



Elevating
frontline
epidemiology

OPEN-SOURCE ANALYTICS:
TOOLS, TRAINING, AND SUPPORT

A NONPROFIT ORGANIZATION

WWW.APPLIEDEPI.ORG
CONTACT@APPLIEDEPI.ORG

R INSTRUCTOR ROSTER

OPEN RECRUITMENT

Applied Epi seeks applicants with R expertise and public health experience to join its roster of part-time R instructors that deliver training worldwide. Applications will be reviewed on a rolling basis.

ABOUT APPLIED EPI

Applied Epi is a nonprofit organization helping the frontline public health workforce achieve advanced, versatile, and cost-effective analytics capabilities.

Frontline practitioners and R experts

Our team includes 150 experts in 35 countries around the world. We know the challenges of ground-level public health practice and are passionate about accelerating the adoption of free, open-source, analytical software like R.

Leading public health's transition to R

Applied Epi's [Epidemiologist R Handbook](#) has become the foundational R training resource in public health. The "Epi R Handbook" has helped 130,000 people learn R (35,000 in LMICs) and has been adopted at field levels by organizations such as Doctors without Borders (MSF), the WHO, the US CDC, local health agencies, and Field Epidemiology Training Programs (FETPs). It is being translated into 10 languages, and was praised as "an open-source unicorn" by [Github](#).

R training campaign

Applied Epi has launched a worldwide campaign of live R training courses. Partnered with major global health actors, we plan to reach thousands of ground-level practitioners in the coming years.

IMPACT AND OPPORTUNITIES

Our instructors are leading the movement to transition public health to R analytics. This position affords a unique opportunity to have transformative impact across many ground-level organizations.

Audiences for Applied Epi's R courses include local and national public health agencies, FETPs, NGOs such as MSF, UN agencies, university audiences, and medical researchers.

Instructors may be offered opportunities to deliver remote training, to travel worldwide, to teach courses for audiences in their home region, to receive advanced R training, and to network with prominent global health agencies.

RESPONSIBILITIES

Roles

Instructors are offered either Lead or Assistant roles for a given course depending on their qualifications and course needs.

Delivering courses

Please review [this document](#) that describes our R courses. Lead instructors are generally responsible for course organization, delivering didactic content, code demonstrations, and offering expert code troubleshooting. Assistant instructors are generally responsible for leading break-out sessions and supporting the Lead instructor.

Instructors receive paid time to become familiar with the course materials, and can advise on revision of curricula. Instructors also conduct follow-up group support sessions with participants in the weeks and months following each course, to help them apply their R skills to their work context. If instruction is conducted in an extended format over several months, instructors answer student questions in our online Q&A forum between sessions.

Other opportunities

Separate opportunities will likely be offered to modify or develop new course materials.

Time commitment

We will have a conversation with you about what contributions are possible given your other responsibilities. Some examples:

- You arrange with your full-time employment to teach with us 1-2 weeks per year
- You are a freelancer who teaches with us for 1 week each month
- You are a specialist (e.g. in GIS) who teaches advanced courses a few days each year





ELIGIBILITY

Competitive candidates for general R instructor roles will have the competencies listed below. Instructors wishing to only teach specialized courses (e.g. GIS, Github, advanced statistics, etc.) should express this in their cover letter and may not need all of the below competencies.

Some candidates may be provisionally accepted to the roster as trainees until they obtain the skills required for assistant instructor status.

Technical R Skills

Required

- High competency using R for data management and analysis, particularly in the tidyverse, with clear and concise coding style
- Experience using R Markdown to create routine reports and dashboards (e.g. situation reports, surveillance reports, flexdashboards)

Desirable

- Experience using R geospatial packages to create descriptive and action-oriented maps and perform simple geospatial analyses
- Experience using Github for collaboration and version control
- Experience using Shiny to make informative dashboards
- Experience using SQL and knowledge of R interface with SQL
- Familiarity with field data collection tools such as RedCap, KoBo, ODK

Professional Experience

Desirable

- Professional experience applying R in applied epidemiology, such as for government health agencies or operational NGOs (relevant activities could include responding to outbreaks or other health emergencies, conducting operational research, conducting/analyzing surveys, and collecting/analyzing surveillance data)
- Experience teaching or mentoring others in R; ability to clearly and patiently teach and coach
- Ability to teach in English and other languages

Other

Required

- Availability to support either full-day, week-long, or extended-format courses delivered in smaller time-units over several months
- Commitment to advancing open data, open-source tools, accessible training, and to supporting R beginners in a variety of contexts

Desirable

- Willingness and ability to travel internationally



COMPENSATION

Instructors are part-time contractors and are responsible for their own tax obligations. We encourage candidates to confirm their legal eligibility to work for Applied Epi (e.g. if residing with student visas). If your full-time employment or residency status do not permit you concurrent paid employment, volunteering may be possible. Current instructor pay rates (subject to change):

Introductory courses: Lead instructors are paid US\$45/hour (\$2500 for a standard 5-day course) and Assistant instructors are paid US\$35/hour (\$1660 for a 5-day course).

Advanced courses: Lead instructors are paid US\$60/hour.

Candidates provisionally accepted to the roster as trainees will be offered a lower pay rate until they obtain the skills required for assistant instructor status.

RECRUITMENT PROCESS

Please submit the following application materials to staffing@appliedepi.org.

- **Cover letter** (1 page)
 - Please describe your qualifications and motivations for joining our instructor team, any specific roles you would like to be considered for (e.g. Intro courses only, certain specialized courses only), languages with fluency or working knowledge, country/time zone of residence, anticipated availability, and willingness to travel to conduct in-person training.
 - If you do not have applied epidemiology experience but do have other relevant expertise (e.g. PhD student or post-doc), describe how you expect to translate your skills to address challenges facing applied epidemiologists and public health practitioners.
- **Resume** (1-2 pages)
- **R code sample** (one of the following)
 - Attach an R or R Markdown script that you wrote and its related outputs (e.g. PNG, PDF, HTML) that demonstrate your technical skills, coding style, and application of R to solving challenges in public health or related practice. Please submit a code sample that reflects *your* skills (not a team effort). Please accompany this with a short (1 paragraph) description of your code and its purpose.
 - If you are unable to share a sample as described above, you may submit an R markdown script that uses [this fake COVID-19 linelist](#) to create a weekly outbreak situation report (maximum 2 page output) that addresses any topic or trend you deem relevant to inform an audience of local public health and medical responders.

Applied Epi is committed to recruiting a team that reflects the experiential, geographic, linguistic, and cultural breadth of the global public health workforce. All candidates will be emailed with their application outcome, with short-listed candidates invited to interview.