2006 – 2010 *Columbia Undergraduate Science Journal*
Executive Vice-President & Symposium Coordinator

AD HOC REVIEWER

(alphabetical order) Current Biology, Frontiers in Behavioral Neuroscience, eLife, Frontiers in Human Neuroscience, The Israel Science Foundation, Journal of Visualized Experiments, Medical Research Council United Kingdom, Nature Neuroscience, Neuropsychologia, Neuroscience, Psychonomic Bulletin & Review