Courtney J. Charlesworth

Email – courtneyjcharlesworth@gmail.com
GitHub – https://github.com/cjcharlesworth
Website – https://cjcharlesworth.github.io/

EDUCATION:

Rowan University, Glassboro, NJ   **May 30, 2022**
B.S. in Biological Sciences, Minor in Chemistry – Summa Cum Laude, 3.854 GPA

RESEARCH EXPERIENCE:

Spielman Lab Research Assistant, Rowan University   **Spring 2022**
Advisor: Stephanie J. Spielman, Ph.D.
- Built a Shiny application using the R programming language to interactively explore results from a study evaluating the performance of empirical protein models in phylogenetic branch length estimation
- Included features such as radiobuttons, dropdown menus, and tables and plots that change based on user input
- Employed reproducible research practices, including using GitHub for version control: https://github.com/cjcharlesworth/aa_models_bl

WORK EXPERIENCE:

Peer Tutor   **Fall 2021 - Spring 2022**
Tutoring Center, Rowan University
Tutored fellow undergraduate students in courses: Evolution, Biostatistics, Genetics, Cellular Biology, Ecology
- Addressed student concerns with challenging material while adapting to each individual's learning style
- Supported students by acting as a peer and mentor, also assisting with non-academic concerns such as personal issues and recommended courses to take
- Treated all students equally with respect, kindness, and empathy
- Managed personal scheduling and appointments

Student Worker   **Spring 2019 - Spring 2022**
Office of the Registrar, Rowan University
- Answered student inquiries and assisted students with the graduation application process
- Communicated with students on the process to lift holds in order to receive their diploma for mail or Office pick up
- Inventoried and categorized all diplomas at the Office and communicated consistent updates to better support the remotely-worked Graduation Team during COVID-19
- Oversaw the recordkeeping and organization of confidential student information and documents (transcripts, Change of Grade forms, Enrollment Verifications, etc.) according to FERPA
- Trained incoming student workers to perform office duties and trained staff to use the enterprise "Onbase" software for recordkeeping, scanning, and copying transcripts

TECHNICAL SKILLS:

- Statistical analyses in JMP and R/RStudio including ANOVA, linear regression, t-tests, confidence interval, and chi-square
- Ellucian Banner ERP System and Hyland Unity Client (OnBase)
- Laboratory skills:
  - Microbial plating (*B. subtilis* and *E. coli*) and mammalian cell culture techniques (3T3 fibroblasts) using aseptic technique

- Experience with gel electrophoresis, western blot, PCR, Bradford assay, indirect ELISA assay, live/dead assay, alamarBlue assay, gram staining, cryopreservation and thawing of mammalian cells
    - Experience with titrations (acid-base, iodometric, and potentiometric) and visible absorption spectrophotometry
    - Microscopy (inverted and fluorescence), micropipetting, pipette controllers
- Computational skills:
    - R programming, visualization, data analysis with the "tidyverse"
    - R Shiny application development
    - Version control with git and github.com
    - Experience working in UNIX environments
- CITI Program certified in General Biological Laboratory, General Laboratory Safety Training, and Hazardous Biological Materials and Human Samples Laboratory