

# LUIS ANTONIO HADDOCK III SOTO

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## EDUCATION

**PhD Candidate, Cell and Molecular Biology** Madison, WI  
**Minor: Quantitative Biology** August 2019–Present  
**University of Wisconsin, Madison**

**M.S., Molecular Microbiology** San Juan, PR  
**Minor: Bioinformatics** 2017–2019  
**Interamerican University of Puerto Rico, Metropolitan Campus**  
GPA: 4.00

**B.Sc., Cell and Molecular Biology** San Juan, PR  
**University of Puerto Rico, Rio Piedras Campus** 2010–2016  
Major GPA: 3.55

## HONORS AND RECOGNITIONS

Genomic Sciences Training Program (Fellowship) May 2020 - Present  
Yale Ciencia Academy Fellow (NIH/NIGMS #1R25GM114000) January 2020–December 2020  
SciMed Fellowship- UW Madison August 2019 - Present  
LSAMP (PR) fellowship and Travel Awards (#1400868) August 2014 – July 2016  
2016 Faculty Graduates – Outstanding Graduate May 2016  
Dean's Honor List (Undergraduate) Spring 2016, Fall 2015,  
Spring 2015, Spring 2013  
Fall 2012

## RESEARCH EXPERIENCE

AIDS Vaccine Research Laboratories (AVRL) – UW Madison March 2020 – Present  
**Research Assistant (PhD Candidate)**  
Principal Investigator: Dr. Thomas C. Friedrich  
*Understanding the role of anatomical compartmentalization and effective population size in driving influenza A virus diversity*

Institute of Neurobiology - University of Puerto Rico, Medical Sciences Campus June 2017 – August 2019  
**Research Technician**  
Principal Investigator: Dr. Andrew M. Seeds  
*Implementing machine learning to detect behavioral responses in Drosophila using mechanical stimuli targeting different antennal sensory neuron populations*

University of Puerto Rico, Rio Piedras Campus January 2014 – July 2016  
**Undergraduate Researcher – (Biological Sciences Research Building, Julio García Díaz)** under PR-LSAMP  
Principal Investigator: Dr. Carlos I González  
*Determining the functional role of Upf2 phosphorylation in translation termination in yeast*

## SUMMER INTERNSHIPS

**HHMI - Janelia Research Campus, Dr. Marta Zlatic** Ashburn, VA  
Janelia Undergraduate Scholar Summer 2018  
*Optogenetic activation of Drosophila neuronal components to generate a Neuron-Behavior Map*

**Institute for Functional Nanomaterials** San Juan, PR  
Nanotechnology Research Internship June 2009  
*Development of nanoscale porous semiconductor films used for solar cells as energy sources in space.*

## PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science (AAAS)  
American Society for Biochemistry and Molecular Biology (ASBMB)  
American Society for Virology (ASV)  
American Society for Microbiology (ASM)  
Neuroboricuas – “Explora tu Cerebro en las San Se”, Volunteer - Institute of Neurobiology (2018 and 2019)

## SCIENTIFIC PUBLICATIONS

- Newman CM, Ramuta MD, McLaughlin MT, Wiseman RW, Karl JA, Dudley DM, Stauss MR, Maddox RJ, Weiler AM, Bliss MI, Fauser KN, **Haddock III LA**, ... Friedrich TC, O'Connor SL, O'Connor DH. Initial evaluation of a mobile SARS-CoV-2 RT-LAMP testing strategy. *medRxiv [preprint]*. 2021 Feb 27. PMID: 33655260
- Amato KM, **Haddock III LA**, Braun KM, Schaack GA, Higgins CA, Boehm EC, Barry GL, Meliopoulos V, Livingston B, Honce R, Schultz-Cherry S, Friedrich TC, Mehle A. Using barcodes for the detection and characterization of influenza A virus infection bottlenecks. [*manuscript in preparation*]
- Colón EM, **Haddock III LA**, Lasalde C, Lin Q, Ramírez-Lugo JS, González CI. Characterization of *S. cerevisiae* Upf2 mIF4G domains. [*under review at PlosOne Journal*]
- Braun KM, **Haddock III, LA**, Crooks CM, Barry GL, Lalli J, Neumann G, Watanabe T, Kawaoka Y, Friedrich T. Stochastic processes within hosts constrain adaptation of wildtype H7N9 avian influenza viruses to mammalian hosts. [*manuscript in preparation*]

## SCIENTIFIC PRESENTATIONS

### Quantifying influenza virus diversity during transmission and infection using molecular barcodes

- 2021 NHGRI Research Training and Career Development Annual Meeting [virtual poster] April 2021

### Generation of a Neuron-Behavior Map in *Drosophila Larvae*

- Janelia Research Campus JUS Presentation, Ashburn, VA [poster presentation] August 2018
- 2<sup>nd</sup> Puerto Rico *Drosophila* Neurobiology Meeting, San Juan, PR, [poster presentation] August 2018

### Determining the Functional Role of Upf2 Phosphorylation in Translation Termination in yeast.

- ASBMB Annual Meeting at Experimental Biology 2016, San Diego, CA. [poster presentation] April 2016
- 36<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting and 51<sup>st</sup> Junior Technical Meeting, University of Puerto Rico, Rio Piedras Campus [oral presentation] March 2016
- 12<sup>th</sup> Bio Sciences week at the University of Puerto Rico, Rio Piedras Campus [poster presentation] September 2015
- 35<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting and 50<sup>th</sup> Junior Technical Meeting, University of Puerto Rico, Rio Piedras Campus [oral presentation] March 2015
- 65<sup>th</sup> American Medical Student Association Annual Convention, Washington, DC [poster presentation] February 2015
- 1<sup>st</sup> American Society for Biochemistry and Molecular Biology, University of Puerto Rico, Rio Piedras Campus Meeting [poster presentation] November 2014

### Targeting the Young Scientist Community through their Interest in Biochemistry and Molecular Biology

- 2016 ASBMB Annual Meeting at Experimental Biology 2016, San Diego, CA. April 2016 [poster presentation]

## SKILLS

**Software:** Proficient in Python, command line and R (Studio); Proficiency on Microsoft Office programs (Excel, Word, Power Point,) and Adobe (Photoshop and Illustrator); Basic MATLAB programming; Bioinformatics tools (MEGA, CLustalW, MAFFT, TCOFFEE, BEAST, among others).

**Languages:** Fully bilingual in Spanish and English; Basic Spanish ASL

## TUTORING AND TEACHING EXPERIENCE

Institute of Neurobiology – University of Puerto Rico, Medical Sciences Campus

- **Science Outreach for pre-college students**

August 2017 – June 2019

University of Puerto Rico, Rio Piedras Campus

- **Molecular Genetics Tutor**, (BIOL 5398)
- **Biochemistry Tutor**, (BIOL 4545)

January 2016 – May 2016

January 2015 – December 2015

REFERENCES

**Dr. Thomas C Friedrich**

Associate Professor  
Dept. of Pathobiological  
Sciences  
School of Veterinary  
Medicine  
UW-Madison  
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**Dr. Andrew M. Seeds**

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