# kw3180@cumc.columbia.edu

#### Education

#### **COLUMBIA UNIVERSITY**

New York, NY

Master of Science in Epidemiology. GPA: 4.08.

2024 – Present

Coursework: Principles of Epidemiology I, Introduction to Biostatistical Methods, Introduction to Clinical Psychiatry for Epidemiology and Public Health, Child Development and Health Programs. Epidemiology II: Design and Conduct of Observational Epi Studies, Analysis of Categorical Data, Application of Epi Research Methods, Gun Violence in the US. Epidemiology III: Applied Epidemiologic Analysis. Psychiatric Epidemiology. Spatial Epidemiology. Data Science I. Master's Essay in Epidemiology.

Programming: R, SAS.

### UNIVERSITY OF WASHINGTON

Seattle, WA

Bachelor of Science in Biology, Physiology.

2017 - 2022

Dean's List: Winter 2019, Spring 2020, Annual Dean's List 2020-2021, Autumn 2022, Spring 2022.

# **Experience**

### **COLUMBIA UNIVERSITY**

New York, NY

EPIDP6400 Principles of Epidemiology I Graduate-level TA

Aug 2025 – Dec 2025

- Lead a weekly discussion section for 29 students, reinforcing course material.
- Prepared weekly slides and seminar lecture.
- Held weekly office hours and completed duties as needed.

Summer Health Professions Education Program (SHPEP) Facilitator

May 2025 – July 2025

- Served as Teaching Assistant for Anatomy and Physiology and Statistics for a healthcare pathway program at Columbia University Vagelos College of Physicians and Surgeons.
- Led discussion sessions 2x a week for 50 students to reinforce course concepts and to prepare them for success in future pre-med classes.
- Attended to Resident Assistant duties as assigned throughout the duration of the program.
- Advocated for and mentored 90 undergraduate students who are economically disadvantaged and/or identify with groups that have been historically underrepresented within the health professions.

### Course Note-Taker for Office of Disability Services

Sept 2024 – Dec 2024

- Provided accurate and comprehensive notes for INTRO-CLIN PSYCH-EPI&PUB (EPID 8421, section 001), ensuring equitable access to education.
- Demonstrated ability to synthesize and present information in a timely and effective manner.
- Strong understanding of the importance of confidentiality and student privacy.

# **UW SCHOOL OF MEDICINE**

Seattle, WA

RECOVER Research Coordinator at Chu Lab

May 2023 – June 2024

- Responsible for the day-to-day operations for an observational study of post-acute sequelae of COVID-19 at varying stages of infection.
- Executed clinical appointments for more than 200 participants, including recording study data, collecting biospecimens, and facilitating clinical assessments and survey-triggered tests.
- Performed all clinical research participant communications including enrollment, informed consent, retention, clinic scheduling, and answering questions.
- Gained a wide breadth of knowledge about clinical tests: NIH Toolbox Cognitive Battery, Pulmonary Function Test, EKG, Smell Test, 6 Minute Walk Test, Vision Test, Home Polysomnography.
- Processed blood, nasal, urine, stool, and saliva specimens for biorepository storage.
- Managed adverse event/serious adverse event, clinical/abnormal lab result, and suicide ideation reporting.
- Extracted data from electronic medical records.
- Oversaw site-wide Zelle compensation, ensuring timely payment for each study activity.

- Utilized multiple data-capture platforms such as REDCap, electronic health records, and OnCore.
- Practiced empathetic care while implementing study protocol to make situational judgments.

### HAARVI Research Coordinator at Chu Lab

Dec 2022 - June 2024

- Conducted clinical visits to study the immune response to SARS-CoV-2, Influenza, and RSV infections and vaccinations.
- Collected biospecimens (blood, nasal, saliva, and breath samples) and study data regarding vaccinations, infections, and post-infection surveys for more than 500 participants and 30 publications.
- Performed all clinical research participant communications including enrollment, informed consent, retention, clinic scheduling, and answering questions.
- Designed study timelines and protocols, specific to each sub-study.
- Expanded and developed the study to include Influenza/RSV samples and a pediatric cohort.
- Maintained electronic data collection system while considering data security and adhering to HIPAA.
- Received the Distinguished Staff Award for Impact in 2024.

#### SEATTLE CHILDREN'S RESEARCH INSTITUTE

Seattle, WA

Laboratory Technician, Volunteer

Nov 2022 – May 2023

- Genotyped mice specimens to assist Dr. Allison Hanaford with her investigation of the role of immunometabolism in mitochondrial disease.
- Extracted DNA from mouse tails or ears.
- Mastered wet lab techniques, such as assembling PCR reactions, processing samples, running agarose gel electrophoresis, and analyzing amplified DNA.
- Prepared agarose gel and working solutions of primers.
- Exposed to how to make 4% Formaldehyde and how to freeze tissue for cryosectioning with OCT and dry ice.

