

0:14 Hello and welcome to an informational webinar on CDC's Laboratory leadership service, or LLS Fellowship program.

0:23 My name is Tara Henning and I'm the LLS director, and I'm looking forward to sharing with you today information on LLS.

0:29 And in this webinar, we'll walk through an overview of the program and discuss the application process. As an interested applicant, you can also reach out to LLS at through our e-mail, lls@cdc.gov, to request a handout that gives more detailed recommendations on how to prepare your application and where to find additional support.

0:52 LLS is a two-year program for PhD scientists in a laboratory related field.

0:57 Newly graduated or soon to graduate PhDs as well as those with post-doctoral experience are welcome to apply.

1:05 The most competitive applicants are those who have an interest or passion for a career in public health. As we work through the presentation, I'll also take a moment to highlight some of the current and past fellows, like here.

1:16 This is Dave Lau, a class of 2017 fellow who worked with the novel rabies model as a part of his LLS applied research.

1:23 Dave is now a team lead with CDC's Coronavirus and Other Respiratory Viruses Division laboratory branch.

1:31 The mission of LLS is to develop a diverse cohort of future public health leaders who demonstrate scientific excellence through leadership, service, and high standards of laboratory quality and safety.

1:43 This is class of 2018 fellow Brandi Freeman on a response deployment to the US Virgin Islands Public Health Lab.

1:50 Brandy is now the Deputy Branch Chief of Laboratories in the Polio and Picornavirus branch.

1:57 The training and experiences LLS provides are based on competencies deemed critical for success as a leader in the public health laboratory workforce.

2:06 These competencies were developed in collaboration with APHL or the Association for Public Health Laboratories and cover applied research, lab safety and quality, bioinformatics lab management, and communications.

2:19 Leadership is a key area of development, and the curriculum is designed to weave leadership experience and training throughout all of the competencies.

2:28 Fellows then complete core activities of learning – or CALs – throughout their fellowship to build proficiency and skill within these competency domains.

2:37 Shown here as class of 2022 fellow Roxana Rodriguez Stewart, training partners in Thailand on antifungal susceptibility testing. And this work was done on behalf of her host site laboratory.

2:49 Roxana now works with CDC's Viral Vaccine Preventable Diseases Branch.

2:56 LLS's training is largely on the job.

2:58 Approximately 91 percent is experiential, and service based.

3:03 On a near daily basis, fellows will support the mission objectives of their host site labs, whether that's through applied research contributions, conducting risk assessments, supporting lab operations, or other routine but high-performance activities.

3:17 And they also provide service to the nation's public health needs through support of CDC's initiatives.

3:22 Only a small portion of LLS training is didactic. So here is class of 2023 fellow Lindsay Hein.

3:30 Lindsay was the laboratory subject matter expert on an Epidemic Intelligence Service – or EIS – EPI aid anthrax field investigation.

3:38 After LLS, Lindsay will join a team at Johns Hopkins to build public health infrastructure.

3:45 Where does a fellow work?

3:47 Our LLS fellows are hosted and trained in CDC or other jurisdictional public health labs across the United States and its territories.

3:55 LLS offers a broad range of training opportunities and experiences, regardless of where you're hosted.

4:01 For example, featured on this slide are class of 2022 fellows Sergio Rodriguez and Peter Dumoulin with a collaborating EIS officer, and they're at the Tampa Bureau of Laboratories in Tampa, Florida.

4:13 This is where Peter was assigned as a field fellow.

4:19 And Sergio was a CDC headquarters fellows. Sergio was in Tampa completing his LITE, or LLS immersive training experience.

4:24 So even as a headquarters fellow, Sergio still gained experience and perspective at the state and local level.

4:30 Peter traveled to CDC for training and frequently engaged with headquarters-based fellows, CDC scientists, leadership, subject matter experts, and the LLS

program.

4:40 So LLS encourages applicants to be open to both headquarters and field placements.

