IHME is seeking to revolutionize the way we track diseases around the world by developing innovative geospatial analytic methods to produce increasingly granular estimates of diseases and determinants. Just a few of the diseases this revolutionary work will touch on are pneumonia and its etiologies, diarrhea and its pathogens, malaria, HIV/AIDS, tuberculosis, Ebola, as well as select neglected tropical diseases. Through the development and use of geospatial techniques to synthesize information at the local level, and in partnership with key collaborators around the world, IHME will present results in interactive high-resolution maps to illuminate levels, trends, and disparities in health outcomes.

IHME’s geospatial research will empower policymakers and donors to make optimal decisions about allocating funds and prioritizing interventions. In order to encourage use of this research, IHME will employ a variety of methods to make results available and encourage uptake. These approaches include developing and maintaining a web presence, as well as producing interactive tools and visualizations, conference presentations, scientific publications, and materials for non-scientific audiences. This position must develop an understanding of different research needs and analytic functions across multiple projects to best meet researcher needs.

IHME has an outstanding opportunity for a Data Analyst. The Data Analyst must be able to independently translate requests into actionable results through interactions with research databases, formulation of displays of results, and development of complex code to be applied to a variety of quantitative data. The position calls for dexterity working with complex databases and the ability to assess, transform, and utilize quantitative data using multiple coding languages (Stata, Python, R, SQL). The individual must then quality control results to ensure that other team members have exactly what they need to incorporate the data and results into their own components of the analytic process, presentations, and papers. This position will additional work alongside other Data Analysts on complementary projects and will require knowledge and skill sharing and collective problem solving. Overall, the Data Analyst will be a critical member of an agile, dynamic research team. This position is contingent on project funding availability.

**Responsibilities:**

**Research command**

- Become familiar with substantive areas of expertise to understand the dimensions and uses of health data in the Geospatial Analysis portfolio.
- Work directly with researchers to identify the source of data used in models and results, understand the context of the data, and ensure that they are relevant to the analyses themselves.
- Work directly with researchers to explain and modify databases and routine analytic processes to best serve the needs of evolving projects.
- Create and document efficient, effective, and replicable methods for extracting data, developing code, organizing data sources, managing data quality, and explaining complex analytic processes.

**Data management and analytic processes**

- Problem-solve computational and analytic challenges by investigating the data, understanding the root questions, and coming up with alternative measurement strategies.
• Develop creative code solutions to test and assess new methods.
• Maintain, update, and interact with databases containing health data from multiple sources.
• Execute queries and prepare summaries of data searches, extractions, and transformations.
• Perform quality assurance and routine diagnostics on data and databases.
• Develop, document, and maintain code in multiple languages as needed to clean, merge, aggregate, manipulate, and format datasets.
• Using standardized protocols, identify problems with datasets, rectify issues, and systematize data for future analysis.
• Create, maintain, update, and execute analytic processes that apply cutting-edge quantitative methods to data in order to produce results that are central to different components of the Geospatial Analysis portfolio.
• Ensure results are consistent with the data.
• Extract, format, and transform data from multiple sources according to set protocols in consultation with researchers to best meet their needs. Sources include surveys, censuses, administrative records, vital registration systems, and disease registries, among others.
• Develop novel solutions to the problem of comparing highly different quantitative datasets.
• Archive, catalogue, and annotate datasets according to Institute standards to build a common library of materials for use by a wide set of researchers.
• Create new code functions to add to a common code library to make commonly needed tasks more efficient.

Publications, presentations, and data requests

• Create text, tables, figures, and charts for presentations and publications.
• Provide referencing and other support for publications and presentations.
• Create new ways to view the data and illuminate stories in the results.
• Execute queries on databases to respond to the needs of senior researchers and external requests from collaborators, media, policymakers, donors, and other stakeholders.
• Assess available results and determine how best to marshal and sometimes modify them to address requests that do not strictly match to available data.

General

• Communicate clearly and effectively while contributing as a productive member of the Geospatial Analysis team and the Institute as a whole. Work closely with other team members to help them with relevant tasks, show them how to learn new skills, and help resolve emerging problems on different projects. Attend relevant meetings, adhere to deadlines, and participate as a vital member to collectively advance team-level objectives.
• Work with data visualization developers, data indexers, and other staff as needed to support the needs of the project.
• Participate in overall community of the Institute, carrying out duties as required as team members with other Institute members.
• Participate in and/or lead internal trainings to share knowledge and ensure consistency across the Institute.

Minimum qualifications:
Bachelor’s degree in social sciences, mathematics/statistics, sciences, engineering, computer science, or related field plus two years’ experience, or equivalent combination of education and experience.

- Demonstrated success in developing code in R, Python, Stata, SQL, or other coding language.
- Demonstrated facility with analytic tasks and ability to participate productively in interdisciplinary research teams.
- Strong quantitative aptitude, desire to learn new skills and information, and ability to interpret complex analytic quantitative information.
- Strong sense of focus and attention to detail.
- Interest in global health research.
- Demonstrated organizational skills, self-motivation, flexibility, strong communication skills, and the ability to thrive in a fast-paced, energetic, highly creative, entrepreneurial environment.
- Experience writing novel code to handle complex analytic tasks optimal.

Conditions of employment: Evening and weekend work may be required.

Further Information: See IHME’s website: [www.healthdata.org](http://www.healthdata.org)

To Apply: Please apply through the [UW Hires Website](https://uwhires.admin.washington.edu/eng/candidates/default.cfm?szCategory=jobprofile&szOrderID=131600&szCandidateID=0&szSearchWords=&szReturnToSearch=1)