

PROFILE

Combined MD/PhD student studying viruses with diverse research skills in data science, virology, and molecular biology. Former professional artist who simultaneously performed at an international level of ballet, pursued diverse interests, and maintained a high-level of academic achievement. Interested in emerging infectious diseases, data science, and equity in the arts.

EDUCATION

University of Texas Medical Branch School of Medicine	May 2027
MD/PhD in Biochemistry, Cellular and Molecular Biology, GS1	
University of Pittsburgh, Graduate School of Public Health	May 2020
MS in Infectious Disease and Microbiology	
Texas A&M University, College of Veterinary Medicine and Biomedical Science	May 2018
BS in Biomedical Studies	

ACADEMIC EXPERIENCE

Pei-Yong Shi Lab University of Texas Medical Branch <i>Graduate Member (Thesis Lab)</i>	2021 - 2023
<ul style="list-style-type: none">Applied molecular cloning and virologic techniques at Biosafety Level 3 to characterize emerging SARS-CoV-2 variants and mutants resistant to antiviral drugs at different approval stages (pre-IND to phase 1 trials).	
Andrew Routh Lab University of Texas Medical Branch <i>Collaborator</i>	2021 - 2023
<ul style="list-style-type: none">Developed web application, NoSQL database, documentation and Nanopore-compatible software for ViReMa, a viral recombination mapper software that detects non-homologous recombination in sequencing data.	
St. Vincent's Student Clinic University of Texas Medical Branch <i>Steering Committee Member (Logistics and Smoking Cessation Programming)</i>	2020 - 2021
<ul style="list-style-type: none">Contributed to development of a student-run comprehensive care clinic for congestive heart failure patients and performed motivational interviewing for tobacco use.	
Ernesto Marques, Jr. Lab University of Pittsburgh Graduate School of Public Health <i>Graduate Member (MS Thesis Work)</i>	2018 - 2020
<ul style="list-style-type: none">Worked on projects related to pathogenesis and host response of Dengue and Zika viral infection, developed and optimized immunoassays, and analyzed large datasets of immune-related patient features.	
Vishwajit Nimgaonkar Lab University of Pittsburgh Medical Center Western Psychiatric Hospital <i>Graduate Member</i>	2019 - 2020
<ul style="list-style-type: none">Applied virologic techniques and cultured brain organoids for modeling of herpes simplex infections.	
Koichi Kobayashi Lab Texas A&M College of Medicine <i>Undergraduate Member</i>	2016 - 2018
<ul style="list-style-type: none">Contributed to several projects related to the role of the gene NLRC5 in various cancers, worked with transgenic mice models, analyzed large public datasets (TCGA), and mentored students.	
MD Anderson Cancer Center T. Boone Pickens Academic Tower <i>Integrative Medicine Trainee and Internal Medicine Observer</i>	2016 - 2017
<ul style="list-style-type: none">Used R to prepare large clinical datasets for multivariate survival analysis, collected clinical data from EPIC software, presented at weekly meetings, attended lectures, and shadowed physicians.	
Aggie Research Scholar Texas A&M Vet-Med GI Lab <i>Team Member</i>	2016 - 2017
<ul style="list-style-type: none">Contributed to research projects utilizing cytokine levels to diagnose canine chronic enteropathies.	

