

## **2025 UCalgary Biostatistics Center–Training Network (UCBC-TN) Biostatistics Research Day Report**

The 2025 UCBC-TN Biostatistics Research Day was held on April 24th 2025 at the University of Calgary's Main Campus (MS 431). We were honoured to welcome Dr. Alexandre Bouchard-Côté from UBC's Department of Statistics as our keynote speaker, who delivered a talk on Bayesian cancer phylogenetics and fitness inference. Dr. Mina Aminghafari from UCalgary's Department of Mathematics and Statistics gave a presentation on model selection and penalized regression, and Dr. Rui Fu from UCalgary's Department of Community Health Sciences discussed incorporating economic considerations into biostatistical research.

The event also featured contributed talks by graduate students and postdoctoral fellows from the University of Calgary, covering a wide range of topics in biostatistics, including high-dimensional genetic and genomic data analysis, meta-analysis in social sciences, machine learning and AI, survival analysis, spatio-temporal modelling, and Bayesian statistics. As a student-focused event, it fostered collaboration between the Departments of Mathematics and Statistics and Community Health Sciences, enhanced awareness of the breadth of biostatistics research at the University of Calgary, and provided valuable presentation experience for trainees.

A total of 37 participants registered for the event. The majority were early-career individuals, with 57% in the 25–34 age range, reflecting strong engagement from graduate students and young professionals. Smaller proportions of attendees were aged 35–44 (14%), 45–54 (14%), and 55 and above (8%), and 8% preferred not to disclose their age. Gender representation showed a slight majority identifying as female (57%), followed by male (41%), with 2% choosing not to specify.

Ethnic representation was diverse, with 57% identifying as Asian, 14% as White, 11% as Middle Eastern, 8% as Black or African, 3% as South Asian, and 5% preferring not to say. This reflects the multicultural and inclusive nature of the biostatistics community. 57% of participants held or were pursuing a PhD degree, 38% a Master's degree, and 5% were at the undergraduate level. By career stage, 49% were graduate students, 11% postdoctoral fellows, and 24% faculty members. This distribution aligns with the research-intensive nature of the event, which primarily targeted researchers, trainees, and faculty in quantitative health sciences. While participants came from a variety of institutions, including University of Prince Edward Island (UPEI), Toronto Metropolitan University (TMU), and Mount Royal University (MRU), the majority were affiliated with the University of Calgary, particularly the Departments of Mathematics and Statistics and Community Health Sciences.

We gratefully acknowledge the generous support from University of Calgary: Departments of Mathematics and Statistics and Community Health Sciences; Canadian Statistical Sciences Institute (CANSSI); Pacific Institute for the Mathematical Sciences (PIMS). We are grateful for the support from Marni Farrant, Senior Administrative Assistant, from the Department of Mathematics and Statistics. Without their contributions, this workshop would not have been possible.

On behalf of the UCBC-TN Committee: Yirao Zhang, Dirk Douwes-Schultz, Olayinka Arimoro, Rob Deardon, and Karen Kopciuk

July 7, 2025



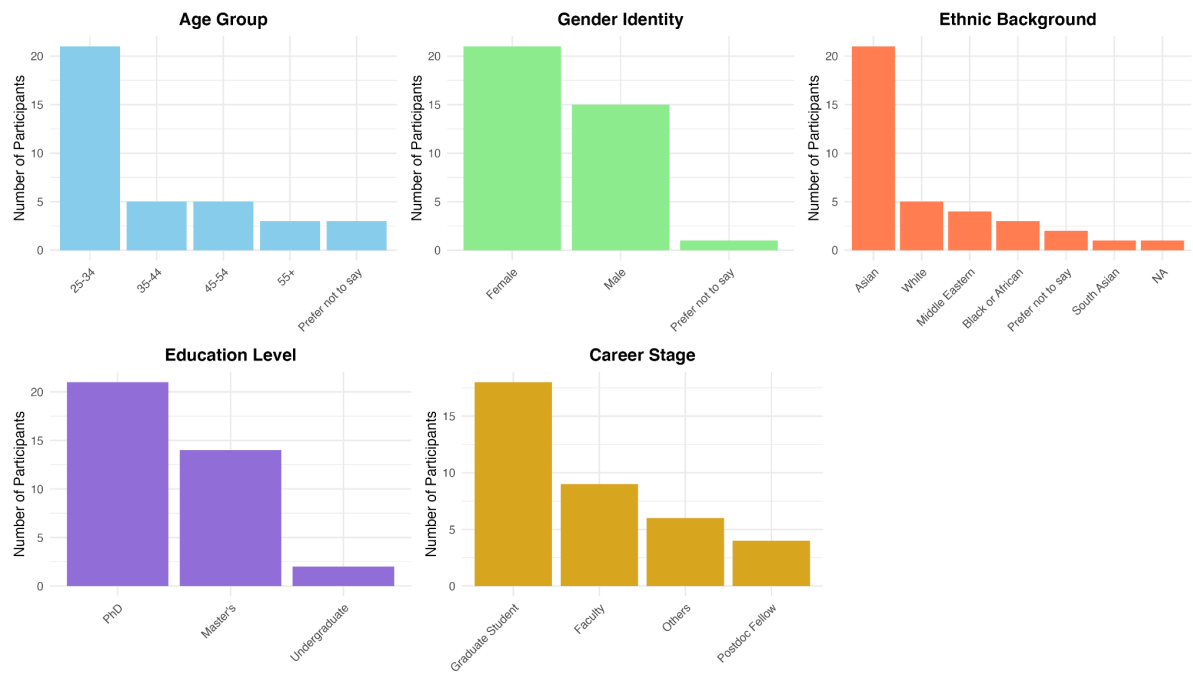


Figure 1: Participant Demographics of UCBC-TN Biostatistics Research Day 2025



Figure 2. Welcome remarks and Land Acknowledgement delivered by Dr. Rob Deardon, faculty organizer.





Figure 3. Dr. Alexandre Bouchard-Côté delivering his keynote presentation at UCBC-TN Biostatistics Research Day.



Figure 4. Participants enjoying lunch during the UCBC-TN Biostatistics Research Day.