4:47 Service and service learning are LLS cornerstones.

4:50 Fellows provide service to their host site laboratories and research programs, but this service isn't just limited to bench scientists.

4:58 While some of you may be looking to LLS for your postdoctoral training, it's not designed to provide a traditional academic postdoc experience.

5:06 We're lab scientists and applied research is a key component of the fellowship, but "applied" in LLS is going to extend beyond the bench.

5:14 In LLS, you'll be challenged beyond your comfort zone, asked to push your scientific thinking and your contributions beyond the bench and your usual defined area of expertise.

5:24 It's a rewarding experience like no other.

5:28 Fellows learn through their service to CDC's mission in partnership with state and local labs on a field deployment and a variety of other unique opportunities that we'll discuss more in the next few slides.

5:39 Shown here is 2023 fellow Blake Bertrand, who was assigned to the Georgia State Public Health Lab. LLS fellows can lead lab aids as a part of their service learning and gain leadership experience.

5:52 A Lab Aid can support jurisdictional public health lab needs, or even one at CDC.

5:57 They provide opportunities for the cross training, in collaboration with your LLS colleagues and lab subject matter experts.

6:03 Lab aids help facilitate that fellowship experience balance that I alluded to earlier.

6:08 Headquarter fellows have the opportunities to work in the field and vice versa for field fellows at headquarters.

6:14 Our sister program is EIS, or the Epidemic Intelligence service.

6:18 LLS often partners with EIS officers to provide lab support for their EPI Aids.

6:24 EIS offers joint lab aids to provide Epi and surveillance expertise when needed.

6:29 Shown here on the far left is class of 2022 fellow Steven LaVoie offering Lab Aid assistance by training staff at the US Virgin Islands Public Health Lab on COVID testing workflows.

6:40 Steven is now the team lead of the Antimicrobial Resistance Characterization Lab at CDC's Clinical and Environmental Microbiology branch.

6:50 LLS Fellows are a deployable force.

6:52 You won't spend all of your time in the field or on a public health response, nor should you expect to.

6:57 But we are CDC disease detectives, and when the call comes, LLS fully supports CDC's Emergency response needs.

7:06 In 2019, the program pivoted fully to support the agency and the nation's response efforts to COVID-19.

7:13 LLS Fellows were among the first to deploy with some onboard the Princess Cruise Liner ship at its docking, and at the military quarantine sites that were repatriating U.S. citizens. For the monkeypox outbreak response in 2022, the first CDC responder was an LLS fellow, and we'll be ready to deploy again when the next public health threat emerges.

7:36 Shown here is class of 2022 fellow Perri Callaway.

7:39 Perri participated in the Mpox response, heading to the field just two months shy of beginning her fellowship. And in this image, she's prepping specimen packets for an impact vaccine study.

7:50 Perri now supports antimicrobial resistance programs with CDC's Antimicrobial resistance Strategy and Surveillance Unit. In addition to Lab AIDS, joint EpiAids, the agency public health response efforts, LLS fellows can also deploy or serve to their own host lab assignments.

8:11 For example, shown here on the right is class of 2022 fellow Megan Mickum, providing laboratory training for cholera detection in El Salvador.

8:19 Regardless of how or where they serve in the field or in their host sites, LLS fellows are on the front lines of public health.

8:27 After LLS, Megan remains at her home site as a unit lead supporting laboratory capacity building efforts.

8:33 Particularly for field fellows – those fellows that are assigned to state or local labs – being on the front lines is common practice.

8:40 Field fellows routinely interface with their community through studies, programs or emergency responses.

8:47 Now we've spent a good bit of time discussing amazing field response and deployment opportunities. And, and yes, LLS can provide these types of exciting and rewarding experiences. But the LLS experience doesn't just happen in the field, you know, particularly when there's not a global pandemic.

9:04 The magic of LLS is in the day-to-day.

