**CURRICULUM VITAE**

Christopher J. Gonzalez May 4, 2021

PhD Student and Teaching Assistant

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**EDUCATION**

Degree Year Institution Area of Interest

Ph.D. Current University of New Hampshire Molecular & Evolutionary Systems Biology

M.S. 2018 Plymouth State University Biology

B.S. 2014 Plymouth State University *Magna Cum Laude* in Biology

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**WORK EXPERIENCE**

Graduate Teaching Assistant (Sept. 2019-Current)

Teaching Lecturer (Sept.-Dec. 2016, 2018) — Instruct lab sections for PSU’s introductory biology course. Provide instructional information and guidance to students in and outside of lab, grade students’ lab handouts and reports, and help the professor proctor course exams.

Teaching Lecturer (Feb.-May 2018) — Instruct the non-science major “Cells, Genes, & Biotechnology” general education biology course at Plymouth State University. Content includes the scientific method, the nature of evidence, fundamentals in chemistry, cell cycle, and genetics, and select advanced topics of interest, including cancer biology, genetic modification, and regenerative medicine. Labs, presentations, and in class exercises are used to provide hands-on understanding of course material.

Graduate Assistant / Lab Instructor (Sept. 2014-June 2016) — Instruct students in PSU’s non-major introductory biology and major upper-level evolution and developmental biology courses, respectively. Instruct lab sections or assist the professor and students as needed. Provide exam review sessions and instruction in lab techniques for student research projects. Provide feedback and grades for student lab reports and independent research data.

Undergraduate Lab Assistant (Sept. 2013-May 2014) — Instruct students in PSU’s non-major introductory biology and major upper-level evolution and developmental biology courses, respectively. Assist lab instructors and students via scientific knowledge and communication skills. Provide exam review sessions and instruction in lab techniques.

Student Researcher (Summer 2012-2018) — Design an integrative evo-devo research program emphasizing body patterning and appendage development in mayflies. Take detailed images of embryonic and nymphal development. Develop step-by-step protocols for artificial fertilization, egg and hatchling care, nymphal washing and fixing, immunohistochemistry, RNA extractions, in situ hybridization, and RNAi.

Student Services Tutor (Sept. 2012-May 2014) — Subject-area tutor in Biological and Political Sciences, explicit emphasis on developing independent learning in tutees. CRLA-certified Study Skills tutor, assisted students with course scheduling, organization, and time management.

**SKILLS**

Animal Husbandry — Field observation and collection, artificial fertilization, captive rearing and maintenance.

Microscopy — Dissection, Microtome use, specimen mounting, bright-field and fluorescent imaging, image editing

Molecular Biology — Sample fixation, immunohistochemistry, in situ hybridization, RNA extraction, DNA

extraction, polymerase chain reaction, gel electrophoresis, plasmid ligation, E.coli transformation

Bioinformatics — Transcriptome assembly, multiple-sequence alignments, GO-term annotation, sequence annotation, domain / motif identification, algorithmic and tree-searching phylogenetics

Proficient with — Mac OSX, CLC Genomic Workbench, Blast2Go, ImageJ, Leica Aquire 1.0, Q Capture Plus

Familiar with — Mesquite, Microsoft Excel

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**RESEARCH INTERESTS**

Evo-devo, body patterning and appendage development, integrative biology, bioinformatics, gene expression and function

**PUBLICATIONS**

Mincarone, M. M., Plachetzki, D., McCord, C. L., Winegard, T. M., Fernholm, B., Gonzalez, C. J., & Fudge, D. S. (2021). Review of the hagfishes (Myxinidae) from the Galapagos Islands, with descriptions of four new species and their phylogenetic relationships. *Zoological Journal of the Linnean Society*.

**MANUSCRIPTS IN PREPARATION**

Identification of Developmental Genes in the Transcriptome of *Hexagenia limbata*

**PRESENTATIONS**

“Development of Abdominal-A In Situ Hybridization and RNAi in the Mayfly Hexagenia limbata.” Christopher J. Gonzalez and Dr. Brigid C. O’Donnell. Graduate Research Symposium; Plymouth State University, Plymouth NH., 2015.

“Identification of Segmentation, Hox, and Appendage-patterning Genes in the Mayfly *Hexagenia limbata.*” Christopher J. Gonzalez and Dr. Brigid C. O’Donnell. Showcase of Excellence; Plymouth State University, Plymouth NH., 2015.

“Expression of the Hox Genes Antennapedia, Ultrabithorax, and Abdominal-A in the Mayfly *Hexagenia limbata*.” Christopher J. Gonzalez and Brigid C. O’Donnell. Fourth Annual NH-INBRE Conference, Whitefield NH, 2014; Graduate Research Symposium, Plymouth NH., 2014.

“Morphological Development of Gnathal and Abdominal Appendages in the Mayfly *Hexagenia limbata*.” Gonzalez, C.J. and O’Donnell, B.C. Showcase of Excellence; Plymouth State University, Plymouth NH., 2014.

“Transcriptomic Identification of Putative Circadian Clock Genes in the American Lobster, *Homarus americanus.*” Gonzalez C.J., E.G. Johnson, C.A. Wilk, and CC Chabot. Showcase of Excellence; Plymouth State University, Plymouth NH., 2014.

**FUNDED GRANTS**

EDEN Research Exchange Grant, 2015

Sigma Xi Grants-in-Aid of Research, 2015 ($1,000)

PSU Student Research Advisory Council Student Research Grant, 2014 ($2,000)

NH-INBRE Summer Research Fellowship: 2013, 2014 ($4,500)

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**PEER REVIEW SERVICE**

Biological Chemistry (March 2021)

**SERVICE TO DEPARTMENT/UNIVERSITY**

Showcase of Excellence Planning Committee (2016)

Academic Integrity Panel Student Representative, 2013 (nine hearings)

PSU Science Society Secretary, Vice-president, President; 2012-2016

**OUTREACH**

STEM Mentorship 20% Project, Plymouth Elementary School, Plymouth NH, 2015

**PROFESSIONAL DEVELOPMENT ACTIVITIES**

PSU Center for Excellence in Teaching and Learning:

Summer Symposium / University Days 2015, 2016, & 2018

Your Students & the Showcase of Excellence!, Mar. 2015

Engaging adult learners: From Pedagogy to Andragogy, Nov. 2014

Tips and Tricks to Facilitate Class Participation, Oct. 2014

**HONORS AND AWARDS**

President’s List: Fall 2010, Spring 2011, Spring 2012, Spring 2014

Dean’s List: Fall 2012, Spring 2013

Geneva Smith Memorial Scholarship, Plymouth State University, 2012