

JOB OFFER

Lead Data Manager / Data Scientist



Laboratory for intelligent
Global Health & Humanitarian
Technologies

EPFL

■ School of Computer
and Communication
Sciences



HARVARD
T.H. CHAN
SCHOOL OF PUBLIC HEALTH

Position

Lead Data Manager / Data Scientist

Percentage & Contract

100% - Fixed term, full-time, 1 year with possible extension

Location

Lausanne, Switzerland (EPFL) or Boston, USA (Harvard/ Ariadne Labs)

Start Date

ASAP (published November 1st, 2025)

Application

Apply via the following link:

<http://www.light-laboratory.org/joinus>



About LiGHT

The Laboratory for Intelligent Global Health and Humanitarian Response Technologies (LiGHT) is an impact-driven research group creating novel AI tools specifically adapted to limited-resource and volatile global health settings and bringing them to scaled, locally owned implementation.

LiGHT is jointly hosted at:

- Harvard T.H. Chan School of Public Health & Ariadne Labs – Ariadne Labs is a world-leading center for implementation science and innovation in health systems, co-hosted by Harvard T.H. Chan School of Public Health and Brigham and Women's Hospital in Boston.
- Swiss Institute of Technology (EPFL “École Polytechnique Fédérale de Lausanne”) – In the top 10 computer science institutions globally, EPFL is a deeply international hub for technical excellence in AI.

Our mission is to develop safe, scalable, and context-aware digital health tools. We work with international NGOs such as WHO, MSF, ICRC, and national ministries of health to design, create, validate and deploy trustworthy AI in real-world healthcare systems—especially in settings where clinical resources are limited and stakes are high.

About the Role

We are seeking a Lead Data Manager / Data Scientist to build, lead, and oversee all data management and data science activities at LiGHT. This is a unique opportunity to shape the lab's data architecture, pipelines, and governance from the ground up, supporting major AI-for-health initiatives and complex multinational clinical trials.



Your Responsibilities

Strategic Leadership & Governance

- Lead and oversee all Data Management (DM) activities across LiGHT's research portfolio, including complex multicountry clinical trials in Africa and AI-based health innovation projects.
- Develop, implement, and continuously refine the LiGHT Data Management and Data Governance framework, integrated within the EPFL ecosystem and compliant with GCP, GDPR, DPDP (India) and relevant data protection regulations.
- Act as the focal point and accountable lead for all data management and compliance-related matters in LiGHT's role as Sponsor or Coordinating Centre within international consortia.
- Develop and maintain all SOPs, work instructions, templates, and forms related to data management, biostatistics, and data governance.

Data Architecture & Infrastructure

- Design, implement, and maintain secure, scalable data architectures for clinical and AI research projects, including EDC systems, data lakes, and integration pipelines.
- Oversee the design & integration of eCDS solutions and ensure interoperability across databases, AI model repositories, and analytics environments.
- Liaise with EPFL IT and research data offices to ensure alignment with institutional standards and data security policies.

Data Science & AI Integration

- Lead the development of data pipelines for AI model training, validation, and deployment, including data curation, annotation, quality assurance, and metadata governance.
 - Develop data-driven dashboards, monitoring systems, and automated pipelines for data analysis and visualization.
 - Support the development of AI-ready datasets, ensuring proper data provenance, consent tracking, and harmonization across sites.
 - Work closely with data scientists and engineers on machine learning model governance, versioning, and reproducibility.
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Operational Oversight & Mentorship

- Coordinate and supervise contractual data managers, data scientists, and external CROs or IT partners, ensuring timely and high-quality deliverables.
- Develop and maintain contractual and quality oversight mechanisms, including vendor assessment and performance tracking.
- Mentor students, junior researchers, and collaborators in data management, reproducible research, and ethical data practices.
- Support scientific reporting, donor communications, and publications based on LiGHT datasets.

Partnerships & Innovation

- Explore and establish strategic collaborations with external partners in academia, industry, and global health to strengthen LiGHT's data science ecosystem.
- Stay abreast of emerging trends in AI, data standards (e.g., CDISC), FAIR data principles, and federated learning for global health research.

