Michael Burgess

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<u>Goal</u>: My goal is to use my education to conduct data collection and analysis that will add significantly to the biological and ecological fields. I hope to gain experience both in the field and laboratory setting to gain a broader understanding of how to best utilize the natural world around me to broaden my understanding of the field of Biology, however, I would like my career to be predominantly field based. I would eventually like to become a Doctor of Philosophy in Marine Biology/Ecology, so that I may inspire the next generation to pursue a career in the mysterious blue body that occupies the vast majority of our planet.

Education:

Branford High School, Branford, CT – 06/17/2015

B.S., University of Rhode Island, Major in Marine Biology(05/18/2019), Overall GPA 3.59/4.00. Graduated Magna Cum Laude

Relevant Course Work in Major: Evolution and Diversity of Fish, Introduction to Ecological Statistics, Bermuda Marine Biodiversity, Community Ecology, Introductory Ecology, Marine Ecology, Invertebrate Zoology

Directed Research: "Deep-Sea Sharks" (mentored by Professor Wetherbee, Fall 2019)

Directed Research: "Calculating the Nutritional Needs of North Atlantic Sharks using the Caloric Density of Recorded Prey Items" (mentored by Professor Wetherbee, Spring 2019)

Directed Research: "Quantifying the Population Composition of Stingrays in the Popular Tourist Attraction 'Stingray City' in the Cayman Islands" (mentored by Professor Wetherbee, Spring 2019)

Undergraduate Teaching Assistant: Developmental Psychology (Professor Kathleen Webster) Bermuda Institute for Ocean Sciences(BIOS), Bermuda, Spring Break 2019 (GPA: 3.70)

Course Work: Marine Biodiversity of Bermuda

Research Project: Investigating the Potential Impact of Macroalgae Cover on the Presence of Common Coral Groups on the Different Reef Sites of Bermuda (Mentored by: Dr. Chris Lane)

Work Experience:

07/2015-08/2019 Dockhand, Bruce and Johnson's Marina, Branford, CT (40 hrs/wk)

Assisted with the docking of vessels, Performed yard work to maintain the marina. Worked as secretary once a week.

11/2013-09/2014 Part-time Worker, Cyberchrome, Branford, CT (8-16 hrs/wk)

Assembled magazines/pamphlets in an assembly line setting.

10/2015-05/2017 Student Ambassador, URI Phonathon Program, Kingston, RI (5.5 hrs/wk)

Contacted alumni and current students of the University of Rhode Island to request donations to fund various facets of the university.

11/2018-05/2019 Tutor, Academic Enhancement Center, Kingston, RI (6-10 hrs/wk)

Worked in a drop in center to provide assistance to peers who are struggling with subject material. Worked in weekly groups to provide assistance to students in a structured environment.

08/2019-Present Postgraduate Research Associate, Yale University, New Haven, CT (40 hrs/wk)

Focused mainly on studying the molecular development of vertebrae in zebrafish embryos. I was trained extensively in zebrafish husbandry, as well as foundational molecular techniques such as PCR Analysis, Microinjection, DNA transformation into bacteria, In Situ RNA stains, as well as general lab maintenance jobs.

Publications:

Submitted Manuscript: Targeted Degradation of Transcription Factors by TRAFTACs: TRAnscription Factor Targeting Chimeras. Kusal T. G. Samarasinghe1, Saul Jaime-Figueroa1, **Michael Burgess1**, Katherine Dai1, Zhenyi Hu1, Adrian Bebenek, Scott A. Holley1 and Craig M. Crews

Awards, Honors and Fellowships:

High School:

AP Biology Award, 06/17/2015 – Branford High School; Awarded to most outstanding student in AP Biology

CAPT Scholar, 06/17/2015 – Given for an outstanding score on the CAPT exam National Honor Society: Recognition for achieving a 3.8 gpa for the first 2 ½ years of high school.

College:

Centennial Scholarship, 09/15-05/19 – University of Rhode Island; Received for outstanding academic accomplishment

Dean's List: Awarded for 6 consecutive semesters

Alpha Award for Research Recipient, 05/01/2019 - Nominated for the research that I was responsible for under the guidance of Dr. Bradley Wetherbee

Leadership Roles and Extracurricular Activities

Branford High School

Varsity Football Team(2012-2015) Model Congress(2012-2014) Maritime Aquarium Volunteer(2012-2014)

University of Rhode Island (2015-Pres.)

The Ocean Notion (2016-2018) Intern (2016-2017) Director of Fundraising(2017-2018) Intramural Football(2015-2016)

Licenses, Certifications, etc.

Open Water SCUBA (2018) Recreational Boaters License (2012) Class D Driver's License (2014)

Other Skills

Computer - Google Drive(Sheets, Docs, Slides)

Microsoft Excel - Spent over 9 hours per week analyzing data using excel under the direction of Dr. Wetherbee

Microsoft Word: Highly experienced in producing documents in various different formats using the Microsoft Word program

Microsoft Powerpoint: Have represented data for a variety of different studies in the format of the powerpoint; This included the presentation of data from the Marine Biodiversity of Bermuda Trip.

Excellent Organizational Skills

Experience in Statistical Analysis: Statistics 308, Use of excel to determine statistical significance; Statistics 263x, Use of excel to analyze ecological data

Lab Experience -- Pipetting, microscopes, sample testing, species identification, examination of development in vertebrate fishes, synthesis of chemical compounds, Identification of species based on morphological features.

Experience using Rstudio to perform statistical analysis given a variety of different datasets

Interpersonal Communication

Experience directing small scale fundraising projects(The Ocean Notion)