

# Yasmin Marrero-Garcia

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## EDUCATION

<b>Emory University</b> , Atlanta, GA Doctor of Philosophy, Neuroscience, Expected 2021	July 2016
<b>Brandeis University</b> , Waltham, MA Bachelor of Arts, Neuroscience, with Honors	May 2014 Cumulative GPA: 3.26/4.00
<b>Albert Einstein College of Medicine</b> , Bronx, NY Enrichment Program (EEP)	Jun 2010
<b>Saint Pius V High School</b> , Bronx, NY Regents Diploma	Jun 2010 Cumulative GPA: 95.8/100

## RESEARCH EXPERIENCE

### Oct 2014 – June 2016

**Intramural Research Traineeship Awardee Technician** -National Institute of Health/ National Institute on Drug Abuse, Baltimore, MD

**Supervisor: Geoffrey Schoenbaum, M.D, Ph.D**

**Project 1:** Examined *in vivo* electrophysiological recordings during a complex odor discrimination task to investigate the effects of prior cocaine self-administration on dopaminergic error signaling in rat ventral tegmental area.

Lead researcher: Yuji Takahashi, Ph.D

**Project 2:** Used optogenetic manipulations and behavioral scoring during a Pavlovian over-expectation task to test whether suppression of dopaminergic neuron firing in the ventral tegmental area fulfills the role of a negative prediction error in awake behaving animals.

Lead researcher: Chun Yun Chang, Ph.D

### May 2012 – 2014

**Senior Thesis** – Department of Psychology, Brandeis University, Waltham, MA

**Supervisor: Donald B. Katz, Ph.D**

**Project: Conditioned taste aversion does not require cortical mRNA synthesis.** Utilized *in vivo* pharmacological inactivation of neural structures during induction of conditioned taste aversions in rodent models to research the role of mRNA synthesis in systems necessary for taste memory consolidation.

### May 2011 – 2014

**Student Research Assistant** – Department of Psychology, Brandeis University, Waltham, MA

**Supervisor: Donald B. Katz, Ph.D**

**Project 1:** Explored brainstem function of gustatory processing in awake, freely moving rats through use of *in vivo* electrophysiological recordings.

Lead researcher: Madelyn A Baez-Santiago, Ph.D

**Project 2:** Examined electrophysiological recordings of lateral hypothalamus during simultaneous stimulation or inactivation of cortical regions involved in reward processing.

Lead researcher: Madelyn A Baez-Santiago, Ph.D

## SKILLS

*Research specific:*

- Stereotactic surgery (rat and mice)

- Intracranial implantation (infusion cannulae)
- Electrophysiological recordings
- Back-mounted intravenous catheter implantation (rat)
- Histology (tissue sectioning via microtome, tissue mounting, Nissl staining)
- Pharmacological inactivation
- Cocaine self-administration training
- Behavioral testing

*Computer:*

- Microsoft Office
- MATLAB
- Intermediate Graphic and Web-page design

*Languages:*

- English (Native)
- Spanish (Second Language)

## GRANTS/AWARDS

2016	<i>Initiative to Maximizing Student Development Fellowship</i>
2014 - 2016	<i>NIH/ NIDA Technical Intramural Research Training Award</i>
2013	<i>Brandeis/ NIDA Undergraduate Traineeship in Computational Neuroscience</i>
2012 - 2013	<i>Association for Chemosensation Diversity Travel Fellowship</i>
2012	<i>Division of Science Summer Undergraduate Research Fellowships</i>
2011	<i>Science Posse Carnegie Foundation Internship Award</i>
2010	<i>Posse Foundation Leadership Merit Scholarship</i>

## PUBLICATIONS

- Chang YC, Esber GR, **Marrero-Garcia Y**, Yau HJ, Bonci A, Schoenbaum G. (2016) Brief optogenetic inhibition of VTA dopamine neurons mimics the effects of endogenous negative prediction errors in during Pavlovian over-expectation. *Nat. Neuroscience*. **10**.1038
- Takahashi Y, Stalnaker T, **Marrero-Garcia Y**, Schoenbaum G. (2016) Effect of prior cocaine self-administration on dopaminergic error signaling in rat ventral tegmental area. *In preparation*.
- Baez-Santiago MA, Reid EE, Moran A, Maier JX, **Marrero-Garcia Y**, Katz DB. (2016) Dynamic taste responses of parabrachial pontine neurons in awake rats. *Journal of Neurophysiology*, **115**(3):1314-23.
- Wikenheiser AM, **Marrero-Garcia Y**, Schoenbaum G. (2016) Suppressing ventral hippocampal output impairs orbitofrontal encoding of response direction. *Under review*.

## PRESENTATIONS

- Marrero-Garcia Y** & Russo AA, Katz DB (2013). Conditioned taste aversion does not require cortical mRNA synthesis. Presented at the Society for Advancement of Chicanos & Native Americans in Science National Conference, San Antonio, TX, USA.
- Marrero-Garcia Y** & Russo AA, Katz DB (2013). Conditioned taste aversion does not require cortical mRNA synthesis. Presented at the Association for Chemoreception Sciences Annual Meeting, Huntington Beach, CA, USA.
- Baez- Santiago, MB, Reid E, Moran A, **Marrero-Garcia Y** and Katz DB. (2012) Taste responses of simultaneously recorded parabrachial and cortical neural ensembles in awake rats. Presented at the Society for Neuroscience annual meeting, New Orleans, LA.
- Baez- Santiago, MA, Reid E, Moran A, **Marrero-Garcia Y** and Katz DB. (2012). Taste responses of simultaneously recorded parabrachial and cortical neural ensembles in awake rats. Presented at the AChemS Annual Meeting, Huntington Beach, CA, USA.

## REFERENCES

**Geoffrey Schoenbaum, M.D., Ph.D.**

Senior Investigator & Chief, Cellular Neurobiology Research Branch, National Institute on Drug Abuse, Baltimore, MD

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Email: [Geoffrey.schoenbaum@nih.gov](mailto:Geoffrey.schoenbaum@nih.gov)

**Thomas Stalnaker, Ph.D.**

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