

SAMUEL MEYER FRIEDMAN

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EDUCATION

RUTGERS UNIVERSITY, School of Arts and Sciences Honors Program **New Brunswick, NJ**
BACHELOR OF ARTS IN GENETICS, Certificate in Computational Genetics, *Summa Cum Laude* **May 2021**
- Awards: Henry Rutgers Scholar Award, Department of Genetics Award for Excellence in a Research Presentation
- Societies: Phi Beta Kappa, Paul Robeson Scholar, Rutgers Honors Program Student Advisory Board
- Courses: Java, Data Structures, Bioinformatics (Python), Comp. Genetics (R)

PROFESSIONAL EXPERIENCE

HUMAN GENETICS INSTITUTE OF NEW JERSEY **Piscataway, NJ**
Curation Assistant, National Institute of Mental Health Repository & Genomics Resource (NRGR) **Jun 2021-Present**
- Use Python (Pandas) to curate, harmonize, and validate terabytes of data in a multimillion-dollar genetics repository.
- Build pipelines to scrape XML data from sister repositories and construct ID mapping files using Python.
- Develop Python scripts to corroborate that genetic profiles of 50K+ biosamples match IDs from clinical interviews.
- Assess sample risk burden for manifestation of psychosis by computing polygenic risk scores using R and Python.
- Digitize and index dozens of documents containing confidential information using optical character recognition.

Research Assistant to Linda Brzustowicz, M.D., Distinguished Professor/NRGR Director **Sep 2018-May 2021**
- Independent Honors Thesis: identified gene associated with increased risk for manifestation of Bipolar Disorder.
- Developed Python scripts that added additional checks to the quality control process for new NRGR data submissions.

Aresty Summer Science Fellow to Amrik Sahota, Ph.D., Research Professor **Jun 2018-Aug 2018**
- Began the pre-clinical trial for a novel therapeutic oral treatment for Cystinuria, a debilitating genetic disorder.
- Assessed drug for cardiac, renal, and hepatic toxicity on mice as a model for its metabolic activity in humans using the following methods: PCR, gel-electrophoresis, enzyme-linked immunosorbent assays, spectrophotometry, and Excel.

TENAFLY PSYCHIATRIC ASSOCIATES **Tenafly, NJ**
Administrative Associate (Seasonal – Summers and Winter Breaks) **Jun 2017-Jun 2021**
- Used Python to construct tool that gives insights into historical billing data upon entry of parameters, e.g., billing codes.
- Decreased office spending by 8% (\$43K p.a.) and increased productivity through rote task automation using Python.
- Served as a liaison, ran payrolls, managed ledgers and QuickBooks, launched HIPAA-compliant server.

EXTRACURRICULAR ACTIVITIES

YACHAD, THE NATIONAL JEWISH COUNCIL FOR DISABILITIES **Brooklyn, NY**
Coordinator **Sep 2021-Present**
- Develop and facilitate activities for 150 members and advisors, foster community building, and organize logistics.

ARESTY RESEARCH CENTER **New Brunswick, NJ**
Senior Peer Instructor **Sep 2020-Aug 2021**
- Developed curriculum, hosted talks and events, and mentored 40 Peer Instructors through teaching of seminars.
- Moderated the 17th Annual Summer Science Symposium, in which over 200 individuals were in attendance.

THE EXAMINER **New Brunswick, NJ**
Editor-in-Chief and President **Sep 2019-May 2021**
- Managed and presided over staff and journalists for Rutgers' 60-member science periodical.
- Tripled the club's funding as treasurer (2018) by advocating for and clarifying the club's missions and new initiatives.

FIRST-YEAR INTEREST GROUP SEMINARS **New Brunswick, NJ**
Peer Instructor **Apr 2019-Dec 2019**
- Developed and taught an original curriculum for "Exploring Health and Medicine," a 10-week university accredited course.
- Introduced first-year students to the health professions while helping them acclimate to college life.

SKILLS

Software: Python, R, Java, HTML, CSS, Unix scripting, Git, Excel
Languages: Fluent in Hebrew (speak, read, write)