

Hanlong Chen

Curriculum Vitae

Contact Information

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Education

PhD in Biostatistics, University of Toronto

Sep 2026 - Aug 2030

- Advisor: Dr. Aya Mitani

MSc in Biostatistics, University of Toronto

Sep 2024 - Jun 2026

- Advisor: Dr. Aya Mitani

Honours BSc in Mathematics & Statistics, University of Toronto

Sep 2019 - Jun 2024

- Advisor: Murari Singh

Publications and Preprints

†: Corresponding Author;

*: Equal contribution

Under Review

1. Aya Mitani, **Hanlong Chen**, Yuning Wang and Christopher McCulloch 2026
Assessing the Reliability of Electronic Dental Records Through Agreement of Probing
Pocket Depths Measured Between Two Closely Conducted Periodontal Exams.
Submitted to Journal of Clinical Periodontology

2. **Hanlong Chen**, Xinyang Feng and Aya Mitani.
Dynamic Prediction of Tooth Loss Using Landmarking Models with Clustered Survival
Data.
Passed thesis defense, pending to submit

In Progress

1. **Hanlong Chen**^{*,†}, Ian Zhang^{*}, ..., Malcolm Binns 2026
Continuous Cognitive Heterogeneity in Dementia: A Severity Factor and an Age-Related
Amnesic Axis Without Reproducible Subtypes
2. Ian Zhang^{*,†}, **Hanlong Chen**^{*}, ..., Malcolm Binns 2026
Redundancy-Aware Model Assessment for Component and Cluster Selection in Clinical
Subtype Discovery

3. **Hanlong Chen**, Bruce Liu, Aya Mitani, Karim Keshavjee, Felipe Cepeda, Aziz Guer-
gachi, and Camellia Zakaria. 2026

A Sequential Mixed-Effects Imputation Framework for Visit-Level Informative Missing-
ness and Imputation-Aware Evaluation of Metabolic Subtyping Methods in Longitudinal
EHR Data.

Research Experience

Canadian Primary Care Sentinel Surveillance Network Toronto, ON
Research Assistant Apr 2025 – Present
Supervisor: Dr. Camellia Zakaria & Dr. Aya Mitani

Baycrest, Rotman Research Institute Toronto, ON
Graduate Practicum Student Oct 2024 – Present
Supervisor: Dr. Malcolm Binns

University of Toronto, Department of Statistical Sciences Toronto, ON
Undergraduate Research Student Sep 2023 – May 2024
Supervisor: Dr. Murari Singh

Internship

Guangzhou Center for Disease Control and Prevention Guangzhou, China
Analyst Intern May – Aug 2021 & May – Aug 2023
Supervisor: Yilie Ma

Guangzhou Baiyun International Airport Guangzhou, China
Data Analyst Intern Jan 2021 – Apr 2021

Teaching Assistant

University of Toronto Toronto, ON
St. George Campus

- AI4PH - Handling Missing Data in Health Research Winter 2026
- STA130: Introduction to Statistical Reasoning and Data Science Fall 2025
- COG260: Data, Computation, and the Mind Winter 2026

Scarborough Campus

- STAB22: Statistics I Summer 2026
- MATB44: Differential Equations I Winter 2026

- STAA57: Introduction to Data Science Winter 2026
- STAB27: Statistics II Winter 2026
- STAC33: Introduction to Applied Statistics Winter 2026
- STAD91: Bayesian Statistical Analysis Winter 2026

Presentations

Conference Talks

2026 Joint Statistical Meetings 2026

Hierarchical Gaussian Process Landmarking and Cluster-Aware Metrics for Tooth-Level Survival.

2026 SSC Annual Meeting in Hamilton 2026

Landmark Models for Clustered Data to Account for Within-cluster Correlation of Unit.

2025 SSC Annual Meeting in Saskatoon 2025

Cognitive Profiles of People Living with Dementia: a PCA-Based Clustering Analysis.

Posters

The Thirteenth Annual Canadian Statistics Student Conference 2025

Cognitive Profiles of People Living with Dementia: a PCA-Based Clustering Analysis.

Grants

Graduate Student Research Fellowship Jun - Sep 2026

Department of Political Science at the University of Toronto \$3,000

SGS Conference / Research Travel Grant May 2026

School of Graduate Study at the University of Toronto \$500

Graduate Student Research Fellowship Feb 2026

Department of Psychology at the University of Toronto \$1,000

Jack and Rita Catherall Fund – Research Grant May 2025

Research Training Centre at Baycrest \$500

Services

Biostatistics Union of Graduate Students Executive Team 2025 - 2026

Seminar Committee

Other

Languages Spoken: English (bilingual), Mandarin (native), Cantonese (native)

Memberships: Statistical Society of Canada