

# ***Ryan D'Onofrio***

571-315-8940

[rsd@vt.edu](mailto:rsd@vt.edu)

1707 Autumn Splendor Way  
Blacksburg, VA 24060

## **Education**

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**University of California, Santa Barbara**  
• PhD Dynamical Neuroscience

*Fall 2021 - Present*

**Virginia Polytechnic Institute & State University**  
• BS Clinical Neuroscience  
• Cumulative GPA: 3.64  
• In-Major GPA : 3.85

*Graduated: May 2021*

## **Research Experience**

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**Graduate Student Researcher**  
University of California, Santa Barbara  
Santa Barbara, CA

*Fall 2021 - Present*

- Dr. Craig Montell
  - Uncovering the role of sensory integration and impact on decision making in *Drosophila melanogaster* and *Aedes aegypti*

**Undergraduate Research Assistant**  
Virginia Tech - Corporate Research Center  
Blacksburg, VA

*Winter 2018- Spring 2021*

- Dr. Mike Bowers' Lab
  - Projects:
    - Foxp2 and sex specific transcriptional targets related to speech and communicative disorders
    - Developmental impact of Foxp3 regulation of the neuroimmune system
    - <http://bowerslab.wixsite.com/bowerslab/meet-the-team>

## **Teaching Experience**

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**Undergraduate Teaching Assistant**  
Virginia Tech - School of Neuroscience  
Blacksburg, VA

*Spring 2019-Present*

- Introduction to Neuroscience II Laboratory (NEUR 2036)

## **Campus Involvement & Work Experience**

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**Hokie Ambassador Executive Board**  
Virginia Tech - Undergraduate Admissions  
• Director of Training led 60 students

*Fall 2020 - Present*

- Give weekly tours

### **Nu Rho Psi Honors Society Executive Board**

Virginia Tech – School of Neuroscience

- Treasurer

*Spring 2019 – Present*

### **Founder of MagicMirrorUS**

Blacksburg, VA

- Started own business building Smart Mirrors
- Over 100 Units shipped internationally
- \$75,000 in revenue

*Spring 2017 – Present*

### **College of Neuroscience Ambassador**

Virginia Tech – School of Neuroscience

*Fall 2019 – Present*

### **Summer Undergraduate Research Fellowship**

Virginia Tech – School of Neuroscience

*Cancelled due to COVID-19*

### **Volunteers Around the World**

Cusco, Peru

*Summer 2019*

### **Volunteers Neuroscience Club**

Virginia Tech – School of Neuroscience

*Fall 2018-Present*

### **Techniques & Skills**

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- Expert in Deepsqueak
- Basic Python Programming Language
- Basic R Programming language
- Use of the shell and command line programs
- Knowledge of Raspberry Pi microcomputers
- Elementary usage of Linux OS and JavaScript
- Experience working with Boris and Sonotrack
- Brain extraction and partition from *Rattus norvegicus*
- Animal handling
- Bradford Assay
- Western Blot
- Ultrasonic vocalization analysis

## Publications

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### *In Prep:*

**D’Onofrio, R.,** Taylor, M., Ezenwa, K.C., Eiden, H., Ingram, S., Gammons, L., Taylor, M., Taylor, T. & Bowers, J.M. (in prep). Early life social isolation influences rat ultrasonic vocalization during social encounters. (submitting to Neuroscience).

Taylor, M., **D’Onofrio, R.,** Roby, C., Taylor, T., Ingram, S., & Bowers, J.M. (in prep). Sex hormones increase endogenous Gnptab levels in neonatal rats that have the stuttering mutation. (submitting to eNeuro)

Taylor, M., Mustian, J., Roby, C., Taylor, T., Hartle, A., Buhler, C., **D’Onofrio, R.,** & Bowers, J.M. (in prep). Mutating Gnptab in neonatal rats results in stuttering characteristics found in humans and mice. (submitting to Scientific Reports)

## Awards & Honors

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**Frsalin Undergraduate Research Fellowship Scholar** *Fall 2019 - Spring 2020*

**Nu Rho Psi - National Neuroscience Honor Society** *Spring 2020 - Spring 2021*

**College of Science Dean’s List** *Spring 2019 - Spring 2021*

## Presentations

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“A stuttering associated mutation in the gene Gnptab alters rat pup ultrasonic vocalizations”  
National Conference of Undergraduate Research, Bozeman, Montana. Spring 2020

“Modification of Gnptab on rat pup ultrasonic vocalizations”  
Denis Dean Undergraduate Research Conference, Blacksburg, VA. Spring 2020 (cancelled due to COVID-19)