# JASON YEUNG

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## 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 2021 - 2022
*Graduate Member (Thesis Lab)*

- Applied molecular cloning and virologic techniques at Biosafety Level 3 to characterize emerging variants and mutants resistant to an aerosolized SARS-CoV-2 antibody therapy in Phase I clinical trials.

**Andrew Routh Lab |** University of Texas Medical Branch 2021 - 2022
*Collaborator*

- 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.

**Ernesto Marques, Jr. Lab |** University of Pittsburgh Graduate School of Public Health 2018 - 2020
*Graduate Member (MS Thesis Work)*

- 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 2019 - 2020
*Graduate Member*

- Applied virologic techniques and cultured brain organoids for modeling of herpes simplex infections.

**Koichi Kobayashi Lab |** Texas A&M College of Medicine 2016 - 2018
*Undergraduate Member*

- 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 2016 - 2017
*Integrative Medicine Trainee and Internal Medicine Observer*

- 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 2016 - 2017
*Team Member*

- Contributed to research projects utilizing cytokine levels to diagnose canine chronic enteropathies.

## RESEARCH PUBLICATIONS

1. 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*)

2. 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

3. **Yeung J,** Routh AL. 2022. ViReMaShiny: An Interactive Application for Analysis of Viral Recombination Data. *Bioinformatics*. btac522, https://doi.org/10.1093/bioinformatics/btac522

4. Yoshihama S, Cho S, **Yeung J**, Pan X, Lizee G, et al. 2021. NLRC5/CITA expression correlates with efficient response to anti-CTLA-4 checkpoint blockade. *Scientific Reports.*

5. 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

6. 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.

7. 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*.

## SKILLS AND ACTIVITIES

Proficient with R / Shiny, D3.js

Experience with Python, Java, Linux Command line, MongoDB, Docker

## 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

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 – 3rd 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