**CURRICULUM VITAE**

**PERSONAL INFORMATION**

**Kwame Forbes**

120 Mason Farm Rd

4092 GMB, CB# 7365

Chapel Hill, NC 27599

919-966-6375

kwamek@email.unc.edu

**EDUCATION and TRAINING**

GRADUATE

08/2021 - Current University of North Carolina at Chapel Hill PH.D, Bioinformatics

Chapel Hill, North Carolina and Comp Bio

POSTBAC

06/2020 – 06/2020 PREP

 School of Medicine

 University of North Carolina at Chapel Hill

 Chapel Hill, North Carolina

UNDERGRADUATE

01/2014 – 12/2019 University of the Virgin Islands BS Biology

 St. Thomas, USVI AS Computer Sci

**PROFESSIONAL EXPERIENCE**

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| *Academic Appointments* |
| 08/2021 - | Graduate StudentBioinformatics and Computational BiologyUniversity of North Carolina at Chapel Hill |
| 09/2019 – 12/2019 | Student ResearcherUniversity of the Virgin Islands |
| 05/2019 – 07/2019 | Summer ResearchUniversity of Tennessee at Chattanooga |
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**HONORS**

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| 2024- | TRIO TL1 Diversity Supplement |
| 2021 | Bioinformatics and Computational T32 Grant |
| 2020 | Inclusive Excellence Top-Up Fellowship award |
| 2020 | Outstanding Poster Presentation Award ABCRMS |
| 2020 | JTech CSHL Biological Data Science Scholarship |
| 2020 | Dick Smith Scholarship Awardee |

**BIBLIOGRAPHY AND PRODUCTS OF SCHOLARSHIP**

**REFEREED (PEER – REVIEWED) PUBLISHED PRODUCTS OF SCHOLARSHIP**

**Original Research**

1. Goda GA\*, **Forbes K**\*, Eramo GA, Breen C, Porter DF, Khavari PA, Dominguez D†, Aleman MM**†**. Iron-sensitive RNA Regulation by Poly C Binding Proteins. *Nucleic Acids Research*, 53, 18 (2025). \*Co-first authors, **†**Co-corresponding
2. Chao, Y.L., Zhou, K.I., **Forbes, K.K.** *et al.* Snord67 promotes breast cancer metastasis by guiding U6 modification and modulating the splicing landscape. *Nature Communications,* 16, 4118 (2025).
3. Saksena S., **Forbes K.**, Rajan N., Giles D. Phylogenetic investigation of Gammaproteobacteria proteins involved in exogenous long-chain fatty acid acquisition and assimilation, *Biochemistry and Biophysics Reports*, 35, 101504 (2023).

**Computational Tools**

1. Love, M., Ahlmann-Eltze, C., **Forbes, K.**, Anders, S., & Huber, W. (2021). DESeq2: Differential gene expression analysis based on the negative binomial distribution. *Bioconductor version: Release (3.12)*.

**REFEREED UNPUBLISHED ORAL PRESENTATIONS/ABSTRACTS**

 **Oral Presentations:**

1. **Forbes K**, Goda GA, Dominguez D, Aleman MM. Iron Sensitive RNA Regulation. Nephrology Grand Rounds, UNC Chapel Hill, NC. March 5, 2025. (Invited)
2. **Forbes K**, Love, M. Integration of SC Datasets with Bulk Differential Analysis Results for DESeq2. JTech Cold Spring Harbor Laboratory Biological Data Science Conference. Virtual. November 4 - 6 2020. (Solicited)

 **Panels:**

1. **Forbes, K.** Panelist. Question and Answer Session on Graduate School and Research Opportunities. Expert Panel at the University of North Carolina at Chapel Hill. Chapel Hill, NC. November 4, 2023. (Invited).

 **Posters:**

1. **Forbes K**, Goda GA, Dominguez D, Aleman MM. Iron Sensitive RNA Regulation. Kidney Urology Hematology Research -Training Network National Conference. Atlanta, Georgia. May 19 -21 2025.
2. **Forbes K**, Goda GA, Dominguez D, Aleman MM. Iron Sensitive RNA Regulation. Pharmacology Research Retreat. Haw River State Park, NC. September 23 -24 2024.
3. **Forbes K**, Goda GA, Dominguez D, Aleman MM. Iron Sensitive RNA Regulation. Genetics Research Retreat. Myrtle Beach, SC. September 29 – October 1, 2024.
4. **Forbes K**, Goda GA, Dominguez D, Aleman MM. Iron Sensitive RNA Regulation. North Carolina RNA Symposium. Durham, NC. November 14 – 15, 2024.
5. **Forbes K**, Dominguez D, Aleman MM. Transcription Factors & RNA Binding Proteins: Regulatory Loops and Gene Paralogs. Genetics Research Retreat. Ashville, NC September 20 – 22, 2023.
6. **Forbes K**, Love, M. Integration of SC Datasets with Bulk Differential Analysis Results for DESeq2. European Bioconductor Meeting. Virtual. December 2020.
7. **Forbes K**, Love, M. Integration of SC Datasets with Bulk Differential Analysis Results for DESeq2. Annual Biomedical Research Conference for Minority Students. Virtual. November 2020.
8. **Forbes K**, Giles, D. Identifying homologs of Vibrio *cholerae* fadL, fadD and membrane acyltransferases among bacteria for phylogenetic analyses. Annual Biomedical Research Conference for Minority Students. Indianapolis, Indiana. November 2019.
9. **Forbes K**, Stanford, A. Examining the clonality of the Halophila *stipulacea* population within the United States Virgin Islands. Annual Biomedical Research Conference for Minority Students. Anaheim, California. November 2018.

**GRANTS**

ACTIVE

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| 2024 - | TraineeTRIO-associated Diversity Supplement 3TL1DK139567-02S1 |

COMPLETED

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| 2021 | TraineeBioinformatics and Computational Biology T32 Grant 5T32GM135123-02  |

**Research Statement**

I am currently working under the mentorship of Maria Aleman and Daniel Dominguez. My passion for informatics, biology, and research in differential gene expression and gene splicing has largely been the driving force in my pursuit of a PhD in Bioinformatics and Computational Biology. In an era where the frontiers of science continue to expand, it has become increasingly vital for scientists to employ computational strategies to tackle the growing complexity of problems. With this in mind, I am committed to helping advance our understanding of complex biological systems and contribute to the forefront of scientific knowledge.