

YINGYING YU

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Permanent resident of the US. No visa sponsorship required.

EDUCATION

Johns Hopkins University, Bloomberg School of Public Health Seq 2022 – May. 2024 (Expected)
Master of Health Science in Epidemiology, Cancer track *current GPA: 4.0/4.0*

New York University, College of Arts and Science Seq. 2018 – Jan. 2022
Bachelor of Arts in Biology, magna cum laude *GPA: 3.87/4.00*

SKILLS

- **Data analysis:** R (Tidyverse, dplyr, tidyr, ggplot2, DESeq2, edgeR, ASpli, flexdashboard, Shiny), Python (pandas, numpy, matplotlib, sklearn, plotly, streamlit), Stata
- **Data management:** SQL, Excel (vlookup, Power Query), version control (GitHub), Redcap

RELATED EXPERIENCE

Department of Epidemiology, Johns Hopkins University Baltimore, Maryland
Research assistant for Prof. Kala Visvanathan Aug. 2023 – present

- Investigating the impact of breastfeeding and parity on breast cancer mortality and recurrence using data from the Breast and Ovarian Surveillance Service (BOSS) Cohort and Maryland state registries.
- Synthesizing descriptive analyses for baseline characteristics (cancer treatment, hormone replacement therapy, etc...) according to breastfeeding duration in month using R (tidyverse).
- Developing survival analysis by applying Cox proportional hazards regression models to estimate the hazard ratios.

National Cancer Institute, NIH Bethesda, Maryland
Graduate data science analyst for Dr. Rouf Bandy Jun. 2023 – present

- Led a comprehensive genome-wide analysis of transcriptomes of two bladder cancer cell lines; identified 30 novel isoforms exclusively observed in interferon-treated samples.
- Initiated and optimized an RNA-Seq analysis pipeline to explore novel alternative splicing patterns in cancer cells using R (DESeq2, edgeR, ASpli), software IGV, and tools (spliceV, Enrichr).
- Presented research findings through a poster at the NIH Summer Poster Day; shared insights with fellow summer interns and the broader NIH community.

New York University Shanghai Shanghai, China
Research assistant for Prof. Jungseog Kang Aug. 2021 – Dec. 2021

- Engineered plasmids featuring target inserts of five distinct histone H2A.FV truncations; constructed corresponding primers tailored for efficient amplification and analysis.
- Investigated potential interaction mode between histone H2A.FV and the chromosomal segregation-related protein INCENP; utilized Co-Immunoprecipitation techniques in HeLa cell lines for analysis.
- Conducted over-expression on wild-type H2A.FV and three mutant variants; compared mitotic defects by immunofluorescence and micronuclei counting to quantify differences in cellular response.

PROJECTS

R package website building Nov. 2023 – Dec. 2023

- Created a pkgdown website for the R package usmap, demonstrated the functions in the package through an example analysis, by crawling data from the US Census Bureau website using tidycensus link API.
- Built an interactive dashboard to explore the US tornado trends using the R package usmap.