

Research Student - Data Simulation

Internal Job ID: 2025-06

GEMINI (www.geminimedicine.ca) is a unique big data platform in the Canadian healthcare landscape using advanced methods and analytics to extract and standardize data captured in hospital electronic health records. We are based out of Unity Health Toronto, St. Michael's Hospital and currently exist at 30+ hospitals in Ontario. GEMINI is a collaborative data and analytics platform for all Ontario hospitals to accelerate research and quality improvement, leading to excellent hospital care.

Position Overview:

GEMINI is looking for a research student to support generating simulated data for enhanced testing on physician and hospital quality improvement [reports](#) and public-facing repository: [Rgemini](#). The student will be expected to learn and understand GEMINI data characteristics and create a series of functions to simulate data tables that resemble key features of real data. An example deliverable will be similar to: <https://github.com/insightengineering/random.cdisc.data/tree/main/R>

The hired student will be a part of Unity Health's [Keenan Research Summer Student Program](#), and expected salary range is \$17.56 - \$21.95 per hour.

Key Responsibilities:

- Explore GEMINI data tables and perform descriptive analyses to understand data structures, data types, and distribution characteristics
- Translate findings into design and data requirements
- Create user-friendly functions to generate simulated data that reflect real data characteristics and address common testing needs
- Test the simulated data on our report generation code and Rgemini
- Document the development process, including detailed function descriptions, usage instructions, and insights from data exploration
- Collaborate with team members to understand use cases for simulated data and incorporate feedback into the development process

Qualifications:

- Current undergraduate student enrolled in health sciences, statistics, or a related field
- Basic programming skills (R, Python, etc.) to perform data exploration and manipulation
- Interest in healthcare research
- A curious mind and a strong drive to learn
- Eligible to work in Ontario, Canada (e.g. Canadian citizenship, permanent resident, study permit, etc.)

Time Commitment:

Full time contract (37.5 hours per week) for at least 10 weeks from May to August 2025. Student will be expected to work in a hybrid environment with the ability to come into GEMINI's office (located at Li Ka Shing Knowledge Institute, Downtown Toronto) at least once a week.

How to Apply:

Please submit your CV/resume and a quick paragraph on your interest in GEMINI (around 100 words) to gemini.data@unityhealth.to with your subject header “<Your Name> Application for Position 2025-06”.