

# **Henna S. Jones**

## **Current Education**

**University of Pennsylvania**, Philadelphia, Pennsylvania

Neuroscience Predoctoral Graduate Student in Dr. Konrad Kording's Laboratory, Neuroscience Graduate Group, Biomedical Graduate Studies

June 2017 – Present

## **Past Employment**

**Johns Hopkins University**, Baltimore, Maryland

Laboratory Research Technician in Dr. Zachary Kaminsky's Laboratory, Department of Psychiatry and Behavioral Sciences

September 2015 – May 2017

## **Education**

**Dartmouth College**, Hanover, New Hampshire.

B.A. Neuroscience

September 2011 – June 2015

## **Research Experiences**

**Stanford University** – Howard Hughes Medical Institute Exceptional Research Opportunities Program Capstone Project – Dr. Thomas Sudhof – 2015 – “Optimization of Neuralbasal A Neuronal Cell Growth Medium”

**Dartmouth College** – Senior Honors Research Thesis – Dr. Mark Israel – 2014-2015 – “Id4 Suppresses the Expression of Other Id Genes by Antagonistically Binding to Twist1”

**Stanford University** – Stanford Summer Research Program and Howard Hughes Medical Institute Exceptional Research Opportunities Program – Dr. Thomas Sudhof – 2014 – “Investigating Mechanisms Mediating Apolipoprotein E4 Induced Synaptogenesis in Human Embryonic Stem Cell Derived Induced Neurons”

**Dartmouth College** – Presidential Scholars Program and Undergraduate Research Grant/Norris Cotton Cancer Center – Dr. Mark Israel – 2013-2014 – “Investigating the Regulation Anti-Invasive Transcription Factor Id4 in Brain Tumors”

**Dartmouth College** – Sophomore Science Scholars/Department of Psychological and Brain Sciences – Dr. Peter Tse – 2012-2013 – “Spatial progression of perceptual learning in visual feature conjunction search”

**Dartmouth College** - Women in Science Program/Institute for Quantitative Biomedical Sciences – Dr. Jason Moore – 2012 – “The Role of Gene-Gene Interactions in Determining Alzheimer's Disease”

**Johns Hopkins University** - Stanley Summer Scholars Program / Stanley Division of Developmental Neurovirology – Dr. Sarven Sabuncuyan / Dr. Robert Yolken – 2012 – “DNA Methylation in the Mitochondrial Genome”

**Johns Hopkins University** - Center Scholars Program/Stanley Division of Developmental Neurovirology - Dr. Sarven Sabuncuyan / Dr. Robert Yolken – 2011 – “Developing a Protocol Investigating mRNA Methylation Using High Throughput Sequencing”

**Johns Hopkins University** - Center Scholars Program/Mood Disorders Center – Dr. Zachary Kaminsky / Dr. James Potash – 2010-2011 – “Gene Expression and DNA Methylation of KCNQ2 and KCNQ3 in Bipolar Disorder”

## **Publications**

Zachary Kaminsky, LM Osborne, V Guglielmi, **Ilenna Jones**, (et al), “Postpartum depression biomarkers predict exacerbation of OCD symptoms during pregnancy”. **Psychiatry Research**, July 2020.

**Ilenna Jones**, Konrad Kording. “Quantifying the role of neurons for behavior is a mediation question”. **Behavioral and Brain Sciences**, November 2019.

JL Payne, LM Osborne, O Cox, J Kelly, S Meilman, **Ilenna Jones**, (et al), and Zachary Kaminsky. “DNA Methylation Biomarkers Prospectively Predict Both Antenatal and Postpartum Depression”. **Psychiatry Research**, November 2019.

Roosbeh Farhoodi, Kashayar Filom, **Ilenna Jones**, and Konrad Kording. “On functions computed on trees”. **Neural Computation**. September 2019.

Falk Lohoff, Jill Sorcher, Allison Rosen, ..., **Ilenna Jones**, ..., (et al) and Zachary Kaminsky. “Methylomic profiling and replication implicates deregulation of PCSK9 in alcohol use disorder”. **Molecular Psychiatry**. August 2017.

Zachary Kaminsky, **Ilenna Jones**, Arnold Bakker, (et al), and Jennifer Payne. “Discovery, Replication, and Application of an Epigenetic Bioarker Model to the Prediction of Postpartum Depression and Neuroimaging Endophenotypes”. **Biological Psychiatry**. May 2017.

Makena Clive, **Ilenna Jones**, Holly Wilcox, William Eaton, (et al) and Zachary Kaminsky. “Stress Vulnerability and Epigenetic Variation of a Suicide Biomarker Gene, Molecular Regulation and Neuroimaging Consequences of SKA2”. **Biological Psychiatry**. May 2017.

