Job Announcement (October 2021)
Research Associate

Overview

Berkeley Air Monitoring Group is seeking a Research Associate to join our small, dynamic company for a 1-year period of time, with the possibility of extension. The ideal person for this position is a recent M.S. graduate who has a strong interest in the science of household energy transitions in regions where people are reliant on biomass and other polluting fuels -- health, climate change, and gender and economic outcomes -- and is looking to gain in-depth experience in research, monitoring, evaluation, instrumentation, and data analysis. The position is somewhat flexible and could be based in our offices in Berkeley, California and/or Fort Collins, Colorado.

About Berkeley Air and Our Mission

Berkeley Air Monitoring Group, Inc. (www.berkeleyair.com) is a small technical consulting firm located in Berkeley, California, and Fort Collins, Colorado, founded in 2008, and incubated at the University of California, Berkeley. We work to mitigate the many problems associated with the use of dirty solid fuels for cooking, heating, and lighting, where electricity and gas are unavailable or unaffordable. Millions of people die prematurely each year as a result of exposure to air pollution, one of the world's largest environmental health risks. With nearly 40% of households worldwide still using solid fuels for their cooking, the health impacts of this air pollution are especially problematic in lower- and middle-income countries. Similarly, household economics and gender dynamics are affected by the lack of affordable access to clean cooking options. Lastly, the unsustainable harvesting and inefficient burning of biomass fuels contributes substantially to climate change.

Our vision is the widespread adoption of cleaner and more efficient household energy solutions for global health, gender, and climate benefits. To this end, our company provides scientifically based testing, monitoring, and evaluation of household energy technologies and fuels for a range of domestic and international clients in both the public and private sectors. We also sell monitoring instrumentation, including sensors for air pollution and stove use.

Key Responsibilities and Tasks

Fieldwork
- Coordinating with domestic and international field teams and arranging associated logistics

- Training field staff on data collection protocols, including use of equipment and survey forms, for household air pollution, personal exposure, climate, stove use, fuel use, and gender impacts (in-person and remote)
- Operating and maintaining field instrumentation
- Creating and maintaining project equipment inventories (AssetTiger)
- Preparing data collection tools for use in mobile platforms such as ODK

Lab work
- Air pollution instrumentation calibration
- Post-sale instrument customer service

Data Processing, Management, and Analysis

- Coding scripts for collecting, cleaning, and processing field data (Excel, ODK Central, ODK Collect, Mobenzi)
- Compiling and organizing data-sets
- Conducting analysis of data sets including summary tables, regression modeling, power calculations, and tests of statistical significance
    - Quantitative analysis in Excel, R, Geocene Studies
    - Qualitative analysis in NVivo 12

Technical Communications
- Writing and editing reports, manuscripts, proposals, presentations, and training materials
- Presentation of results at conferences and meetings

Miscellaneous
- Desk research (including use of Zotero)
- Maintain database of proposals and other business opportunities
- Assist with ordering and management of equipment and supplies
- Intern management

Essential Professional Skills and Experience
- Background knowledge in household energy, including air quality, climate, gender, and economic outcomes
- Experience working in lower- and middle-income countries
- Measurement of ambient/area air quality, personal exposure, and/or source emissions
- Comfortable with scientific instrumentation and environmental sensors
- Qualitative and quantitative data analysis skills, including familiarity with analysis software
- Experience with statistical software such as R, MATLAB, Python, etc.

- Report, manuscript, and proposal writing
- Ability to work well independently and in groups, both remotely and, when possible, in a small office.
- M.S. in a related field or B.S. plus several years of related work experience

Desired Professional Skills and Experience

One or more of the following skills/experiences, although not essential, are desirable:

- Proficiency in non-English language(s) very helpful (particularly Spanish)
- Biostatistics
- Presenting results at conferences and meetings
- Ability/interest in training and mentoring others

Hours, compensation, and start date

This is a full-time position ranging from 30-40 hours per week, with flexible hours and working location. It is expected to be a 1-year position, with the possibility of extension. The expected salary range is $45,000 to $60,000, commensurate with experience. Benefits include TriNet-managed medical/vision/dental insurance, paid holidays and vacation, and sick leave and a company-sponsored retirement plan. Our Berkeley and Fort Collins office environments are casual and collaborative.

We would like to fill this position as soon as possible.

How to Apply

Please email a cover letter and CV/resume to jobs@berkeleyair.com with "Research Associate position" in the subject field.

(No phone calls, please)