

Purbasha Rahman

561-284-3907 | pxr347@miami.edu

Education:

University: University of Miami Miami, FL/US
Bachelor of Science in Microbiology and Immunology
Bachelor of Arts in Gender and Sexualities Studies Class of 2021

Honors: Presidential Scholarship, Florida Academic Scholars Designation, Bright Futures Medallion Scholar, Bayuk Arts and Science Scholarship

High School: Suncoast High School Riviera Beach, FL/US
International Baccalaureate Degree Class of 2017
Top 10% of graduating class

Research Experience

Undergrad. **Research Assistant, Dr. Norenberg's Neuropathology lab at Miami VA Hospital** 2018-2019
Conducted experiments to investigate cellular mechanisms involved in brain cell degeneration and explore ammonia- and trauma-induced effects on astrocytes with Dr. AR Jayakumar.
Skills include inducing trauma, cell treatment, animal dissection, cell lysis, cell collection

Undergrad. **Academic Year Research Intern, Scripps Research Institute AYRIU program** 2019-2020
Examined the effects of serotonin on gene expression of learning in neurons of Aplysia Californica; paid full-time research 40 hours/week

Undergrad. **Clinical Researcher, Dr. Bandstra's Neonatology lab at Jackson Memorial Hospital** 2019

Undergrad. **Undergrad. Teaching Assistant in Howard Hughes Medical Institute Integrated Lab** 2018-2019
Worked with professor Dr. Sarkar to teach biology/chemistry experimental procedures and allow for students to gain laboratory skills necessary for authentic research in a wet lab.

11, 12 **Kenan Fellow Intern at The Scripps Research Institute, Dr. Puthanveetil lab** 2016-2017
Studied the effects of neurotransmitters FMRFamide on the neurons of Aplysia Californica, revealing a decrease in alpha tubulin and long-term depression.
Paid full-time internship 40 hours/week, learning Aplysia dissections, western blots, pipetting, gel electrophoresis, and bacterial plating.

Publications

Title: Additive Effect of Resveratrol on Astrocyte Swelling Post-exposure to Ammonia, Ischemia and Trauma In Vitro
Journal: Neurochemical Research; Manuscript ID: NERE-D-19-00224R2

In Submission **Title: Astrocytes: Morphological and Functional Consideration in Neurological Disorders**
Journal: Reviews in the Neurosciences; Manuscript ID: (RNS.2019.0038)

Activities

Undergrad. **Dance Teacher, Natyadeeksha Dance Academy** 2014-Present
Teaching young girls formal education of Classical Indian Bharatanatyam dance and choreograph dances for cultural shows

Undergrad. **Junior/& Vice President, Beta Beta Beta Biological Honors Society** 2018-Present
Lead officer and member meetings; Organize informational meetings for members regarding research and guest speakers

Undergrad. **VITAS Hospice Volunteer** 2019-Present
Provide care and comfort to hospice patients at VITAS inpatient hospice unit at University of Miami

Undergrad. **Camp CAMP for Children & Adults with Disabilities** 2019
Volunteered 120+ hours as full-time counselor/caretaker for individuals with severe disabilities with University of Miami's Alternative Breaks trip

- Undergrad. **Co-founder/Treasurer, UMiami Abhinaya Dance Club** **2018-2019**
Founded a club to promote the art of Classical Indian Dance, including Bharatanatyam, Kathak, and Kuchipudi; Perform at events around campus; Teach dance to younger girls in the local Miami area
- 11, 12 **Vice President, Suncoast Student Ambassadors** **2016-2017**
Designed and executed school-wide activities to promote anti-bullying and create a healthy, safe environment for all students; Led officer and member meetings

Shadowing Experience

- Undergrad. **Pediatric Immunology Shadowing (50 Hours)**
Observed the patient care of Dr. Kleiner and Dr. Padron at Lennar Medical Center
- Undergrad. **Hospice & Palliative Care Shadowing (50 hours)**
Observed patient care and attended rounds with hospice specialists at Trustbridge Hospice
- Undergrad. **Medicine and Neuromedicine International Shadowing (60 Hours)**
Attended follow up's and rounds with physicians and interns at the Holy Family Red Crescent Medical College Hospital in Dhaka, Bangladesh

Honor and Awards:

- Undergrad. **Beta Beta Beta Biological Honor Society**
An honor society dedicated to improving the understanding and appreciation of biological study and extending boundaries of human knowledge through scientific research
- Undergrad. **Bharatanatyam Arangetram Graduation Certification**
An Arangetram is the "ascendance to the stage" by a dancer on the completion of their formal dance education and certifies them to teach their own class