## UW SCHOOL OF MEDICINE

Seattle, WA

Chu Lab Aide

Oct 2022 – Oct 2023

- Oversaw lab operation duties for Dr. Helen Chu's lab, who conducts large-scale community-based studies of respiratory virus transmission and clinical trials of vaccines and therapeutics.
- Communicated with lab managers and staff scientists about urgent duties in a dynamic environment.
- Assisted with workflow by restocking lab station and disposing of biohazards and sharps for waste processing.
- Wrote standard of procedures about chemical waste disposal and EH&S procedures.
- Recorded and accounted for specimens in biorepository storage.
- Trained and oversaw two undergraduate researcher assistants.
- Performed other duties as assigned.
- Received the Top Dawgs in Safety Award in 2023.

#### **HCT Research Assistant**

Sept 2021 – June 2023

- Administered and collected nasal swabs for Husky Coronavirus Testing, a study in the Department of Medicine: Allergy and Infectious Diseases with Dr. Helen Chu.
- Adhered to study protocol to ensure research quality and integrity for a study with over 54,000 participants.
- Greeted participants and collected information about their symptoms, symptom duration, and vaccine status.
- Transported lab specimens for tests to be processed at the Brotman Baty Institute.
- Directly interacted with patients in a clinical setting, providing empathetic care and adapting to patients' needs.
- Longitudinal data collection and management through RedCap and Excel.
- Protected sensitive patient information and gained knowledge about HIPAA.
- Received the Distinguished Staff Award for Innovation in 2023.

### **UW HOUSING AND FOOD SERVICES**

Seattle, WA

• Skillfully engaged and collaborated with diverse populations.

- Implemented fast-paced multi-tasking and attention to detail.
- Received the Rookie Award on May 29, 2019.

## KANSAI MEDICAL UNIVERSITY

Hirakata, Osaka, Japan Jul 2019 – Aug 2019

Feb 2019 – Dec 2019

Research Intern

Part-time

- Shadowed researchers specializing in neurophysiology.
- Disinfected and cleaned subjects' brain implants and injected monkeys with antibiotics.

### Volunteer

### EPICONNECT MENTORSHIP PROGRAM

New York, NY

• Connect with incoming a 1st-year MSPH Epi student, serving as an informal resource. Aug 2025 – May 2026

• Check in periodically, offer support when needed, and help ease her transition into the Epi program

## CITIZENS' PUBLIC HEALTH LITERACY (CIPHER)

New York, NY

Support community-based organizations to promote mental and physical health and to empower youth through sports, leadership, tutoring, and mentoring.

## WEDGWOOD ELEMENTARY SCHOOL SCIENCE NIGHT

Seattle, WA

• Educated children about the flu and the importance of flu shots through interactive games. April 2024

**JAPN 1020, JAPN 2010** 

Remote

• Edited and subtitled 32 lectures for university-level Japanese language courses. Mar

Mar 2022 – Oct 2023

ISIRV CONFERENCE

Seattle, WA May 2023

• Assisted the organizer with logistics to ensure that the international conference ran smoothly.

• Set up and oversaw attendee registration, communicating with researchers of various nationalities.

## **HUSKY CORONAVIRUS TESTING STUDY**

Seattle, WA

• Supported the Chu Lab & the Brotman Baty Institute.

Sept 2021

• Built coronavirus swab test kits for the university-wide return to school.

• Allocated and distributed bundles of kits to on-campus dorms.

### ROOTS YOUNG ADULT SHELTER

Seattle, WA

• Provided empathetic communication for guests and prepared food for distribution. Jan 2020 – Mar 2020

## Leadership

# CITIZENS' PUBLIC HEALTH LITERACY (CIPHER) HEALTH EDUCATION LEAD

New York, NY

• Developed and organized 2 public health literacy projects, leading 2 teams (30 students) May 2026 – Current

### **Publications**

Geng, L. N., Erlandson, K. M., Hornig, M., Letts, R., Selvaggi, C., Ashktorab, H., Atieh, O., Bartram, L., Brim, H., Brosnahan, S. B., Brown, J., Castro, M., Charney, A., Chen, P., Deeks, S. G., Erdmann, N., Flaherman, V. J., Ghamloush, M. A., Goepfert, P., Goldman, J. D., ... <u>RECOVER Consortium</u> (2025). 2024 Update of the RECOVER-Adult Long COVID Research Index. JAMA, 333(8), 694–700. https://doi.org/10.1001/jama.2024.24184

Xie, J., Chen, D. G., Chour, W., Ng, R. H., Zhang, R., Yuan, D., Choi, J., McKasson, M., Troisch, P., Smith, B., Jones, L., Webster, A., Rasheed, Y., Li, S., Edmark, R., Hong, S., Murray, K. M., Logue, J. K., Franko, N. M., Lausted, C. G., ... Watanabe K., ... Heath, J. R. (2025). APMAT analysis reveals the association between CD8 T cell receptors, cognate antigen, and T cell phenotype and persistence. Nature communications, 16(1), 1402. https://doi.org/10.1038/s41467-025-56659-3

Hanaford A.R., Khanna K.J., Truong V., James K., Liao R., Chen Y., Mulholland M., Kayser B., <u>Watanabe K.</u>, Shien Hsieh E., Morgan P., Sarkar S., Kalia V., Johnson S.C. (2024). Disruption of adaptive immunity does not attenuate disease in the Ndufs4(-/-) model of Leigh syndrome. Under review at *Brain communications*.

