**Carolyn R. Stewart**

4 Jason Lane  •  Clifton Park, NY 12065  •  (518) 817-7098  •  carolynrstewart@gmail.com

**EDUCATION**

**Princeton University**, Princeton, NJ     June, 2016

A.B. in Molecular Biology (Cumulative GPA: 3.52)

Certificate in Applications of Computing

* Relevant classes include Genetics, Biochemistry, Core Molecular Biology Lab, Bioinformatics, Data Structures and Algorithms, Advanced Programming Techniques, Linear Algebra
* Senior Thesis and Junior Independent Research: The Characterization of the Synthesis of Eicosanoyl-5-Hydroxytryptamide

**PROGRAMMING SKILLS**

* Languages: Java, C, Python, R (proficient), JavaScript, HTML (prior experience)
* Familiar with Git, Linux/Unix, Ember, Django, relational and non-relational databases

**RELEVANT EXPERIENCE**

**Software Developer Intern,**The Center for Open Science, Charlottesville, VA Summer 2016

* Building web service to meet federal mandate, allowing electronic submission of published research to government agency databases, using Ember and Django

**Senior Thesis Research**, Jeffry Stock Laboratory,          Summer 2015 – Spring 2016

Princeton University

* Worked to characterize activity of a novel enzyme important for brain health, providing a potential therapeutic target in the prevention of neurodegenerative disease
* Created protein extracts from a variety of animal tissues
* Used high-performance liquid chromatography to detect target enzyme activity
* Used BLAST and PROSITE to search for homologs in mammalian proteomes
* Used PyMOL to model known homologous structures

**Final Bioinformatics Project,**Princeton University        Fall 2015

* Collaborated with three other students to determine whether non-random eukaryotic gene order is driven by need for low recombination rates in essential genes
* Used R to recreate the bioinformatic analysis of a 2000 Nature Genetics paper

**Undergraduate Researcher**, Celeste Nelson Laboratory, Summer 2014

Princeton University

* Worked on bioengineering project aimed at understanding lung development using chicken embryos as a model, in order to eventually develop synthetic human lung tissue
* Extracted embryonic chick and quail lungs; performed immunohistochemical staining; imaged with confocal microscopy; analyzed with GIMP

**LEADERSHIP**

**Artistic Director, Expressions Dance Company**                  December 2013-December 2015

Princeton University

* Oversaw all artistic matters for the dance company, including choreography, casting, costuming, scheduling, and member conflicts and absences
* Led all full-company rehearsals of 30 dancers
* Managed other seven company officers