

Student Project Draft Frameworks

Tutorial 03

CHL5402H — February 3, 2026

Online Materials

The screenshot shows the GitHub profile of Lief Pagalan. Red annotations highlight specific elements:
1. The browser tab and address bar.
2. The 'Repositories' tab in the navigation bar.
3. The repository name 'chl5402h-epidemiologic-methods-ii' in the list.

Profile Information:

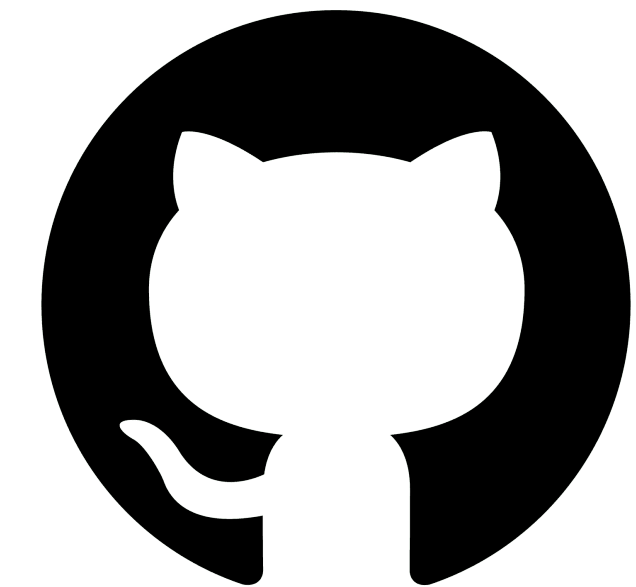
- Name:** Lief Pagalan
- Username:** lpagalan
- Follow:** Button
- Followers:** 6
- Following:** 10
- Education:** University of Toronto
- Location:** Toronto
- Timezone:** 14:03 - same time
- ORCID ID:** <https://orcid.org/0000-0003-2828-7085>
- Twitter:** @lief_pagalan
- Email:** @lpagalan.com

Achievements:

- GitHub logo icon

Repositories:

- chl5402h-epidemiologic-methods-ii** (Public)
Updated 1 hour ago
- thp-geospatial-crosswalk** (Public)
These geographic crosswalks were developed to link dissemination areas (DA) and 6-character postal codes to higher-level geographies, such as census divisions (CD), census subdivisions (CSD), Peel ...
Updated on Mar 23, 2025
- canue-enviro-data** (Public)
Prepare CANUE environmental data for linkages to other datasets using 6-digit postal code and year.
R Updated on Oct 8, 2024
- ai4ph-causal-inference-ml-workshop** (Public)
Forked from Kuan-Liu/ai4ph2023
AI4PH 2023 Summer Institute - R Workshop on Causal Inference with Machine Learning Approaches
TeX Updated on Jul 18, 2023



GitHub

<https://github.com/lpagalan>

Agenda

- Attendance
- Individual Exercise: PEOTS Elevator Pitch for Assignment 1
- Parallel Activities:
 - Group Exercise: Assignment 1 Peer Feedback
 - One-on-One: TA Assignment 1 Check-In

Learning Goals

- Develop exposure–outcome ideas into causal epidemiological studies
- Apply epidemiology study design concepts into practice
- Strengthen critical appraisal skills to evaluate epidemiological studies



PEOTS Elevator Pitch for Assignment 1

3 to 5 Minute Individual Exercise and Self-Assessment

PEOTS Framework

- **Mental Health:** Among university students (**P**), daily social media use above 3 hours (**E**) is associated with higher incidence of clinically significant depression (**O**) over 2 years (**T**), estimated as a relative risk from a prospective cohort study (**S**).
- **Environmental Health:** Among adults living in urban areas of Beijing (**P**), long-term exposure to PM_{2.5} above 35 µg/m³ (**E**) is associated with increased incidence of ischemic heart disease (**O**) over 10 years (**T**), estimated as a hazard ratio from a longitudinal cohort study (**S**).
- **Maternal and Child Health:** Among pregnant women in their first trimester (**P**), exposure to high air pollution (**E**) is associated with preterm birth (**O**) within the same pregnancy (**T**), estimated as an adjusted odds ratio from a population-based cohort study (**S**).

Assignment 1 Peer Feedback and TA Check-In

Small Group Work and Rotating 1-on-1

Peer Feedback on Assignment 1 Challenges

- Present PEOTS Elevator Pitch
- Identify existing challenges, and ask or provide peer feedback:
 - What is known about your exposure–outcome relationship?
 - What is the gap in the literature?
 - What study designs are you considering?
 - How does your study address the research gap?
 - What statistical estimand and analyses are most appropriate?
 - What are important confounders for your exposure–outcome relationship?
 - How do you plan to address confounding?