**Ilenna Jones**, Makena Clive, Holly Wilcox, William Eaton, (et al) and Zachary Kaminsky. “Stress vulnerability and epigenetic variation of SKA2, potential causes and consequences”. **Psychoneuroendocrinology**. September 2016.

Zachary Kaminsky, **Ilenna Jones**, Ranjana Verma, Lena Saleh, Hersh Trivedi, Jerry Guintivano, Ryan Akman, Peter Zandi, Richard S Lee and James Potash, “DNA methylation and expression of KCNQ3 in bipolar disorder”. **Bipolar Disorders**. July 2014.

## **Posters and Presentations**

“Investigating Mechanisms Mediating Apolipoprotein E4 Induced Synaptogenesis in Human Embryonic Stem Cell Derived Induced Neurons” at the Stanford Summer Research Program Research Symposium, Beckman Center For Molecular and Genetic Medicine, **Stanford School of Medicine**, California, on June 20-21, 2014

“Spatial progression of perceptual learning in visual feature conjunction search” at the Karen E. Wetterhahn Science Symposium, Class of 1978 Life Sciences Center, **Dartmouth College**, New Hampshire, on May 23, 2013

“The Role of Gene-Gene Interactions in Determining Alzheimer’s Disease” at the Karen E. Wetterhahn Science Symposium, Class of 1978 Life Sciences Center, **Dartmouth College**, New Hampshire, on May 24, 2012

## **Honors and Awards**

Awarded the **Howard Hughes Medical Institute Gilliam Fellowship Grant** – August 2020 – Fellowship for minorities in STEM with potential to be leaders in science, **University of Pennsylvania**

Awarded the **Center for Talented Youth Distinguished Alumni Award** - October 2016 - Recognition of CTY's most accomplished alumni, **Johns Hopkins University**

Awarded a **Dean of Faculty Undergraduate Research Grant** – Fall 2013 – Research Assistantship with Dr. Mark Israel on “Investigating the Regulation of Anti-Invasive Transcription Factor Id4 in Brain Tumors”, **Dartmouth College**

Selected as a **James O. Freedman Presidential Scholar** – Summer 2013 and Winter 2014 – Research Assistantship with Dr. Mark Israel on “Investigating the Regulation of Anti-Invasive Transcription Factor Id4 in Brain Tumors”, **Dartmouth College**

Selected as a **Sophomore Science Scholar** – Fall 2012 and Winter 2013 – Internship working with Dr. Peter Tse on “Influences of Brain Structure and Function on Cognitive Abilities”, **Dartmouth College**

Awarded a **Women In Science Project Internship** – Winter and Spring 2012 – Internship working with Dr. Jason Moore on “Genetic Analysis of Complex Human Diseases”, **Dartmouth College**

**Intel Science Talent Search Semifinalist** – 2011 – Society for Science and the Public - Research project "Gene Expression and DNA Methylation of KCNQ2 and KCNQ3 in Bipolar Disorder" was 1 of 300 selected in this national competition

## **Coursework**

Cajal Course in Computational Neuroscience – August 11-31<sup>st</sup>, 2019 – A hands-on summer course in the ideas, methods, and practice of modern computational neuroscience – **Chamalimaud Center for the Unknown**, Lisbon, Portugal

Deep Learning – January-May 2019 – An introductory course on Deep Learning – **University of Pennsylvania**

Theoretical and Computational Neuroscience – January-May 2018 – A course developing theoretical and computational approaches to structural and functional organization in the brain – **University of Pennsylvania**

## **Teaching**

TA for **Neuromatch Academy** – July 13-30<sup>th</sup>, 2020 – The first international computational neuroscience online summer school with over 1700 interactive students – **University of Pennsylvania**

TA for **BBB 109: Introduction to Brain and Behavior** – January-May 2020 – **University of Pennsylvania**

## **Community Activities**

Serving on the Combatting Racial Inequities Committee – July 2020 – Present – A committee formed to address diversity and inclusion issues in BGS and BPP at the Penn School of Medicine – **University of Pennsylvania**

Co-chair of the E.E. Just Seminar and Workshop Committee – July 2020 – Present – A committee to organize workshops, discussions, and seminars for Black student community in BGS as well as the BGS community – **University of Pennsylvania**

Elementary School Outreach - 2017-present - Neuroscience Graduate Group Graduate Led Initiatives and Activities, **University of Pennsylvania**

Questbridge Ambassador - 2014-2019 - Informing high-school educators and students about the Questbridge college scholarship program targeting low-income, first-generation students

Student Mentor, Treasurer, Network Liaison, and Co-Director of the Dartmouth Quest Scholars – 2011-2015 – Dartmouth Chapter of Quest Scholars Network guiding First-Generation Low-Income students, **Dartmouth College**