What are the Newborn Screening Fellowship opportunities?

The Newborn Screening and Genetics team at APHL supports two Newborn Screening Fellowship opportunities:

- Newborn Screening Fellowship
- Newborn Screening Bioinformatics and Data Analytics Fellowship

What is the purpose of the Newborn Screening and Genetics Fellowship program?

This fellowship program is part of an effort to introduce various skilled graduates into the Newborn Screening Public health Laboratory as an opportunity for career growth in newborn screening public health laboratories and increasing workforce development.

What are the Newborn Screening and Genetics Fellowship Tracks?

The Newborn Screening Fellowship and Newborn Screening Bioinformatics and Data Analytics Fellowship tracks may be pursued by recent post-masters or post-doctoral graduate students of bioinformatics, human genetics, molecular biology, statistics, public health, and other related programs for placement in host labs to pursue various newborn screening related projects. The one-to-two year projects are proposed by the host lab and have ranged from new disorder implementation to validation of a new gene panel for next-generation sequencing and Sanger sequencing. Host labs may apply for the fellowship for consecutive years pending project proposal though an online portal. If the fellowship cycle has closed; APHL can review host lab applications on a project need basis.

The Newborn Screening Fellowship track includes bench-level work, cost-benefit analysis, short and long term follow up projects, new disorder implementation, and other relevant projects. Post-doctoral graduates who apply for the Newborn Screening Fellowship are designated as recipients of the prestigious Ronald Laessig Memorial Newborn Screening Fellowship.

The Newborn Screening Bioinformatics and Data Analytics Fellowship track has involved projects related to bioinformatics hardware implementation, development of custom gene panels and analysis for specific populations, development and validation of novel pipelines for second-tier testing, database development, in silico datasets creation, comparison of unsatisfactory to satisfactory specimens, and other relevant bioinformatics projects.

More information:

If you are interested, please take a look at our pages for prospective candidates and host lab instructions below:

Newborn Screening Fellowship
Newborn Screening Bioinformatics and Data Analytics Fellowship
Host Lab Instructions

APHL–CDC Newborn Screening Bioinformatics Fellowship Program

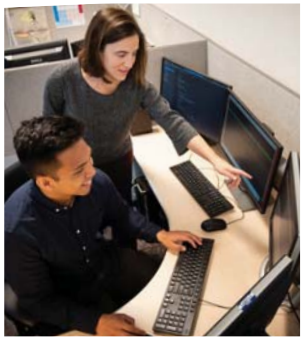
Jump start your career and make a difference in the lives of children and families!

The Association of Public Health Laboratories (APHL) - US Centers for Disease Control and Prevention (CDC) Newborn Screening Bioinformatics Fellowship is an exciting opportunity for post-masters and post-doctoral bioinformatics professionals to apply their skills in a public health setting.

The fellowship is a one- to two-year program that allows fellows to work on a range of important and emerging newborn screening bioinformatics issues, while gaining invaluable experience in the bioinformatics field. Fellows are paired with an experienced mentor in a state public health laboratory, who helps outline the fellow's research objectives and guides them through the program.

The fellowship includes a stipend, opportunities to participate in training, attend conferences and many other benefits.

Fellowship applications close Spring 2020.



What is newborn screening?

Before leaving the hospital, every newborn baby is screened for certain harmful or potentially fatal conditions that are not otherwise apparent at birth. Newborn screening helps identify and treat these conditions before the babies get sick, preventing serious health problems or even death. It is the largest and most successful health promotion and disease prevention system in the country. Most newborn screening occurs at a public health laboratory.

What are public health laboratories?

Public health laboratories are highly specialized governmental laboratories that monitor and detect a range of health threats, such as genetic disorders in newborns, infectious diseases, environmental hazards and biological terrorist agents and much more.

Why are newborn screening bioinformatics fellows needed?

As newborn screening laboratories increasingly integrate molecular detection technologies (i.e., next-generation sequencing) to better identify and improve treatment for newborns with heritable diseases, they produce large amounts of high-throughput data, but currently possess limited bioinformatics expertise and resources to adequately analyze it. The APHL-CDC Newborn Screening Bioinformatics Fellowship is specifically designed to address this unmet need by connecting newborn screening laboratories with recent graduates of bioinformatics programs.

Learn more about this and other APHL-CDC Fellowships

www.aphl.org/NBS-BIF
www.aphl.org/fellowships

Newborn Screening Fellowship

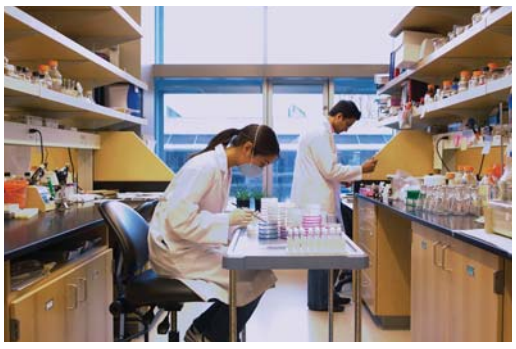
Jump start your career and make a difference in the lives of children and families!

The Newborn Screening Fellowship Program, sponsored by the Association of Public Health Laboratories (APHL) and the US Centers for Disease Control and Prevention (CDC), is an exciting opportunity for post-masters or post-doctoral scientists to apply their skills in a public health laboratory setting. Post-doctoral scientists are designated as Ronald Laessig Newborn Screening Fellowship recipients.

This two-year, full-time program allows fellows to work on a range of important and emerging newborn screening issues, preparing them for a career in newborn screening or clinical genetics. Fellows are paired with an experienced mentor in a state public health laboratory, who helps outline the fellow's research objectives and guides them through the program.

The fellowship includes a competitive stipend, opportunities to participate in training, at-tend conferences and many other benefits. Fellows will:

- Gain knowledge about routine newborn screening phases and processes
- Understand the newborn screening system
- Demonstrate competency within testing areas such as sample preparation, testing, resulting and reporting
- Review quality control of each assay
- Perform instrument maintenance and troubleshooting
- Draft validation proposals, develop quality assurance checks and maintenance procedures to monitor the performance of the method
- Experience short and long term follow-up management of patients with identified disorders
- Submit abstracts to relevant conferences and symposia
- Conduct research projects proposed by laboratory leadership



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Contact

Please direct questions to Hiral Desai at hiral.desai@aphl.org

Learn more about this and other APHL-CDC Fellowships

www.aphl.org/NBS-fellows
www.aphl.org/fellowships