9:07 It's the high caliber and challenging activities at a fellow's host site.

9:11 It's the ability for fellows to engage with public health leadership at all levels across multiple agencies and build partnerships in the process.

9:20 It's the mentorship that they receive from leaders and subject matter experts that are dedicated to their professional development.

9:27 I wanted to be sure to point this out, that there is a good bit of time standing around a conference table, at the lab bench, or with a computer.

9:35 There's a balance to the LLS experience, and as a program we ensure that fellows receive the benefit of the whole experience.

9:43 So here are members of the Infectious Disease Pathology Branch at CDC with class of 2022 fellow Andres Wong-Sam at the front right.

9:52 All of us fellows were involved in so many service-based activities that aren't associated with the deployment, but that still provide unique leadership training opportunities.

10:00 Most are part of their daily duties, with their host lab assignments.

10:04 Our goal is to challenge fellows not just to complete an activity, but to take a leadership role in that activity, like in this photo with class of 2022 fellow Katie Margulieux.

10:14 She was leading a lab training at her host site on a new testing process that she'd implemented.

10:19 Our fellows and alumni can share more examples of LLS leadership training opportunities, such as serving as the branch liaison on an interagency collaboration with the FDA. Or consulting on biosafety needs for the whole public health workforce, or leading the design and set up of a new lab for rapid SC testing in New York City.

10:40 The LLS program can connect you with current and former fellows to learn more about their experiences.

10:47 We often get lots of questions about what fellows do after LLS, and I've highlighted a few examples of fellows post-LLS positions in the previous slides.

10:56 But the majority of LLS Fellows do remain in public health. For the last graduation of the 2022 class, 88% of all matriculated fellows remained in public health after LLS.

11:09 Shown here are Eric and Elizabeth.

11:10 They were both hosted at the New York City Public Health Lab.

Eric was in the class of 2021 and after he graduated, he accepted a position as the

Chief of Virology with the New York City Lab in class of 2022. Fellow Elizabeth accepted a position as their Chief of Environmental Sciences.

11:27 Note that LLS does provide tailored one-on-one support for your post-fellowship job hunt that includes an interview, training, and CV training too.

11:38 The types of positions that LLS fellows assume after graduation can vary, but many are going to find themselves working in public health laboratory science, in program management and delivery, or in leadership.

11:49 So these data represent current positions.

11:51 So we're seeing the full spectrum from our seasoned alumni to our most recent data that we have from the graduated 2022 class.

12:00 Let's pivot now to discussing the application and selection process.

12:05 Let's begin with an overview of the application.

12:08 The first step is to submit your application online.

12:11 Access the application portal through the LLS website.

12:15 Be sure to confirm the application availability and due dates on the website.

12:20 Your applications are first reviewed for basic eligibility.

12:23 Your application will be rejected if it doesn't meet these minimum requirements and I'll define what those are in the next slides.

12:30 After eligibility review comes the deeper review and scoring of your application, your education experience letters or recommendations, etc.

12:39 Applicants with high-quality applications will advance to the first round of interviews with the LLS program.

12:46 Timeline details on when applicants should expect to hear about program interviews and when they will take place are also on the LLS website.

12:54 Candidates with high scores from the program interviews will have met all criteria to be among the next class of LLS fellows. You only need to match with a lab to secure your place in the class.

13:04 So next comes the match interviews with the available hosts site labs for that year.

13:09 Fellow candidates will be able to review position descriptions of the various labs and select which ones they'd like to interview with. The date range for match interviews is also on the website; and after match interviews, fellows will rank their lab preferences, and the labs will rate the fellows that they've interviewed.

13:25 We use a statistical algorithm to assign the final matches.

13:29 Now our class sizes are budget-dependent and at this time we anticipate a

class size of 10.

13:36 Now let's dive into the application specifics.

13:39 As I mentioned, the entire process begins with eligibility.