RESEARCH PUBLICATIONS

JOURNAL ARTICLES

1. Sotcheff, S., Zhou, Y., **Yeung, J.**, Sun, Y., Johnson, J.E., Torbett, B.E., Routh, A.L., 2023. ViReMa: a virus recombination mapper of next-generation sequencing data characterizes diverse recombinant viral nucleic acids. *GigaScience* 12, giad009. <https://doi.org/10.1093/gigascience/giad009>
2. Xia, H.*, **Yeung, J.***, Kalveram, B.*, Bills, C.J., Chen, J.Y.-C., Kurhade, C., Zou, J., Widen, S.G., Mann, B.R., Kondor, R., Todd Davis, C., Zhou, B., Wentworth, D.E., Xie, X., Shi, P.Y., 2023. Cross-neutralization and viral fitness of SARS-CoV-2 Omicron sublineages. *Emerging Microbes & Infections* 0, 1–19. <https://doi.org/10.1080/22221751.2022.2161422>
3. **Yeung, J.**, Routh, A.L., 2022. ViReMaShiny: an interactive application for analysis of viral recombination data. *Bioinformatics* 38, 4420–4422. <https://doi.org/10.1093/bioinformatics/btac522>
4. Yoshihama, S., Cho, S.X., **Yeung, J.**, Pan, X., Lizee, G., Konganti, K., Johnson, V.E., Kobayashi, K.S., 2021. NLRC5/CITA expression correlates with efficient response to checkpoint blockade immunotherapy. *Sci Rep* 11, 3258. <https://doi.org/10.1038/s41598-021-82729-9>
5. Zheng, W., Klammer, A.M., Naciri, J.N., **Yeung, J.**, Demers, M., Milosevic, J., Kinchington, P.R., Bloom, D.C., Nimgaonkar, V.L., D'Aiuto, L., 2020. Patterns of Herpes Simplex Virus 1 Infection in Neural Progenitor Cells. *Journal of Virology* 94, e00994-20. <https://doi.org/10.1128/JVI.00994-20>
6. Liu, W., Qdaisat, A., **Yeung, J.**, Lopez, G., Weinberg, J., Zhou, S., Cohen, L., Bruera, E., Yeung, S.-C.J., 2019b. The Association Between Common Clinical Characteristics and Postoperative Morbidity and Overall Survival in Patients with Glioblastoma. *Oncologist* 24, 529–536. <https://doi.org/10.1634/theoncologist.2018-0056>
7. Liu, W., Qdaisat, A., Lee, E., **Yeung, J.**, Vu, K., Lin, J.-Z., Canada, T., Zhou, S., Cohen, L., Bruera, E., Yeung, S.-C.J., 2019a. The association between weight stability and parenteral nutrition characteristics and survival in patients with colorectal cancer. *Gastroenterol Rep (Oxf)* 7, 419–425. <https://doi.org/10.1093/gastro/goz021>

BOOK CHAPTERS

1. Marques, E.T.A., Demers, M., D'Aiuto, L., Castanha, P.M.S., **Yeung, J.**, Wood, J.A., Chowdari, K.V., Zheng, W., Yolken, R.H., Nimgaonkar, V.L., 2022. Herpesvirus Infections in the Human Brain: A Neural Cell Model of the Complement System Derived from Induced Pluripotent Stem Cells, in: *Current Topics in Behavioral Neurosciences*. Springer, Berlin, Heidelberg, pp. 1–22. https://doi.org/10.1007/7854_2022_383

*Contributed equally

SKILLS AND ACTIVITIES

Proficient with R / Shiny, D3.js / Observable

Experience with Python, Java, Linux systems, Docker, MongoDB

Coached media training with Emmy Award-winning journalist Anne Kavanagh (Sponsored)

ARTISTIC EXPERIENCE

Dance Data Project® | Chicago, IL

2020 - 2023

Board Member

- Serve on the board of directors for Dance Data Project, a non-profit organization featured by the [NYT](#) that “promotes equity in all aspects of classical ballet by providing metrics-based analysis”.

Final Bow for Yellowface / Gold Standard Arts Foundation | Houston, TX

2021 - 2023

Research Collaborator

- Involved in IRB-approved, survey-based research for Final Bow for Yellowface and their non-profit organization dedicated to promoting the visibility of Asian Americans and Pacific Islanders in dance.

Data Pointes | Pittsburgh, PA

2019 - 2023

Founder / Writer

- Created a [data-driven ballet consulting organization](#) analyzing patterns in training, diversity, and hiring; launched [app](#) visualizing common trajectories for ballet dancers.

City Ballet of Houston | Houston, TX

2014 - 2017

Artist in Residence

- Performed as the lead artist in outreach shows at Jones Hall (Greater Houston Youth Nutcracker) for Houston public school systems; outreach shows integrate inner city youths into the performance and award dance scholarships to promising children.

Tulsa Ballet | Tulsa, OK

2012 - 2014

Full-Time Second Company Performer

- Performed in shows with the critically acclaimed company including outreach shows and teaching events for children from the Tulsa public school system.

Awards

College of American Pathologists Medical Student Travel Award – 2023

Graduate School of Biological Sciences Associates Travel Award – 2023

UTMB WE Summit Top Student Researcher Awardee – 2022

Carl J. Herzog Endowment for the MD/PhD Program Awardee – 2022

Delta Omega Honorary Society in Public Health – based on “outstanding scholarship in students” – 2020

Valentina Kozlova International Ballet Competition Semi-Final New Orleans – Bronze medal – 2015

Valentina Kozlova International Ballet Competition Finals New York – Awarded New Jersey Ballet Contract (one of four recipients of a corps company job contract) – 2015

World Ballet Competition – an international competition with competitors from 32 countries – 3rd Place Pas De Deux Division – 2015

Committee Responsibilities

UTMB Pathology Association for Students – Vice President – 2022, 2023

UTMB SOM Student Ambassador – Member – 2022, 2023

St. Vincent’s Student Clinic - Steering Committee Member (Logistics and Smoking Cessation Programming) - 2020

Public Health Premedical Organization – President – 2020