Being a Laboratory Leadership Service Fellow at the NYC Public Health Laboratory

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APHL Annual Meeting 2018
Spotlight on Public Health Laboratory Fellowships: What Can a Fellow Do for Your Lab?
06/02/2018
Laboratory Leadership Service (LLS)

- CDC Fellowship
- Mirrored from the Epidemiologic Intelligence Service (EIS)
- Since 2015
- 2 years fellowship
- 6-8 fellows per year
- CDC-based fellows and field fellows (NYC and MN (2017), 2018: NH)
- Leadership training with focus on research, QM and biosafety.
NYC Public Health Laboratory

- In Manhattan
- Next to the biggest hospitals
- Around 150 employees
- Different units: Microbiology, Virology, Environmental but also Admin, QM, Safety.
- Specimens for diagnostics, surveillance and research.
- My assignment?
Projects

- Laboratory work
- Quality management
- Safety
- Management and leadership
- Research Project
- Service to the Agency
- Communication
Laboratory rotations

Public Health Laboratory

Microbiology
- Enterics
- STD
- Mycobacteriology
- Maldi-ToF
- AST
- HPLC

Virology
- Serology
- Viral culture
- Panther/pNAAT/Biofire/EasyMag
- Rabies
- HIV Phylogeny

Environmental
- Molecular Typing
- WGS
- Food/Legionella
- Water chemistry/microbiology
- LRN Unit
Quality management

- Reviewed, revised, implemented new and existing SOPs
- Participated in internal QM audit
- Validations and verifications
- Assessing an existing rt-PCR assay
Safety

- Risk assessment on DNA extraction for WGS
- Standardization of BSCs/PCR workstations SOPs for cleaning/decontamination and hands-on training.

Adventures in ETOR - New York City’s Journey Away from Paper Requisitions and Towards an Electronic Test Ordering System - Altaf Shaikh and Anna Liddicoat - Sunday 4:00-5:30pm
Management and leadership

- Weekly Director meetings and bi-weekly Division meetings
- Quarterly Performance Review and ELC applications feedback
- Postdoctoral Fellow interview
- Coordinating a laboratory *Legionella* project
Chelsea Sexual Health Clinic: from design to grand opening

- Lab space design and collaboration with architects and safety group.
- Interaction with vendor for procurement contracts and site assessment with admin team.
- Partnering with division of STI for workflow at clinic.
- Safety risk assessment with safety team.
- Developing a validation testing plan with QM.
- SOP development with QM.
- Medical records and LIS integration with LIS team.
- Laboratory scientist training
LMINDS: *Legionella* monitoring in NYC’s water distribution system

- Implementing DNA Extraction, PCR for 16S, 18S, ITS, library preparation and sequencing
- Method validation
- SOP development
- Obtained external funding through a startup for WGS
- Data analysis
- Publication
LabAid: Developing laboratory capacity testing

Developing lab capacity for *Legionella* detection and characterization

- **Remotely:**
  - Assessment using CDC developed toolkit
  - Tailored approach to HI needs and to implement 7 different assays
  - Prepared list of SOPs, supplies and schedule

- **On-site:**
  - Examined lab workflow
  - Preparedness exercise with sample collection/PCR/interpretation
  - Performed training on all assays with lab and stakeholders
  - Stakeholder meeting
LabAid: the other side of the story

- Developing lab capacity for rabies detection using rt-PCR at the NYC PHL
- Coordinating with CDC SME’s and NYC PHL rabies group to determine what the needs are:
  - Site assessment for workflow
  - Risk assessment
  - Implementation of the procedure
  - Inactivation
  - SOPs and jobaids
  - Training

Lab-Aid: A New Endeavor for CDC to Provide Field Laboratory Assistance to Public Health Laboratories
Poster – P37 – Dr. Aufra Araujo
Communication

- CDC-PHL liaison
- Participated in the inaugural TED-style talk session at the EIS conference
- Lay-audience communication
LLS Class of 2017:

- Many oral and poster presentations
- Conducted 15 risk assessments and wrote more than 20 SOPS/JobAids/training materials
- Serve on LIS/QMS/Biosafety committees
- 5 EpiAids from Pto Rico to US. Virgin Islands passing through Uganda, Bangladesh and Cameroon
- 2 LabAids and 2 EOC details
- Peer career group and “lunch with mentor” series

Come talk to us!
Acknowledgements

CDC
LLS Program

NYC PHL
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Scott Hughes, PhD

LLS 2017 Class

For more information, contact CDC
1-800-CDC-INFO (232-4636)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
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Training the next generation of laboratory leaders

LLS prepares high caliber scientists to become public health leaders through experiential training in laboratory quality management and the science of biosafety.

Learn more at www.cdc.gov/LLS

Application Period for Class of 2019: April 16-July 11, 2018