

Background

The National Library of Medicine (NLM) is recruiting a Chief of the Applied Clinical Informatics Branch (ACIB) in the Lister Hill National Center for Biomedical Communications (LHNCBC). LHNCBC is a research and development organization within NIH that focuses on advancing the use of clinical (human) data for research by judicious application of data science, computational sciences, and biomedical informatics to support cutting-edge biomedical research. In 1968, Congress established LHNCBC to further biomedicine through innovations in computer and digital communications technology, data science research, and computer applications development.

The evolution of LHNCBC resulted in operations around three key themes: intramural research, research and development and related technology transfer, and scientific computing. LHNCBC is comprised of an Office of the Director and three branches, including ACIB, the Computational Health Research Branch (CHRB) which is directed by the Scientific Director under the NLM Intramural Research Program (IRP), and the Scientific Computing Branch.

The ACIB identifies and develops innovative solutions for complex biomedical informatics challenges related to the use of diverse forms of clinical data (such as electronic health record, imaging, and sensor data) that scale across institutional boundaries and applications; translates new research results into operational solutions that can be implemented in healthcare and research environments; explores and improves upon emerging solutions in the use of clinical data, including standards for terminology and data communications; collaborates with other entities within NIH and HHS agencies to develop data science solutions to address issues of mutual interest; and participates in interdisciplinary, cross-divisional collaborations and projects where appropriate. A new vision was recently established for ACIB: *To leverage clinical datasets to support discovery and enable the development of tools and resources that improve clinical decisions and outcomes.*

Job Summary

The Chief, ACIB, is responsible for setting the overall direction and adherence to the Branch's new vision to devise approaches to strengthen clinical data and improve its value to the research enterprise. The Chief, ACIB is responsible for overall program development, program evaluation, policy formulation, and strategic direction of ACIB activities. The Branch Chief serves in a key leadership role in overseeing a diverse scientific and technical workforce of Federal staff and contractors.

Specifically, the Branch Chief is responsible for the following:

- Directing all ACIB's operations, programs, and staff by utilizing:
 - Reorganization and modernization of the technology product development activities, and assessment of processes supporting them within ACIB.

- Biomedical research and product assessment methodologies in healthcare, to support improvement in clinical workflows, health information exchange, electronic health records, health data standards, and associated regulatory requirements.
- Developing assessment criteria for reviewing ACIB projects to continue, deciding new areas to pursue, and providing oversight to the expanding portfolio of new and continuing projects within ACIB.
- Standing up and implementing the Center for Clinical Observational Investigations (CCOI) which will provide profiles and characterizations as well as product assessments about clinical datasets, and proxy access to support observational research and provide informatics and statistics support. This will help to lower the barrier for adoption of research based on observational data across NIH and making it possible to efficiently test hypotheses arising from basic and pre-clinical research on “real” clinical data.
- Conducting product assessment reviews to determine the quality of clinical datasets for possible inclusion into the CCOI and assess software products to be used in the CCOI for developing dataset profiles and data characterizations, and data science tools related to datasets assessed by CCOI staff.
- Overseeing the implementation of a strategic vision for the branch, including identifying products, emerging trends, innovative approaches, and research opportunities in applied clinical informatics.
- Coordination and assessment of research technology and product transitions to real-world production environments. Facilitating the transfer of research activities to development of products aimed at improving health and health care through methodological advances in clinical informatics from the CHRB to production within the ACIB in close collaboration with the LHNCBC Director and NLM Scientific Director.
- Leading the day-to-day operations of ACIB as well as supervisory duties such as mentoring staff, managing the budget, conducting staff performance evaluations, and reviewing and approving purchases, manuscripts, staff training, staff leave, and purchase card activities. The Branch Chief will also oversee team leads making sure tasks are completed on time and accurately while also directing and managing their own projects/products.

Specific duties include:

- Overseeing a diverse staff and managing substantial resources for a research and development program. Specifically, this position will manage a budget and oversee a substantial staff in a range of Federal appointment authorities and contracts that have backgrounds in medicine, biomedical informatics, clinical informatics, imaging, computer science, data science, library and information sciences, linguistics, cognitive science, education, and engineering.
- Leading a highly technical multidisciplinary team tasked with curating clinical datasets through data standardization to facilitate useability, support discovery from clinical datasets by reducing barriers to access, provide analytics support, and enable the development of tools and resources that improve clinical decisions and outcomes.

- Applying outstanding and broad expertise in program administration, software development and deployment, and scientific computing as they relate to the fields of biomedical and clinical informatics. Responsibilities require experience in the full life cycle from research and development to production in the client/server and cloud environments.
- Serving as a senior technical leader who can collaborate across NLM, NIH, and the broader research community by providing expert advice and consultation on clinical and biomedical informatics.
- Designing and implementing programs that support applied research that aligns with the mission and priorities of NLM and NIH. Areas of applied research include the development of tools to facilitate access to large health databases to benefit research to improve clinical outcomes, the development and evaluation of computer algorithms for automated clinical data analysis, and data science research in biomedical imaging leveraging artificial intelligence and machine learning to support automated clinical decision-making.

Required Qualifications

To be eligible for this position, candidates must be a U.S. citizen, or U.S. National. Foreign nationals or legal permanent residents are not eligible for consideration. Candidates must indicate their U.S. citizenship status on their CV or within their email application submission.

In order to qualify for this position, candidates must possess either a doctoral-level degree in biomedicine or a biological related field, or a master's level or higher degree in:

- Engineering
- Bioinformatics
- Or an emerging or related scientific field.

In addition, candidates must have at least one year of experience related to the position, including achievements in one or more of the following areas to demonstrate the individual has received recognition as an expert in the field:

- Has significant experience dealing with complex, precedent-setting evaluation, scientific policies or development issues (e.g., those associated with novel biomedical products, novel approaches to biomedical product manufacturing, or use of novel evaluation methods)
- Demonstrated cutting-edge expertise in a scientific or technical discipline critical to design, development, manufacturing, clinical performance assessment, or technical aspects of effective oversight of biomedical products
- Played a leadership role in planning and conducting public meetings to seek public input and communicate regulatory scientific policies

- Received invitations to speak at or chair major national or international meetings and symposia or
- Meets other criteria demonstrating sufficient rigor or accomplishment in a relevant or closely related activity or field that is necessary to the accomplishment of NIH's mission.

If you are a current Federal Title 5 employee, you must have one year of equivalent experience at the GS-14 level or above.

How to Apply

Interested candidates should email a complete application package consisting of:

1. A cover letter including a description of experience and expertise;
2. Curriculum Vitae; and
3. Three letters of recommendation.

Applicant information should be sent to: NLM LHC Chief of the Applied Clinical Informatics Branch Search Committee at nlmlisterhillcenterjobs@mail.nih.gov.