Job Announcement: Postdoctoral Associate/Data Analyst - LEGEND Hypertension Project

**Position:** Postdoctoral Associate/Data Analyst

**Organization:** Yale University, School of Medicine

Location: 195 Church Street, 5th floor, New Haven, CT, 06510

**Application Deadline:** Rolling basis

**About the Project:** 

We have recently secured R01 funding from the National Institute of Health to support a project aimed at generating Real-world Evidence to Inform Decisions for Hypertension

Treatment Escalation. With over 100 million US adults suffering from hypertension, a leading cause of mortality and morbidity, and 70% unable to achieve adequate blood pressure control with monotherapy alone, this project is pivotal. Despite clinical practice guidelines advocating for the initiation of therapy with two drugs, more than 50% of hypertensive individuals currently receive single medication treatment. For these patients, guidelines suggest adding a second antihypertensive drug for treatment escalation. The lack of head-to-head comparisons in randomized controlled trials (RCTs) has hindered guideline recommendations. Our long-term objective is to produce real-world evidence to guide RCTs for hypertension treatment escalation and to provide high-quality non-randomized evidence for guideline recommendations. The primary aim of this project is to ascertain the comparative effectiveness and safety of second antihypertensive agents added to monotherapy in hypertension patients. Building upon the existing LEGEND Hypertension study, this project extends its focus to treatment escalation.

#### Job Description:

We are seeking a talented and dedicated Postdoctoral Associate/Data Analyst to join our dynamic team. In this role, you will play a pivotal part in advancing our mission of improving health outcomes through data-driven research. You will have the opportunity to work with diverse healthcare datasets, develop innovative analytical methods, and collaborate with experts in the field.

The Postdoctoral Associate/Data Analyst should possess significant experience in R and Rstudio, with specific expertise in database management using PostgreSQL—critical requirements within the OHDSI network. Your responsibilities will include assisting the Principal Investigator (Dr. Yuan Lu from Yale University) and Co-Investigator (Drs. Marc Suchard from UCLA) in creating the analytic tool stack and performing related analyses.

## **Key Responsibilities:**

- Collaborate with multidisciplinary teams to design and execute data analysis projects.
- Develop and implement statistical and machine learning models for healthcare data.
- Perform data extraction and preprocessing tasks to prepare datasets for analysis.
- Conduct exploratory data analysis and visualization to extract insights from healthcare data.
- Assist in the development and maintenance of OHDSI's open-source tools and resources.
- Communicate findings and insights through reports, presentations, and publications.
- Stay up-to-date with the latest advancements in data science and healthcare informatics.

#### **Qualifications:**

- Master's or Ph.D. in a relevant field (e.g., Data Science, Health Informatics, Statistics, Biostatistics, Epidemiology).
- Strong programming skills in languages such as R or Python.
- Proficiency in SQL for data manipulation and querying.
- Experience with healthcare data and electronic health records (EHR) is advantageous.
- Knowledge of open-source healthcare data standards, such as OMOP (Observational Medical Outcomes Partnership), is desirable.
- Exceptional problem-solving skills and the ability to work both independently and collaboratively.
- Effective communication skills to convey complex findings to non-technical stakeholders.

• Dedication to OHDSI's mission of open science and collaborative research.

# **How to Apply:**

Interested candidates are invited to submit their applications, including a cover letter and resume, to [email address] (<u>y.lu@yale.edu</u>). Please use "Postdoctoral Associate/Data Analyst Application - LEGEND" as the subject line.

### **Benefits:**

Yale School of Medicine offers competitive compensation packages, a flexible work environment, and opportunities for professional growth within a collaborative and innovative research community.

Join our team and contribute to improving healthcare worldwide through the power of data science and informatics!

Yale University is an equal opportunity employer and welcomes applicants from all backgrounds to apply.