

JOSEPH WALEWSKI

jwalewski@conncoll.edu • 203-209-0657 • linkedin.com/in/josephwalewski

EDUCATION

CONNECTICUT COLLEGE New London, CT Bachelor of Arts Received May 2023
Double Major: Biochemistry, Cellular & Molecular Biology; Computer Science Cumulative GPA: 3.7
Honors/Awards: Academic Distinction (Biochemistry), Research Honors (Computer Science), Science GPA: 3.8
Susan Warren First Year Biology Prize, Senior Computer Science Award, Merit Scholar
Language Skills: Spanish (C1 CEFR)
Relevant Courses: Cells and Molecules Discrete Math
Molecular Cell Biology Introduction to Computer Science
Human Physiology Data Structures
Molecular Development Algorithms
Advanced General & Organic Chemistry Theory of Computation
Biochemistry Computer Organization
Medicinal Chemistry Databases
Physics Bioinformatics

Honors Research: A Computational Analysis of Hybrid Genome Assemblies

PHILLIPS EXETER ACADEMY Exeter, NH High School Diploma Received June 2019
Publications: Kockel L, Griffin C, Ahmed Y, Fidelak L, ... **Walewski JJ**, Simon B, Zu SJ, Miller GP, Fitzpatrick KB, Lantz N, Fox E, Collette J, Kurtz R, Duncan C, Palmer R, Rotondo C, Janicki E, Chisholm T, Rankin A, Park S, Kim SK. An Interscholastic Network To Generate LexA Enhancer Trap Lines in *Drosophila*. *G3 (Bethesda)*. 2019 Jul 9;9(7):2097-2106. doi: 10.1534/g3.119.400105. PMID: 31040111; PMCID: PMC6643891.
Advanced Courses: Biology (AP Series; Research Science) Spanish

LAB TECHNIQUES

Solubility Tests · Titration · Buffers · Acid & Base Solutions · Chromatography · Gel Electrophoresis
Transformation · Fly Dissection · Immunofluorescence Staining · PCR · qPCR · Inverse PCR · PBMC Isolation
Brain Tumor Dissection & Flash Freezing · DNA Isolation · RNA Isolation

PROGRAMMING/COMPUTATIONAL SKILLS

Languages: Python (pandas, Scanpy, NumPy, anndata) · R (Seurat) · Java · C/C++ · Make · Shell (Bash)
HTML/CSS/Javascript · MATLAB/Octave · JVM Instruction Set
Software: LaTeX · VSCode · Eclipse · Git · Microsoft Office
Theoretical Techniques: Genome Assembly & Alignment · sc-RNAseq analysis · RNA Velocity · Website Development

RELEVANT EXPERIENCE

Hafler Lab, Department of Neurology at Yale Medical School, New Haven, CT July 2023 - Present
PostBaccalaureate Researcher

- Introduce the lab to RNA Velocity, a technique to measure cellular transcription dynamics
- Analyze and curate data for the lab
- Collaborate with software authors across the world and suggest edits to widely used programs
- Coordinate with clinicians on consenting patients for neurology research
- Perform Peripheral Blood Mononucleated Cell (PBMC) isolation and brain tumor dissection & flash freezing for the ARCUS TIGIT trial

Publications: Hafler D, Lu B, Lucca L, Lewis W, Wang J, Nogueira C, Heer S, Axisa PP, Buitrago-Pocasangre N, Pham G, Kojima M, Wei W, Aizenbud L, Bacchiocchi A, Zhang L, **Walewski J**, Chiang V, Olino K, Clune J, Halaban R, Kluger Y, Coyle A, Kisielow J, Obermair FJ, Kluger H. Circulating Tumor Reactive KIR+CD8+ T cells Suppress Anti-Tumor Immunity in Patients with Melanoma. *Res Sq [Preprint accepted Nat. Immunolgy]*. 2024 Feb 28;rs.3.rs-3956671. doi: 10.21203/rs.3.rs-3956671/v1. PMID: 38464315; PMCID: PMC10925449.

RELEVANT EXPERIENCE cont'd

Aquatic Models of Human Disease Conference, UChicago Marine Biological Laboratory, Woods Hole, MA Fall 2022

- Student Presenter*
- Presented three year's worth of award winning (best student poster) work at the cutting edge of genome science to world wide community of biologists studying aquatic models of human disease
 - Applied to conference and submitted 500 word abstract summarizing my undergraduate research
 - Communicated Computational techniques to a biology-focused audience

Shadowing Yale Neurology Yale School of Medicine, Fairfield, CT Summer 2022

- Pre-Med Student*
- Shadowed multiple Yale neurologists in an outpatient setting
 - Interacted with a socially, economically, and medically diverse patient population
 - Developed note-keeping system in order to track patients throughout the summer
 - 80 + clinical hours

Yale Health Hospital Volunteer, New London & Bridgeport, CT Fall 2021 - Summer 2022

- Patient Transporter*
- Transported patients within L&M hospital, to and from departments, procedures, discharge
 - Volunteered for med surg floor at Bridgeport Hospital
 - Interacted with a socially, economically, and medically diverse patient population
 - 150 + clinical hours

Summer Science Research Institute (SSRI), Connecticut College Summer 2020 - Summer 2022

- Student Researcher*
- Proposed interdisciplinary research and competitively selected to receive \$6500 in funding awards
 - Conducted literature review for background understanding of genome assembly
 - Designed and built a computer to handle the computational workload
 - Designed and built software to automate the process of genome assembly and analysis
 - Analyzed data and summarized findings to create final poster presentation
 - Presented research to SSRI students and faculty and awarded best student poster

EXTRACURRICULAR EXPERIENCE

Men's Track and Men's Cross Country Teams, Connecticut College Fall 2019 - Spring 2023

- Athlete*
- Qualified to be on the 2022 NCAA division III cross country nationals roster, the first team to represent the college in 20 years
 - Individually qualified for the New England Intercollegiate Amateurs Athletic Association (NEICAAA) meet, an interdivisional track championship event in spring 2022 and spring 2023
 - Competed alongside dozens of teammates and participated in a myriad of team-building exercises
 - NESCAC All-Academic award recipient all possible terms (awarded after fall 2019)

WORK EXPERIENCE

Slovenski Camps, Raymond, ME Summer 2018

- Camp Counselor/
Running Coach*
- Was responsible for day and night supervision of a group of 11-12 year olds
 - Oversaw training and provided one on one mentorship to middle school runners
 - Participated in many team building exercises for campers and counselors

Town of Fairfield Beach, Fairfield, CT Summer 2017

- Lifeguard*
- Obtained CPR and oceanfront lifeguard certification
 - Interacted with patrons in a casual but professional demeanor

LEADERSHIP EXPERIENCE

Outing Club, Co-Head, Phillips Exeter Academy Fall 2017 - Spring 2019

Student Council, Dorm Representative, Phillips Exeter Academy Spring 2016 - Spring 2019