Required Skills

- PhD (preferred) or Master's degree in data science, computer science, biomedical informatics, or a related quantitative field
 - Minimum 5 years of experience in data management, data engineering, or applied data science, including leadership in global health or clinical research.
 - Demonstrated experience managing distributed data workflows in LMIC and multi-institutional research environments.
 - Proven proficiency in all aspects of clinical data management, including database setup, CRF design, edit check programming, data validation, query management, SAE reconciliation, coding, data review, and database lock.
 - Experience establishing and maintaining Data Quality Management Systems (QMS) for research environments.
 - Proven experience managing data management subcontracts and oversight of external vendors or CROs.
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- Strong understanding of data versioning, lineage tracking, and reproducibility standards, including Git-based workflows and CI/CD integration.
- Proficiency in Python
- Familiarity with CDISC, GxP standards, and international research data compliance with a strong foundation in data security and compliance, including GDPR and emerging frameworks like India's DPDP Act (2023).
- Demonstrated contribution to open-source or FAIR-compliant data infrastructure projects.

Preferred Skills

- Familiarity with medical LLM applications or clinical decision support systems
- Experience with safety-critical evaluation protocols (e.g., benchmark leakage detection, hallucination profiling, audit trails)
- Deep interest in equity-centered deployment and global health implications of LLMs
- Experience with federated learning, synthetic data generation, or privacy-preserving AI.
- Familiarity with cloud environments (AWS, GCP, Azure) and HPC orchestration.
- Exposure to real-world evidence generation or digital health analytics in LMIC settings.

What We Value

At LiGHT, we cultivate a working culture that is mission-driven, ambitious, and deeply human. Our values guide how we build, how we collaborate, and how we hold ourselves accountable in high-stakes environments.

What We Offer

- The opportunity to shape real-world deployments with international organizations and teams
 - Close collaboration with extraordinary researchers
 - Travel opportunities, community, and impact at global scale
 - Competitive salary and benefits, commensurate with experience
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The 11 Guiding LiGHTs

- 1. Curious Creativity.** We value bold exploration and context driven innovation, blending imagination with technical precision to solve real-world problems with novel solutions.
- 2. Radical Ambition.** We believe that how we spend our time can shape global equity. We pursue work that matters with intensity, excellence, urgency, and endurance.
- 3. Autonomous Mission-Driven Collaboration.** In the spirit of ubuntu (“I am because we are”), we value initiative grounded in shared responsibility. Everyone leads, and everyone contributes.
- 4. Modular Rigor.** We move quickly within a flexible structure of organization that supports iteration, enabling disciplined work in dynamic settings.
- 5. Generous Honesty.** We speak with clarity, evidence, and care. Feedback is direct, constructive, and rooted in shared purpose, respect, and a commitment to integrity.
- 6. Embracing Uncertainty.** We see ambiguity as opportunity. Continuous learning and responsive adaptation are part of our core process.
- 7. Lived Intelligence.** We curate extraordinary people leading full, interesting, adventurous lives, and believe that this diversity is the foundation of our creativity and collaborative strength.
- 8. Constructive Joy.** We value humour, warmth, connection, and a sense of play to build resilient teams capable of sustaining focus, care and a culture of passionate quality.
- 9. Grounded Perspective.** We work in close partnership with the communities we serve; originating from, travelling to, and embedding in the places where we co-design inclusive technologies rooted in local realities.
- 10. Impact During and With Research.** We integrate implementation into the research process—using academic rigor and resources to build tools that are not only publishable, but provably useful.
- 11. Principled Research.** We are guided by the humanitarian principles that have long anchored global health. As an academic institution, we operate with evidence, openness, and integrity—free from profit or political influence. We build knowledge into action, sharing both success and failure with humility and rigor.
 - **Humanity.** No one is too remote for innovation, or too underserved for dignity.
 - **Independence.** We act free from financial or political conflict, using academic freedom to advance knowledge in service of people, not agendas.
 - **Neutrality.** Our tools, partnerships, and research respond to need—not affiliation—and are applied with care across all contexts.
 - **Impartiality.** We focus on urgency and equity, directing our work where it's most needed—not where it's most visible.