

Olga Lositsky

Postdoctoral Research Associate in David Badre's Lab at the Department of Cognitive, Linguistic & Psychological Sciences, Brown University, Providence RI 02912

Email: olga_lositsky@brown.edu | Website: <http://www.princeton.edu/~lositsky>

Education

- 2011 – 2017 Princeton University, USA – **Ph.D. in Neuroscience**
- 2007 – 2010 McGill University, Canada – **B.Sc. in Neuroscience**, Minor in Philosophy
Concentration in Physiology and Computational Neuroscience
- 2008 – 2009 University of Freiburg, Germany – **Academic Exchange**: Ten Master's level courses in German, Concentration in Neurobiology and Biophysics
- 2005 – 2007 Collège Stanislas, Montreal, Canada – **General Baccalaureate Diploma**
Scientific Series

Publications and Conference Papers

Lositsky, O., Chen, J., Toker, D., Honey, C. J., Shvartsman, M., Poppenk, J. L., Hasson, U., & Norman, K. A. (2016). Neural Pattern Change During Encoding of a Narrative Predicts Retrospective Duration Estimates. *eLife*.

Significance: Developed novel methods for measuring changes in BOLD activity patterns over minutes-long time scales. Showed that the rate of change in entorhinal cortex activity patterns during encoding of narratives predict retrospective duration estimates.

Simony, E., Honey, C. J., Chen, J., **Lositsky, O.**, Yeshurun, Y., Wiesel, A., & Hasson, U. (2016). Dynamical reconfiguration of the default mode network during narrative comprehension. *Nature Communications*.

Lositsky, O., Wilson, R.C., Shvartsman, M., Cohen, J.D. (2015, June). A drift diffusion model of proactive and reactive control in a context-dependent two-alternative forced choice task. In Proceedings of the *Reinforcement Learning and Decision Making Conference*, Edmonton, Alberta.

Significance: Built the first computational model of proactive and reactive strategies in context-dependent decision-making. Used model simulations to show when the two strategies are most distinguishable.

Conference Posters and Talks

Lositsky, O., Shvartsman, M., Wilson, R.C., Cohen, J.D. (2017, July). Adaptive response priors in context-dependent decision-making. *39th Annual Meeting of the Cognitive Science Society*, London, UK. [**Poster**]

Lositsky, O., Wilson, R.C., Shvartsman, M., Cohen, J.D. (2016, November). Adaptive task representations in context-based decision making. *Society for Neuroscience Annual Meeting*, San Diego, CA. [**Poster**]

Lositsky, O., Wilson, R.C., Shvartsman, M., Cohen, J.D. (2015, December). Adaptive task representations in context-based decision making. “Bounded Optimality and Rational Metareasoning” workshop, *Neural Information Processing Systems Conference*, Montreal, Canada. [**Poster**]

Lositsky, O., Toker, D., Chen, J., Honey, C.J., Poppenk, J.L., Hasson, U., Norman, K.A. (2013, November). Time perception and contextual drift with a naturalistic stimulus. *Society for Neuroscience Annual Meeting*, San Diego, CA. [**Poster**]

Lositsky, O., Wilson, R.C., White, J.M., Cohen, J.D. (2013, October). Bayesian model of proactive and reactive control in the AX-CPT. *Computational Psychiatry Conference*, Miami, FL. [**Poster**]

Lositsky, O., Toker, D., Chen, J., Honey, C.J., Poppenk, J.L., Hasson, U., Norman, K.A. (2013, June). Time perception and contextual drift with a naturalistic stimulus. Manhattan Area Memory Meeting, New York, NY. [**Talk**]

Lositsky, O., Toker, D., Chen, J., Honey, C.J., Poppenk, J.L., Hasson, U., Norman, K.A. (2013, May). Time perception and contextual drift with a naturalistic stimulus. Context and Episodic Memory Symposium, Philadelphia, PA. [**Poster**]

Pre-doctoral Research Experience

Spring 2009	Advanced Molecular Imaging Research Group, Department of Radiology University Hospital Freiburg, P.I. Jürgen Hennig
Fall 2008	Neuropsychology Lab, University of Freiburg, P.I. Ulrike Halsband
Summer 2008	Zebrafish Neuroimaging Group, Institute of Developmental Genetics, Helmholtz Research Center in Munich, P.I. Reinhard Koester
Summer 2007	Department of Biochemistry, McGill Cancer Research Centre, P.I. Michel Tremblay
Summer 2006	Human Dopamine Neuroimaging Lab, McConnell Brain Imaging Center, Montreal Neurological Institute, P.I. Alain Dagher

Teaching and Mentoring Experience

Advisor for *Princeton Neuroscience Summer Internship Program* Summer 2013

Project title: “Number of event boundaries in a story predicts retrospective duration estimates.”

- Guided undergraduate pharmacy student through all stages of a scientific study, including literature review, experimental design, behavioral data collection and analysis.
- Taught MATLAB, Psychophysics Toolbox and basics of fMRI data analysis.

Assistant Instructor for *NEU 502 From Molecules to Systems to Behavior* Spring 2013

- Assisted graduate students with building connectionist models of memory and learning, analyzing fMRI and EEG data.
- Designed and led tutorials on fMRI data analysis.

Assistant Instructor for *NEU 258 Fundamentals of Neuroscience*

Fall 2012

- Led three weekly undergraduate precepts on topics in introductory neuroscience, including dissections, demonstrations, and scientific article discussions.

Assistant Instructor for *ELE / NEU 480 fMRI Decoding: Reading Minds Using Brain Scans*
Spring 2011

- Collaborated with graduate students in Electrical Engineering to design laboratory exercises on fMRI data preprocessing and analysis, including General Linear Models, searchlight pattern classification and representational similarity analysis

Awards and Accomplishments

2012 Honorable Mention, National Science Foundation (NSF) Graduate Research Fellowship Program

2008 DAAD Undergraduate Scholarship

2008 PBCSE Government of Quebec Travel Award

2008 DAAD Research Internships in Science and Engineering Scholarship

2007 Canadian Millennium Excellence Award

2007 James McGill Scholarship

2007 Toyota Earth Day Scholarship

2007 Prize of the Lieutenant-Governor of Quebec

2007 Laureate in Innovation : « Concours Intercollégial Pédagogie environnement »

2007 Certificate of Distinction, Canadian Mathematics Contest

Community Service and Outreach

2013 – 2014 Social Hour Organizer, Princeton Neuroscience Institute, Princeton University

2013 – 2014 Parallel Distributed Processing Meeting Organizer,
Princeton Neuroscience Institute

2012 – 2013 Neuroscience representative on Graduate Student Government,
Princeton University

2008 – 2009 Communications Officer, Medical Students Society, McGill University

April 2009 Student Representative, “Bologna from Outside” Conference in Siegburg,
Germany: analyzed impact of Bologna educational reforms on student mobility.

January 2009 Franco-German interpreter for AiD (“Fight Against Poverty in Dialogue”)
Conference in Paris, France.

2007 – 2008 I*Create Volunteer, Montreal General Hospital: offered arts and crafts
activities to patients and families in chemotherapy waiting rooms.

Language Skills

Fluency in English, French, German and Russian

Elementary proficiency in Hebrew and Spanish