TEO WEI YI



https://teoweiyi.github.io/

(best viewed on desktop)



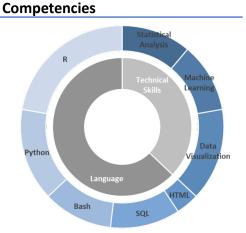
+65 91687668

teoweiyi98@gmail.com

Education

National University of Singapore

- Bachelor of Science with Honours, Life Sciences (Specialization in Biomedical Sciences)
- Minor in Public Health
- CAP: 4.26



Relevant Experiences

NUS Department of Biological Sciences

Research Assistant (Bioinformatics)



Jun 2021 – Present

- Utilized correlation network construction to find biologically functional groups of genes using R in a weighted gene correlation network analysis.
- Utilized instrumental variable analysis for causal inference of a gene product's level on another gene product's level using bash and R in mendelian randomization.
- Utilized logistic regression to find the odds ratio of subjects with a certain genetic make-up being diseased using bash in a genome-wide association study.
- Utilized t-tests to find if subjects with different genetic make-up or different disease status have different levels of genetic products using R in quantitative trait loci and differential expression analyses.
- Utilized enrichment analyses to study over-representation of functional gene products in diseased individuals using R.
- Queried biological databases (GEO database and regulomedb) for genetic datasets using R in validation of research findings.

NUS Department of Biological Sciences

Undergraduate Research (Bioinformatics)



Dec 2018 - Nov 2019; Aug 2020 - Apr 2021

Utilized R and bash for logistic regressions, t-tests, enrichment analyses and querying from biological databases.

First-author article titled "Atopic dermatitis-associated 6p21 variants regulate
LOC100294145 expression and type 1 interferon signalling" to be submitted to the Journal
of Allergy and Clinical Immunology, and presented at the European Academy of Allergy and
Clinical Immunology Congress 2022.

Saw Swee Hock School of Public Health

Quantitative Research intern



May 2020 - Jul 2020

- Utilized regressions to study the effect of an individual's socioeconomic status on their health literacy and behavior with R.
- Produced graphs for visualization of survey results on the sexual behavior of youths in Singapore, which were reported to the Health Promotion Board.

Publications

First author:

- 1. Atopic dermatitis-associated 6p21 variants regulate LOC100294145 expression and type 1 interferon signalling (Under final round of internal review)
- 2. Alternative medical systems: A systematic review of randomized controlled trials in Chronic Kidney Disease Patients (Under final round of internal review)
- 3. Co-expressing gene modules associated with atopic dermatitis are enriched in platelet activation and immune-related biological processes (At the initial stages of data analyses)

Co-author:

- An Update on the Prevalence, Chronicity, and Severity of Atopic Dermatitis and the Associated Epidemiological Risk Factors in the Singapore/Malaysia Chinese Young Adult Population: A Detailed Description of the Singapore/Malaysia Cross-Sectional Genetics Epidemiology Study (SMCGES) Cohort (Submitted and under review by journal)
- 2. Allergic Rhinitis in Young Adult Chinese from the Singapore/Malaysia Cross-Sectional Genetics Epidemiology Study (SMCGES) Cohort: Prevalence, Patterns and Epidemiology of Allergic Rhinitis (Submitted and under review by journal)

Other Experiences

Duke NUS

Systematic Reviewer



Jan 2021 - Dec 2021

 Systematically reviewed 33 randomized controlled trials to determine the efficacy of alternative medicine systems in the treatment of chronic kidney diseases.

HealthServe

Medical Services Intern



Dec 2019 - Jan 2020

Delivered medical services to around 30 migrant workers on each clinic day, by managing front-end (e.g. urine tests and assistance in dispensing of drugs) and back-end clinic operations (e.g. stock check of drugs and scheduling of appointments).

Tan Tock Seng Hospital (Clinic 1A)

Patient Service Associate



Jun 2018 - July 2018

Aided the patients in registration, assisted the doctors, attended to patients' needs, and escorted patients with limited mobility to receive medical attention for the eye.

Extra-curricular Activities

NUS Life Sciences Society





Jul 2020 – Jun 2021 Honorary General Advisor

Offer advice to the current executive committee members, as a mentor in project planning and conflict management.



Jul 2019 – Jun 2020 President



- Led the society of 105 members, in 8 departments, to organize academic workshops, industry exposure talks and welfare events for the Life Sciences cohort.
- Aligned goals and planned the annual budget with the NUS Department of Biological Sciences.



Jul 2018 – Jun 2019 Welfare Director



- Led a team of 9 members to plan and execute events for the cohort including: welcome tea, giveaways, workshops, and sales.
- Secured sponsors for the first welfare pack giveaway.
- Liaised with external sponsors, vendors and school authorities.





Jul 2017 – Jun 2018 Welfare Executive and Marketing IC

Liaised with other departments in the society to streamline marketing processes.

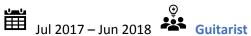
NUS Cultural Activities Club Voices





Jul 2018 – Jun 2019 Financial Secretary; Guitarist

- Planned and executed gigs, and two major concerts each year.
- In-charge of budget planning, management of payments to vendors, sponsorship, claims and income collection.





King Edward VII Hall Titans Cheerleading



Jul 2020 – Jun 2021 Cheerleader



Volunteer Experiences

HealthServe



Jan 2020 – Sep 2020 Clinic Assistant



- Volunteers at the clinic for Singapore's migrant workers.
- Participated in ad-hoc engagement with the migrant workers on the COVID19 post-recovery cruise.

The Bone Marrow Donor Programme





Aug 2019 – Oct 2019 Bone Marrow Donor Day, Programmes Subcommittee

Organised activities to educate and recruit potential bone marrow donors.