

## PROFILE

Combined MD/PhD student studying infectious disease and microbiology with diverse research skills in data science, wet-lab techniques, and animal handling. 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 2028
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

Peiyong Shi Lab   University of Texas Medical Branch <i>Graduate Member (Thesis Lab)</i>	2021 - 2022
<ul style="list-style-type: none"><li>Applied molecular cloning and virologic techniques at Biosafety Level 3 to characterize emerging variants and mutants resistant to various antiviral compounds at different approval stages (pre-IND to phase 1 trials).</li></ul>	
Andrew Routh Lab   University of Texas Medical Branch <i>Collaborator</i>	2021 - 2022
<ul style="list-style-type: none"><li>Developed <a href="#">web application</a>, NoSQL database, documentation and Nanopore-compatible software for ViReMa, a viral recombination mapper software that detects non-homologous recombination in sequencing data.</li></ul>	
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"><li>Assisted in development of a student-run comprehensive care clinic for congestive heart failure patients and performed motivational interviewing for tobacco use.</li></ul>	
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"><li>Worked on projects related to <a href="#">pathogenesis and host response of Dengue and Zika viral infection</a>, developed and optimized immunoassays, and analyzed large datasets of immune-related patient features.</li></ul>	
Vishwajit Nimgaonkar Lab   University of Pittsburgh Medical Center Western Psychiatric Hospital <i>Graduate Member</i>	2019 - 2020
<ul style="list-style-type: none"><li>Applied virologic techniques and cultured brain organoids for modeling of herpes simplex infections.</li></ul>	
Koichi Kobayashi Lab   Texas A&M College of Medicine <i>Undergraduate Member</i>	2016 - 2018
<ul style="list-style-type: none"><li>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.</li></ul>	
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"><li>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.</li></ul>	
Aggie Research Scholar   Texas A&M Vet-Med GI Lab <i>Team Member</i>	2016 - 2017
<ul style="list-style-type: none"><li>Contributed to research projects utilizing cytokine levels to diagnose canine chronic enteropathies.</li></ul>	

## RESEARCH PUBLICATIONS

1. Spike determines the tropism and fitness of Omicron BA.1 in human airway cultures. (In preparation)
2. Sotcheff S, Zhou Y, **Yeung J**, Sun Y, Johnson JE, et al. ViReMa: A Virus Recombination Mapper of Next-Generation Sequencing data characterizes diverse recombinant viral nucleic acids. (Under Review at *GigaScience*)
3. Xia H\*, **Yeung J**\* Kalveram B\*, Bills CJ, Chen JYC, et al. 2022. Cross-neutralization and viral fitness of SARS-CoV-2 Omicron sublineages (p. 2022.11.08.515725). *bioRxiv*. <https://doi.org/10.1101/2022.11.08.515725>
4. Marques ETA, Demers M, D'Aiuto L, Castanha PMS, **Yeung J**, et al. 2022. Herpesvirus Infections in the Human Brain: A Neural Cell Model of the Complement System Derived from Induced Pluripotent Stem Cells. *Current Topics in Behavioral Neurosciences*. Springer; :1-22. doi:10.1007/7854\_2022\_383
5. **Yeung J**, Routh AL. 2022. ViReMaShiny: An Interactive Application for Analysis of Viral Recombination Data. *Bioinformatics*. btac522, <https://doi.org/10.1093/bioinformatics/btac522>
6. Yoshihama S, Cho S, **Yeung J**, Pan X, Lizée G, et al. 2021. NLRC5/CITA expression correlates with efficient response to anti-CTLA-4 checkpoint blockade. *Scientific Reports*.
7. Zheng W, Klammer AM, Naciri JN, **Yeung J**, Demers M, et al. 2020. Patterns of HSV-1 infection in neural progenitor cells. *Journal of Virology*. doi:10.1128/JVI.00994-20:JVI.00994-20
8. Liu W, Qdaisat A, **Yeung J**, Lopez G, Weinberg JS, Cohen L, et al. 2018. The association between common clinical characteristics and postoperative morbidity and overall survival in patients with glioblastoma. *The Oncologist*. theoncologist.2018-0056. 10.1634/theoncologist.2018-0056.
9. Liu W, Qdaisat A, Lee E, **Yeung J**, Vu K, Lin J, et al. 2019. The association between weight stability and parenteral nutrition characteristics and survival in patients with colorectal cancer. *Gastroenterology Report*.

\* Co-first Authors

## SKILLS AND ACTIVITIES

Proficient with R / Shiny, D3.js / Observable

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

## ARTISTIC EXPERIENCE

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

**2021 - 2022**

*Research Advisor*

- 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.

**Dance Data Project® | Chicago, IL**

**2020 - 2022**

*Board Member*

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

**Data Pointes | Pittsburgh, PA**

**2019 - 2022**

*Founder / Writer*

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

**Colombian Folkloric Ballet | Houston, TX**

**2016**

*Soloist Performer*

- Performed in *Mi Colombia*, a project funded in part by a grant from the City of Houston through the Houston Arts Alliance and dedicated to the promotion of Colombian culture in the United States.

**Houston Ballet | Houston, TX**

**2016**

*Audiovisual Intern*

- Coordinated with other production team members to fulfill video production-related requests, created checkout system for the video archive in Visual Basic, catalogued, and edited promotional footage.

**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**

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

Dean’s list – 2016, 2017

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 – 3<sup>rd</sup> Place Pas De Deux Division – 2015

**Committee Responsibilities**

UTMB Pathology Association for Students – Vice President – 2022

UTMB SOM Student Ambassador – Member – 2022

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

Public Health Premedical Organization – President – 2020