

**Michelle H. Nguyen**

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**EDUCATION**

2020-Present

**Ph.D.** (candidate), Department of Biomedical Engineering  
**Johns Hopkins School of Medicine**  
Area of Concentration: Biomedical Data Science

2016-2020

**B.S.** Department of Biomedical Engineering, Honors College  
*Magna cum laude*  
**Virginia Commonwealth University**  
Area of Concentration: Biomaterials and Biomechanics, Minor:  
Mathematics

**HONORS & AWARDS**

2021-2022

NIH/NCATS ICTR Pre-doctoral Clinical Research Training Grant,  
TL1 TR003100

2021

AMIA Student Design Challenge Finalist

2020-2021

NIH/NIGMS Pre-Doctoral Training Program in Computational  
Medicine, CMT32

2019-2020

Tau Beta Pi Scholarship

2017-2019

Western Union Global Foundation Scholarship

2017

VCU Launch Award

2016-2020

VCU Provost Scholar

**RESEARCH EXPERIENCE**

2020- Present

**Research Assistant**, Department of Biomedical Engineering, Johns  
Hopkins School of Medicine, Baltimore, MD, PI: Dr. Casey Overby  
Taylor

2018-2020

**Undergraduate Research Assistant**, Department of Biomedical  
Engineering, Virginia Commonwealth University School of  
Engineering, Richmond, VA, PI: Dr. Seth Weinberg

2017-2018

**Undergraduate Research Assistant**, Department of Biomedical  
Engineering, Virginia Commonwealth University School of  
Engineering, Richmond, VA, PI: Dr. Raiyan Zaman

**TEACHING EXPERIENCE**

Teaching Assistant

Biomedical Data Design (Fall 2022-Spring 2023)

Teaching Assistant

Honors Rhetoric (Fall 2017-Spring 2020)

## PAPERS

- Wang N., Lu Y.L., Treewaree S., Zirikly A., **Nguyen M.H.**, Agarwal B., Shah J., Stevenson J.M., Taylor C.O. (2024). Prompt Engineering to Generate Synthetic Patient Portal Drug-Related Communications. *Journal of American Medical Informatics Association* (\*Submitted).
- Nguyen, M.H.**, Sedoc, J., & Taylor, C. O. (2023). Usability, engagement, and report usefulness of chatbot-based family health history data collection: Mixed-methods analysis. *Journal of Medical Internet Research* (\*In Review). <https://doi.org/doi:10.2196/55164>
- Soley N., Klein A., Taylor C.O., **Nguyen M.**, Ewachiw G., Shah H., Bodurtha J. Feasibility of the Genetic Information Assistant Chatbot to Provide Genetic Education and Study Genetic Test Adoption Among Pancreatic Cancer Patients at Johns Hopkins Hospital. *AMIA Jt Summits Transl Sci Proc.* 2023 Jun 16;2023:497-504. PMID: 37350913; PMCID: PMC10283105.

## PRESENTATIONS

### Oral presentations:

- November 2024\* “Strolr: An LLM-enabled Chatbot to Support Pregnant Women’s Quick and Easy Information Seeking from Trustworthy Sources.”  
AMIA National Symposium 2024, San Francisco, CA (\*Submitted)
- November 2024\* “Automated Genetic Counseling Efficiency Measure Extraction with Rules-based Natural Language Processing Methods.”  
AMIA National Symposium 2024, San Francisco, CA (\*Submitted)
- November 2021 “mAMIA: mHealth dashboard to support pregnant women’s health information seeking and emotional and social wellbeing.”  
AMIA National Symposium 2021, San Diego, CA

### Poster presentations:

- March 2023 “Randomized Intervention Study of Form-based and Chatbot-based Methods for Family History Data Collection”  
AMIA Informatics Summit 2023, Seattle, WA.
- March 2023 “Detecting Phenotypes Among Patients Suspected of Rare Mendelian Disorders”  
AMIA Informatics Summit 2023, Seattle, WA.
- November 2022 “Piloting Family Health History Chatbot with Crowd-Sourced Data Collection”  
AMIA National Symposium 2022, Washington, D.C.
- April 2022 “Design and Implementation of Web-based Methods for Family Health History Collection”  
ACTS Translational Science 2022, Chicago, IL
- May 2018 “Modeling Heart Rate Variability with ECG-based Patient Data”  
Honors Summer Undergraduate Research Program, Richmond, VA
- April 2017 “Piano Practice as Pediatric Multiple Sclerosis Therapy”  
9<sup>th</sup> VCU Poster Symposium for Undergraduate Research and Creativity, Richmond VA

## RESEARCH SUPPORT

### Completed

- 2021-2022 Pre-doctoral fellowship - TL1 TR003100. NIH/NCATS
- 2020-2021 Pre-doctoral fellowship - CMT32. NIH/NIGMS

## **OTHER EXPERIENCE**

2018-2020	VCU Engineering Student Council Executive Board Member
2018-2020	Tau Beta Pi Epsilon Chapter Vice President
2017-2020	Co-Editor-in-Chief and Webmaster of Auctus: The Journal of Undergraduate Research and Creativity at VCU
2019	FIRST Chesapeake NextUP RVA Robotics Instructor, Richmond, VA