Swank, Z., Borberg, E., Chen, Y., Senussi, Y., Chalise, S., Manickas-Hill, Z., Yu, X. G., Li, J. Z., Alter, G., Henrich, T. J., Kelly, J. D., Hoh, R., Goldberg, S. A., Deeks, S. G., Martin, J. N., Peluso, M. J., Talla, A., Li, X., Skene, P., Bumol, T. F., ... <u>RECOVER consortium authors</u> (2024). Measurement of circulating viral antigens post-SARS-CoV-2 infection in a multicohort study. *Clinical microbiology and infection: the official publication of the European Society of Clinical Microbiology and Infectious Diseases*, S1198-743X(24)00432-4. Advance online publication. <a href="https://doi.org/10.1016/j.cmi.2024.09.001">https://doi.org/10.1016/j.cmi.2024.09.001</a>

Erlandson, K. M., Geng, L. N., Selvaggi, C. A., Thaweethai, T., Chen, P., Erdmann, N. B., Goldman, J. D., Henrich, T. J., Hornig, M., Karlson, E. W., Katz, S. D., Kim, C., Cribbs, S. K., Laiyemo, A. O., Letts, R., Lin, J. Y., Marathe, J., Parthasarathy, S., Patterson, T. F., Taylor, B. D., ... <u>RECOVER-Adult Cohort</u> (2024). Differentiation of Prior

SARS-CoV-2 Infection and Postacute Sequelae by Standard Clinical Laboratory Measurements in the RECOVER Cohort. Annals of internal medicine, 177(9), 1209–1221. https://doi.org/10.7326/M24-0737

Hanaford A.R., Khanna K.J., Truong V., Liao R., Chen Y., Mulholland M., Kayser B., <u>Watanabe K.</u>, Shien Hsieh E., Sedensky M., Morgan P., Kalia V., Sarkar S., Johnson S.C. (2023). Interferon-gamma contributes to disease progression in the Ndufs4 (-/-) model of Leigh syndrome. *Neuropathology and applied neurobiology*, 50(3), e12977. https://doi.org/10.1111/nan.12977

#### **Awards**

UNIVERSITY OF WASHINGTON AWARD OF EXCELLENCE	2024
<ul> <li>Distinguished Staff Award for Impact (HAARVI Study Team)</li> </ul>	
UNIVERSITY OF WASHINGTON LAB SAFETY AWARDS	2023
<ul> <li>Top Dawgs in Safety (Department of Allergy &amp; Infectious Disease, School of Medicine)</li> </ul>	
UNIVERSITY OF WASHINGTON AWARD OF EXCELLENCE	2023
<ul> <li>Distinguished Staff Award for Innovation (Husky Coronavirus Testing Study Team)</li> </ul>	
UNIVERSITY OF WASHINGTON HOUSING AND FOOD SERVICES	2019

# • Rockstar Rookie

#### **Certifications**

# **RECOVER Neurocognitive**

Montreal Cognitive Assessment (MoCA)

# **RECOVER NIH Toolbox**

Nov 2023

April 2024

• Cognitive domain: Picture Vocabulary Test, Flanker Inhibitory Control and Attention Test, Pattern Comparison Processing Speed Test, Picture Sequence Memory Test, Oral Reading Recognition Test, and Auditory Verbal Learning Test (Rey)

## **BEST CPR USA**

Sept 2023 – Sept 2025

• Basic Life Support for Healthcare Providers

### **CITI PROGRAM**

Oct 2021

• Human Subject Learners, Good Clinical Practice and ICH (GCP), GCP- Social and Behavioral Research Best Practices for Clinical Research

### Workshops

# FOUNDATIONS FOR RESEARCH COMPUTING: R

Jan 2025

• Attended a 2-day workshop on automating tasks with the Unix Shell, version control with Git, and R for reproducible scientific analysis.

# DR. BRANCH'S BEDSIDE BOOTCAMP

Jul 2020, Nov 2020, Mar 2021, Jun 2021

- Practiced clinical reasoning strategies with simulated patients.
- Trained in patient-doctor communication when history taking and taking physical examinations.
- Gained understanding of empathetic, patient-centered care.

### DR. BRANCH'S CLINICAL CASES IN PHARMACOLOGY

May 2021, Jun 2021

- Collaborated with junior physicians to delve into a patient's medical history and physical examination to make precise diagnoses and treatment plans in simulated patients.
- Developed ability to identify drug-drug interactions and to reduce polypharmacy.