

**Isabelle Boni**  
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## EDUCATION

UNIVERSITY OF ROCHESTER  
Brain and Cognitive Sciences PhD program  
Committee: Jessica Cantlon, Steve Piantadosi, Celeste Kidd  
Rochester, NY  
Aug. 2016-present

UNIVERSITY OF BIRMINGHAM  
MSc in Computational Neuroscience and Cognitive Robotics  
Advisors: Ulrik Beierholm (primary), John Barnden (secondary)  
Birmingham, UK  
Dec. 2015

UNIVERSITY OF CHICAGO  
Degree in Biology (Neuroscience specialization) / Psychology  
Advisors: Peggy Mason, Jean Decety, Inbal Ben-Ami Bartal  
Chicago, IL  
Jun. 2012

## RESEARCH

**Concepts, Actions, and Objects Lab**, *University of Rochester*  
Research Assistant (PI: Jessica Cantlon)  
Aug. 2016-present  
- Assist in collecting non-human primate data (macaques, baboons, orangutans) related to numerical cognition & language

**Computation and Language Lab**, *University of Rochester*  
Research Assistant (PI: Steve Piantadosi)  
Aug. 2016-present  
- Learning to use Bayesian inference to model numerical cognition in non-human primates and eventually children

**Multisensory Integration Research**, *University of Birmingham / Procter & Gamble*  
Research Assistant (primary advisor: Ulrik Beierholm)  
Sep. 2014-Sep. 2015  
- Coded an experiment to test multisensory integration using Matlab Psychophysics Toolbox  
- Recruited and ran subjects, performed data analysis  
- Compiled the results into a masters thesis

**Consciousness and its Connection to Artificial Intelligence**  
Research Placement (secondary advisor: John Barnden)  
Jan. 2015-Apr. 2015  
- Conducted a literature review  
- Presented my work at an assessed poster session

**Lab Technician**, *Universidad Mayor de San Andrés, Bolivia*  
Internship (supervisor: Volga Iniguez)  
Aug. 2013-Oct. 2013  
- RNA extraction from clinical samples to diagnose Rotovirus and Norovirus infections

**Alzheimer's Research**, *University of Chicago*  
Jan. 2013-Jul. 2013

Research Assistant (supervisor: Gopal Thinakaran)

- Assisted lab members with a variety of molecular techniques including: cell culture, immunofluorescence staining, gel electrophoresis, plasmid miniprep
- performed basic lab duties (i.e. autoclaving, dishwashing, solution prep)

**Rat Empathy, University of Chicago**

Jun. 2010-Jun. 2012

Research Assistant (supervisors: Peggy Mason, Inbal Ben-Ami Bartal, Jean Decety)

- Ran trials, conducted data analysis, literature reviews, manually and automatically coded behavior, drew blood, performed ELISA assays to determine corticosterone levels
- Programs used: Geovision, Virtualdub, Ethovision, SPSS, Matlab
- Thanked in acknowledgements for paper published in Science: “Empathy and Pro-Social Behavior in Rats”

## **PUBLICATIONS**

(technical report & student journal articles)

Beierholm, U., & Boni, I. (2015). Building computational models of rapid everyday multisensory decision making with focus on laundry. *Technical Report for Procter & Gamble*.

Boni, I. (2012). Biological and Psychological Effects on Human Space Flight. *Triple Helix*. Retrieved from <http://triplehelixblog.com/2012/04/biological-and-psychological-effects-of-human-space-flight/>

Boni, I. (2011). It’s a Funny Thing: The Social Neuroscience of Humor. *Triple Helix*.

Boni, I. (2011). Hidden Obstacles in Cancer Research. *Triple Helix*. Retrieved from <http://triplehelixblog.com/2011/05/hidden-obstacles-in-cancer-research/>

## **TEACHING**

**Teaching Assistant, University of Chicago**

Core Biology Laboratory Teaching Assistant

### Classes:

Neurobiology

Jan. 2010-Mar. 2010

Neurobiology

Sep. 2011-Dec. 2011

Microbes and Immunity

Apr. 2013-Jun. 2013

Basic Biology

Apr. 2013-Jun. 2013

### Responsibilities:

- Led weekly lab sessions
- Graded weekly assignments, midterms
- Held review sessions for 4 midterms per quarter

**Grader, University of Chicago**

Apr. 2013-Jun. 2013

Nutritional Science Grader

- Graded midterms and assignments for a class of over 100 students

## AWARDS

Provost's Fellowship, University of Rochester (2016-2017)  
Santander Scholarship, University of Birmingham (2014-2015)  
Postgraduate Student Scholarship, University of Birmingham (2014-2015)  
Metcalf Fellowship (2012)  
MPA Conference Travel Award (2011)

## SKILLS

- Proficient in Matlab, MS Word, PowerPoint, Adobe Photoshop, Excel, Windows, Mac OS
- Basic knowledge of Matlab Psychophysics Toolbox, SPSS, R, Ethovision, FinalCut, Audacity, Ubuntu
- Fluent in English & Spanish, conversant in French

## SCIENCE OUTREACH

**Online Editorial Team, *Science Magazine***  
Intern

Jul. 2012-Sep. 2012

- Interviewed scientists and edited audio to compile into weekly podcasts (using SoundSoap & Audacity)

<http://www.sciencemag.org/content/337/6092/365.2.full>

<http://www.sciencemag.org/content/337/6093/488.2.full>

<http://www.sciencemag.org/content/337/6096/865.2.full>

<http://www.sciencemag.org/content/337/6097/989.2.full>

<http://www.sciencemag.org/content/337/6098/1123.2.full>

- Social media: read a new journal article every day and synthesized into an accessible summary to be posted on Facebook & Twitter

- Wrote scripts for & edited two videos:

Enhancing Productivity in Wastewater Management

<http://video.sciencemag.org/SciOriginals/1773956072001/1>

Chasing Sunlight: Cucumber Tendrils in Action

<http://video.sciencemag.org/Featured/1812936094001/1>

- Interviewed cover artist for the art director

<http://www.sciencemag.org/content/337/6095/613>