

# Thais Nisenbaum

Los Angeles, CA

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Current Biotechnology/Bioinformatics MS student. Meticulous and analytical Researcher experienced in Next Generation Sequencing (NGS), various molecular biology techniques, and data analysis/visualization using Python and R.

Bioinformatics Portfolio: <https://tnisenbaum.github.io/>

## EXPERIENCE

### Graduate Quantitative Research Assistant

*Johns Hopkins University, Baltimore, MD*

FEBRUARY 2023 - PRESENT

- Managed and organized data for a collaborative research project on household food purchase behavior in the U.S.
- Utilized R to analyze quantitative data and large datasets.
- Applied knowledge of diet quality metrics, including the Healthy Eating Index, to support research objectives.
- Assisted with data management using SQL, ensuring efficient and accurate handling of information.
- Showcased strong writing skills to contribute to research findings and publications.

### Research Associate, Assay Development

*Foundation Medicine, Cambridge, MA*

JULY 2021 - JUNE 2022

- Prepared and analyzed human specimens and conducted experiments using NGS technologies, contributing to ongoing Cancer Genomic Research.
- Streamlined research processes to meet tight deadlines for multiple projects, optimizing efficiency and productivity.
- Developed Standard Operating Procedures (SOPs) to ensure accurate and reproducible results.
- Contributed to the development and validation of genomic assays in regulated laboratories, adhering to industry standards and guidelines.
- Utilized Python and R to analyze genomic sequencing data, extracting valuable insights and contributing to research findings.

### Laboratory Research Assistant

*Foundation Medicine, Cambridge, MA*

FEBRUARY 2020 - JULY 2021

- Isolated nucleic acid from human tissue, whole blood, plasma, and buffy coat.
- Prepared human specimens for genomic sequencing using NGS technologies and entered results into laboratory information management systems (LIMS).
- Contributed to the implementation of genomic assays involving extraction of buffy coat from genomic DNA.
- Contributed to the development of standard operating procedures (SOPs).

## EDUCATION

### Master of Science, Biotechnology, Bioinformatics

*Johns Hopkins University*

MAY 2022 - PRESENT (EXPECTED GRADUATION AUGUST 2023)

#### **Thesis: Advancing Precision Medicine in Tongue Cancer: Exploring the Potential of DNA-Based Digital Twin Technology**

##### Relevant Coursework:

Relevant coursework: Bioinformatics: Tools for Genome Analysis, Advanced Practical Computer Concepts for Bioinformatics, Molecular Biology, Biochemistry, Advanced Cell Biology, Cellular Signal Transduction, Biostatistics

### Bachelor of Science, Biomedical Sciences

*University of Central Florida – Orlando FL*

AUGUST 2016 - DECEMBER 2018

##### Relevant Coursework:

Molecular Biology, Biochemistry, Organic Chemistry, Cancer Biology, Quantitative Biological Methods, Genetics, Immunology, Microbiology, Human Physiology, Endocrinology, Neurobiology, Microbial Metabolism.

- Dean's List – Spring 2018
- Dean's List – Spring 2017
- President's List – Fall 2016

- Managed the accessibility, storage, and distribution of human specimens in a biorepository.
- Maintained laboratory inventory and placed orders as needed.
- Maintained and calibrated various types of lab equipment.
- Worked both independently and collaboratively in a fast-paced laboratory environment.

## Accessioning Technician II

*Foundation Medicine – Cambridge, MA*

JUNE 2019 - FEBRUARY 2020

- Received and accurately recorded the delivery of patient samples daily using good documentation practices (GDP).
- Demonstrated extreme attention to detail while working in a fast environment.
- Ensured patients have proper documentation and samples are in good condition and entered the information into laboratory information management systems (LIMS).
- Routed samples into the appropriate workflow and ensured downstream staff is alerted to sample availability.
- Maintained specimen identification, integrity, and chain of custody throughout all department processes.
- Ensured full regulatory compliance, providing test results with the best possible quality.
- Followed laboratory safety protocols and disposed of biohazard waste appropriately.

## Biology Lab Assistant II

*Valencia College – Orlando, FL*

AUGUST 2018 - FEBRUARY 2019

- Maintained and prepared Biology, Microbiology, Anatomy, and Physiology student laboratories.
- Prepared media and reagents necessary for student laboratories.
- Responsible for inoculation of bacterial stocks and bacterial cell management.
- Performed ELISA, PCR, Bradford assay, and bacterial gram staining to ensure student laboratory protocols were efficient.
- Optimized protein quantification protocol in the Biotechnology lab and edited the student manual for future use.
- Assisted faculty with student in-class labs.
- Demonstrated ability to take initiative and work on projects without supervision.
- Followed biological and chemical laboratory safety policies and protocols and disposed of biohazard waste appropriately.

## Microbiology Lab Teaching Assistant

*University of Central Florida – Orlando, FL*

AUGUST 2017 - AUGUST 2018

- Conducted a 2-hour student laboratory for Microbiology twice a week under the supervision of a lead teaching assistant.
- Assisted in lectures and answered students' questions.
- Taught at least one lecture independently each semester.
- Collaborated with a team at weekly meetings and contributed new ideas on teaching.
- Proctored in-class lecture exams in addition to all lab exams and quizzes.

## Associate of Arts

*Valencia College – Orlando FL*

AUGUST 2013 - AUGUST 2016

- Dean's List Spring 2014
- President's List Spring 2016
- President's List Summer 2016

## SKILLS

Research and Analysis of Genomics Data  
Assay Development  
Laboratory Management  
Adaptability  
Critical Thinking  
Teamwork

## PROGRAMMING LANGUAGES

Python  
R  
SQL  
JavaScript

## LABORATORY SKILLS

Next-Generation DNA Sequencing  
Bisulfite Genomic Sequencing  
DNA Isolation and Quantification  
Protein Purification  
PCR  
Western Blot  
ELISA  
Bradford Assay  
Bacterial Cell Culture

## CERTIFICATES

Learn Python 3 Course – *Certificate of Completion, Codecademy*

JULY 2021

Learn R Course – *Certificate of Completion, Codecademy*

AUGUST 2021

## LANGUAGES

Portuguese (Native)  
English  
Spanish

## **Biotechnology Lab Intern – Francie Chu, M.S.**

*Valencia College – Orlando, FL*

AUGUST 2016 - DECEMBER 2016

- Optimized GMO identification with PCR protocol in the Biotechnology student laboratory by experimenting with new sets of primers and different concentrations of DNA to derive a more cost-effective and consistent procedure.
- Reduced the use of primers by 33% and the use of positive DNA control by 60% in each experiment, allowing future students to easily repeat the protocol without worrying about the limited amount of resources.
- Presented a PowerPoint to the professor and students and edited the student manual accordingly.
- Maintained an organized laboratory notebook.