13:42 If you're not eligible, your application will not be reviewed, so please check these requirements before you take the time to pull together your application.

13:50 As I mentioned earlier, you'll need a PhD in a laboratory-related discipline.

13:54 Some public health and health sciences doctoral programs will also meet the eligibility requirements if they have a laboratory research component.

14:02 We've had applicants with medical and vet medicine degrees.

14:05 These doctoral-level degrees can also be eligible if your program is research based.

14:10 In these cases, it's best to reach out to us and have a chance to review your transcripts and thesis description to determine eligibility.

14:18 Fellows must be United States citizens or have permanent resident status at the time of application.

14:24 We don't accept international applicants or support visas.

14:28 If you're still in graduate school, you want to defend your dissertation before March 31st the year you enter the program, and be able to provide a transcript or proof of defense letter by the state.

14:40 If you're accepted to the class, your degree must be fully confirmed and transcripts available by June 1st of your application class year.

14:50 Please make sure that you have uploaded a transcript for all degrees or in-progress degrees in your application.

14:57 Electronic transcripts are fine for your application.

15:00 If you're accepted to the program, we'll have time to secure those official transcripts that Human Resources will need for your hiring packages.

15:07 Applications without transcripts would be deemed incomplete, and so they won't be reviewed.

15:13 We do accept foreign transcripts.

15:15 If your transcripts aren't in English, they need to have an accompanying equivalency report.

15:20 This isn't an eligibility requirement, but it's part of the application's transcript requirement component.

15:25 If your application can't be reviewed with the proper transcripts, then then we can't move you forward in that process.

15:33 Equivalency reports are also needed for international doctoral programs that don't provide transcripts.

15:38 A scanned copy of your doctoral degree diploma is not sufficient.

15:44 OK, let's get to the core of your application.

15:47 You'll be asked to describe your work and research experience.

15:51 Use this section to communicate to the reviewers the scope of research and other work experience you've had, and any particular technical skills or accomplishments gained from that experience.

16:02 The reviewer should be able to infer from this section what your technical skill and experience is. Your initiative, your ability to manage complex projects, to collaborate. Do you have a service-oriented mindset? And your leadership ability or potential.

16:17 Don't overlook the volunteer experience.

16:19 This is an important, yet often underdelivered, part of the application.

16:24 The application includes a personal statement with types of questions that will ask you to share your career goals, what you hope to gain from LLS. Your responses should communicate your interest in, or passion for public health, and why LLS is your next logical step in your career.

16:39 These are personal statement responses so it's OK to show your personality.

16:43 You'll also want to do your homework on LLS to help inform your responses.

16:47 And last, don't forget that these are written responses, so be mindful of grammar and spelling.

16:53 From these personal statement responses, we should have a clear, strong impression for why LLS is the right fit for you.

17:00 Be sure to give a wow to your why.

17:04 Two letters of recommendation are required for the application.

17:08 Choose carefully.

17:09 These should come from supervisors, senior mentors, committee members, etc.

17:14 People that know you well and have worked with you recently.

17:16 They should not be from colleagues or someone who you've worked with many years ago.

17:21 A poor recommendation, or one that is not from a suitable source, can seriously hurt your application score.

17:29 One of your best resources for preparing your application is the LLS community.

17:33 This includes the LLS program, but especially current fellows and alumni.

17:37 Reach out to the fellows. Learn about the program, the application interviews, what their perspective was on how LLS might help you achieve your goals, and the different opportunities the fellowship can provide.

17:48 I hope you'll join one of our question and answer sessions to speak with fellows or if the LLS program can help you connect with current fellows and alumni.

17:56 I'd like to briefly highlight the fellows that are featured in this slide.

17:59 Starting on the far left is class of 2019 fellow Nick Weise, who is processing field samples by a headlamp on a joint Epi Aid to the United States Virgin Islands.

