Michelle H. Nguyen

Johns Hopkins University School of Medicine Department of Biomedical Engineering

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EDUCATION

2020-Present Ph.D. (candidate), Department of Biomedical Engineering

Johns Hopkins University School of Medicine Area of Concentration: Biomedical Data Science

Expected graduation: August 2025

2016-2020 **B.S.** Department of Biomedical Engineering, Honors College

Magna cum laude

Virginia Commonwealth University

Area of Concentration: Biomaterials and Biomechanics, Minor:

Mathematics

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

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 Biomedical Informatics*. DOI: 10.1016/j.jbi.2024.104752

Nguyen, M.H., Sedoc, J., & Taylor, C. O. (2024). Usability, engagement, and report usefulness of chatbot-based family health history data collection: Mixed-methods analysis. *Journal of Medical Internet Research*. doi:10.2196/55164. http://dx.doi.org/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.

November 2024 "Automated Genetic Counseling Efficiency Measure Extraction with

Rules-based Natural Language Processing Methods." AMIA National Symposium 2024, San Francisco, CA.

July 2024 "Enhancing FHx collection and documentation with a

chatbot and NLP pipeline." Doctoral Consortium. International Conference on Artificial Intelligence in Medicine. Salt Lake City, UT.

"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:

November 2021

November 2024 "Comparing telehealth and in-person genetic counseling visit times

across specialties"

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"

9th VCU Poster Symposium for Undergraduate Research and

Creativity, Richmond VA

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, T32

2019-2020 Tau Beta Pi Scholarship

2017-2019 Western Union Global Foundation Scholarship

2017 VCU Launch Award 2016-2020 VCU Provost Scholar

TEACHING EXPERIENCE

Teaching Assistant Biomedical Data Design (Fall 2022-Spring 2023) Honors Rhetoric (Fall 2017-Spring 2020) Teaching Assistant

RESEARCH SUPPORT

Completed

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

Pre-doctoral fellowship - CMT32. NIH/NIGMS 2020-2021

OTHER EXPERIENCE

2024-Present Letters to a Pre-Scientist STEM Professional Outreach Pen Pal Johns Hopkins Medicine Basic Sciences Institute – Summer 2024-Present

Internship Program Triage Reviewer
JHU Student Services Excellence Initiative Student Advisory 2023-Present

Committee Member

VCU Engineering Student Council Executive Board Member 2018-2020

Tau Beta Pi Epsilon Chapter Vice President 2018-2020

Co-Editor-in-Chief and Webmaster of Auctus: The Journal of 2017-2020

Undergraduate Research and Creativity at VCU

FIRST Chesapeake NextUP RVA Robotics Instructor, Richmond, 2019

VA