Research Associate at Harvard/MGH - 2022

SUMMARY:

MJ LAB (<u>mi-lab.mgh.harvard.edu</u>) seeks research associates to join two newly funded projects funded by the U.S. FDA and CDC. Working in an interdisciplinary research group, the Research Associate will directly report to the Principal Investigator (Dr. Jalali) and work with multiple investigators located primarily in Massachusetts and South Dakota.

The broad aim of these projects is to develop <u>system dynamics simulation models</u> to understand factors contributing to, and to develop interventions for, stimulant (methamphetamine and/or cocaine) misuse, use disorder, and/or overdose, either alone or in combination with opioid use (i.e., polysubstance use). One project in particular is focused on identifying and intervening on the factors contributing to disproportionate overdose deaths occurring in minoritized populations who are subject to structural racism, including Native Americans (in South Dakota) and Black and Latinx individuals. These projects will involve building on an existing model as well as developing new models with community partners in Massachusetts and South Dakota.

This is a one-year position, with the expectation of renewal for a second year upon mutual consent. The RA will work with the ITA team, including Dr. Jalali as well as postdoctoral fellows and other research associates, to develop these models. This position is best for individuals interested in building their research portfolio, especially those planning to apply for PhD/MD programs in the future.

PRINCIPAL DUTIES & RESPONSIBILITIES:

Anticipated responsibilities include:

- Forming collaborative relationships with community partners who provide services to individuals who use stimulants, and with local, state, and federal policymakers who develop policy involving stimulants
- 2) Conducting a combination of virtual and/or in-person interviews and group model building workshops for the purposes of developing a system dynamics simulation model
- 3) Developing simulating system dynamics models
- 4) Providing support in generating parameter inputs for the simulation model
- 5) Statistical analysis of various substance use-related datasets as well as data visualization
- 6) Scientific manuscript preparation and writing
- Providing support for developing and updating the project website and disseminating the results
- 8) Composition of presentations & presentation of the results
- 9) Documenting the workflow and data analysis procedure

Creative thinking, ability to work independently, a willingness to learn new software and skills, and the ability to handle multiple tasks are expected. Priority goes to highly motivated and organized individuals, committed to doing impactful research, with great attention to detail.

SKILLS & COMPETENCIES REQUIRED:

Area 1:

Familiarity with at least one of these subjects is required:

- participatory methods for developing system dynamics models
- developing system dynamics simulating models
- o Area 2:

Familiarity with at least one of these subjects is preferred:

- opioid and/or stimulant use
- health and social services provision and policymaking in US context

Other requirements:

- Ability to develop strong collaborative relationships
- Excellent writing skills for contributing to article and grant writing
- · Strong work ethic and excellent organization skills

EDUCATION:

Minimum Required: Bachelor's degree

Preferred: Master's degree

FIELD OF STUDY:

Public health, epidemiology, mathematics, biostatistics, social sciences, systems engineering, and other similar fields.

EXPERIENCE:

Zero to two years of research or work experience

WORKING CONDITIONS:

Candidates will work closely with the supervisor and the team of postdocs, RAs, and interns in a collaborative, productive, and friendly research environment. The lab is located at MGH Institute for Technology Assessment: 101 Merrimac St, Boston, MA 02114; however, due to the ongoing COVID-19 pandemic, remote collaborations are considered.

HOW TO APPLY:

Send your CV and a cover letter to Dr. Mohammad Jalali ('MJ'): msjalali@mgh.harvard.edu, (subject line: Research Associate). Feel free to ask any questions.

DEADLINE:

Applicants are recommended to submit their applications as soon as possible.