Brigham and Women's Hospital
Founding Member, Mass General Brigham

Division of Pharmacoepidemiology and Pharmacoeconomics
Department of Medicine
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Research Fellow – Medical Informatics

Research Fellow Medical Informatics/ Day/ 40 Hrs Pharmacoepidemiology & Pharmacoeconomics, DOM

GENERAL SUMMARY/ OVERVIEW STATEMENT:

The Division of Pharmacoepidemiology and Pharmacoeconomics of the Department of Medicine, Brigham and Women's Hospital and Harvard Medical School is accepting applications for one postdoctoral fellow in medical informatics. The Division is a 100- member interdisciplinary research center that brings together the various specialties of medicine, epidemiology, informatics, biostatistics, health services research, and regulatory sciences to evaluate the safety and effectiveness of prescription drugs in clinical practice; to study how medications are prescribed and used; to develop methods to optimize prescription drug use; to understand how medicines are approved and regulated after their marketing. The Division houses the FDA Sentinel Innovation Center with a rapidly growing data asset that links electronic health records (EHR) + insurance claims data for multi-million patients.

We are seeking one self-motivated, diligent, and independent fellows to work with Division faculty in medical informatics. The overarching objective is to answer high-impact questions to inform clinical decision-making on the comparative effectiveness and safety of medications, by analyzing large scale EHR linked with insurance claims data using cutting-edge artificial intelligence and informatics techniques. The fellows will collaborate closely with Division faculty who are leaders in the field of medical informatics. A fellow working in this area will aim to improve estimation of causal treatment effects by making increasing use of unstructured and semi-structured data from EHR and insurance claims. The ideal candidate would be a team player and have a doctoral degree in natural language processing, feature engineering, artificial intelligence, or medical informatics.

Fellows will have an appointment at Harvard Medical School, receive close mentorship from faculty members in the Division and on the Harvard Medical Campus, and engage in one or more projects intended to advance their careers in *medical informatics or artificial intelligence in healthcare*. Fellows will be highly encouraged to publish the results of their research during the appointment period. This opportunity is suited to individuals who are both independently motivated and collaborative and who thrive in a vibrant research environment working as part of a large team of experienced faculty and staff. Fellows must be comfortable giving and receiving feedback and integrating this feedback into their work. Fellows must enjoy recognizing the ideas and contributions of their colleagues and be comfortable being transparent in their work and decision-making. Please see Division website for more information on faculty and research topics: http://www.drugepi.org.

PRINCIPAL DUTIES AND RESPONSIBILITIES:

The duties and responsibilities will vary depending on the specific topic area in which the fellow works, but will generally include:
1. Researching, developing, designing, executing, and interpreting medical informatics studies in the specific topic areas.
2. Collaborating with clinical colleagues on applied informatic techniques.
3. Investigating, creating, and applying new artificial intelligence or medical informatics algorithms for research advancement in the specified topic areas.
4. Developing automated informatics systems and pipelines for medical processes and visualizing analytic results.
5. Contributing to the scientific literature by way of reports, journals articles, and presentations.

QUALIFICATIONS:

Applications are invited from researchers with doctoral degrees (PhD/ScD/DrPH, MD, PharmD, or equivalent) and strong research and publication records in natural language processing, feature engineering, artificial intelligence, and medical informatics. Candidates are expected to have experience of developing artificial intelligence models with statistical machine learning and cutting-edge deep learning algorithms (e.g. Transformers, Large Language Models). Experience of analyzing healthcare data (e.g., claims, EHR) or causal inference research are desirable, but not required.

SKILLS/ABILITIES/COMPETENCIES:

- Outstanding team player.
- Strong programing skills and experience of artificial intelligence model development.
- Strong research design and analytical skills.
- Meticulous in all aspects of their work.
- Excellent time management and organizational skills.
- Ability to thrive in a dynamic environment and to adapt to shifting priorities, demands, and timelines.
- Strong written and oral communication skills.
- A willingness to learn new methods and tools relevant to their research is a must.

WORKING CONDITIONS:

Hybrid with in-person and remote activities in compliance with the facility and MA government guidelines

TO APPLY:

If interested, please send your CV and cover letter to Lewis Seton at:
lseton@bwh.harvard.edu .

EEO Statement:
BWH is an Affirmative Action Employer. By embracing diverse skills, perspectives and ideas, we choose to lead. All qualified applicants will receive consideration for employment without regard to race, color, religious creed, national origin, sex, age, gender identity, disability, sexual orientation, military service, genetic information, and/or other status protected under law. We will ensure that all individuals with a disability are provided a reasonable accommodation to participate in the job application or interview process, to perform essential job functions, and to receive other benefits and privileges of employment.

Primary Location: MA-Boston-BWH Boston Main Campus
Work Locations: BWH Boston Main Campus 75 Francis St Boston 02115 **Job:** Research - Other
Organization: Brigham & Women's Hospital(BWH)
Schedule: Full-time
Standard Hours: 40
Shift: Day Job
Posted Shift Description: Day / 40 hrs
Employee Status: Regular
Recruiting Department: BWH Department Of Medicine /Pharmocoepidemiology

Employment at a Mass General Brigham System ("MGB") affiliate is contingent upon:
- United States Citizenship and Immigration Services rules concerning identity and right to work in the United States
- Multi-state criminal background checks
- Pre-employment health and drug screening and annual compliance with the Influenza Vaccination Policy