18:09 To the right of Nick, this is class of 2019 fellow Oren Mayer, on a deployment to the Democratic Republic of the Congo, prepared to board a United Nations flight.

18:18 To the right of Oren is also a class of 2019 fellow Shelby Chastain-Potts, seated with her supervisor and QMS mentor.

18:25 And on the far right are members of the classes of 2020, 2021, and 2022 - all participating in the EIS conference's Prediction Run.

18:37 The reviewers will be looking at your four key areas when scoring your application.

18:41 Working through these areas may also help reinforce what we discussed in the last slide.

18:47 First is academic achievement.

18:49 Your academic record should reflect a consistent high level of achievement throughout undergraduate and graduate School.

18:55 We also review your other listed trainings and professional development.

18:59 It's not necessary to include trainings that are required for routine lab work like bloodborne pathogens or your biosafety cabinet training.

19:07 We next review awards, merit-based fellowships, and the overall scope of your laboratory training and experience, which includes peer review, publications, and presentations.

19:18 In preparation-publications and white papers should not be listed.

19:21 Remember that volunteer experience is also a scored element.

19:25 From this section, reviewers will make inferences about your initiative, accountability, the level of responsibility you've taken, and your leadership potential.

19:33 Now I'll note that this is not a stock image.

19:34 That's class of 2022 fellow Emily Bouda, who was completing her LLS immersive training experience, or LITE, at the Mississippi Public Health Lab.

19:45 Your personal statement will be scored based on your ability to clearly express: 1) reasons that influenced you to consider a career in public health, 2) the impact LLS would have on your career path and helping you achieve your goals and; 3) the skills that you're seeking to develop or improve during the fellowship.

20:04 Scoring deductions will be made for grammatical or spelling errors, or responses that lack a logical flow or reasoning, so proofreading will be your friend.

20:15 And finally, recommenders will comment on your ability to manage tasks and projects timely, your ability to take initiative and how you respond to constructive feedback, and your working relationship with others.

20:27 The letter writers will rate you in these areas, and they're given the option to provide examples that support that rating. This additional context is encouraged and really helpful.

20:37 Scores are reduced if the letters are coming from non-suitable recommenders.

20:41 And this highlight is class of 2022 fellow Emily Yarosz on the left with her host site supervisor at the Minnesota Public Health Lab.

20:53 Fellows and former applicants agreed that the LS application and selection process, including all the program and the match interviews, can be an intense process, and it moves fast.

21:02 That's Peter Dumoulin, the class of 2022 fellow who was assigned to the Tampa lab, who in this image is out on a mosquito control assignment.

21:11 It does help to have awareness of this and just to be in that right mindset to manage the schedule and be prepared for each step of the application process.

21:20 Be sure to note the key dates on the LLS website and monitor your e-mail for notices and other updates after you apply.

21:27 Regardless of whether you're assigned to a field or a headquarters lab, LLS fellows are CDC employees who have unparalleled training and career opportunities.

21:38 LLS is a unique experience.

21:41 Fellows are supervised and mentored by scientists who are experts in their field.

21:45 No other fellowship provides this level of comprehensive curriculum and intensive training with tailored professional development and one-on-one program support. You can make a difference for yourself, your career, your training, all while making a difference in public health.

22:03 This is 2018 fellow Ash Wadwha, presenting at the EIS conference.

22:07 Ash is now a team lead with CDC's Enteric Disease Laboratories Branch.

22:13 Be sure to check the website for key dates and application deadlines.

22:16 We look forward to reviewing your submission and hopefully welcoming you to the next LLS class.

22:21 Shown here is the LLS class of 2023.

22:24 This photo was taken at their orientation in summer course in Atlanta.

22:28 That's where all new fellows start their journey with LLS and CDC. And we hope to see you there.

22:34 Good luck with your application.

22:37 If you have questions, please reach out to the LLS program at LLS@CDC.gov or you can visit our website.

22:45 Thank you.