

Shaniece Theodore: Alright, so it's 1 o'clock, so we are going to go ahead and get started.

Shaniece Theodore: Welcome everyone to today's webinar. My name is Shaniece Theodore. I'm a Program Manager with the Laboratory Leadership Service Program, or LLS for short. In today's webinar, I'll share information about CDC's LLS Fellowship Program, discuss the application process, give a few tips on how to submit a competitive application, and then we'll have time for question and answer with myself, the lead of the LLS program, Tara Henning, and we also have two current LLS fellows on the call with us today who will also be available to share a bit of their experience and answer any questions that you have.

Shaniece Theodore: I'll also take a moment to highlight some of our current and past fellows because they are beyond awesome. Today, we have class of 2018, Brandy Freeman, who went on a response deployment to the United States Virgin Islands Public Health Lab.

Shaniece Theodore: The mission of LLS is to develop future public health laboratory leaders. And to do this, LLS fellows hone their leadership skills and create a culture of excellence in laboratory science by emphasizing high standards in areas such as laboratory quality and safety.

Shaniece Theodore: LLS is a two-year program for PhD scientists in the laboratory related field.

Shaniece Theodore: Here, we have Dave Lowe, who's a class of 2017 fellow, who worked on a novel rabies model as a part of his LLS applied research.

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

Shaniece Theodore: These competencies were developed in collaboration with the Association for Public Health Laboratories. They cover applied research, lab safety and quality, bioinformatics, lab management, and communication.

Shaniece Theodore: Leadership is the key area of development as well. And the curriculum is designed to weave leadership throughout all these competencies.

Shaniece Theodore: During LLS, fellows are responsible for completing ten core activities of learning, or CALs for short, to build proficiency and skills within these competency domains.

Shaniece Theodore: Shown here, we have class of 2020 fellow, Christine Lee, who had the chance to partner with the Wisconsin Public Health Lab on a COVID testing strategy investigation among college students. She's processing samples at a Wisconsin Satellite Lab on the college campus as a part of that study.

Shaniece Theodore: The fundamental objective of LLS is to train, serve, and retain. We want to train fellows through service and retain them in public health after they leave the program.

Shaniece Theodore: We've had six classes over five years. Matriculating 42 fellows and 5 more will join that list in July.

Shaniece Theodore: Fellows have provided service to 27 unique host public health laboratories and nearly 90 percent of LLS fellows remain in public health. 71 percent of grads accepted positions at CDC.

Shaniece Theodore: Fellows are hosted in CDC or other jurisdictional public health labs. Public health doesn't just happen at CDC, but also at the frontlines of our nation's state, local, territorial, tribal public health labs, and health departments. Many candidates apply with the goal of working at CDC, which is great. But it is important for lab scientists seeking the leadership role in this field to have some experience at the state and local level as well.

Shaniece Theodore: This year, LLS will prioritize placements with our jurisdictional public health laboratories, or in field sites, as we call them.

Shaniece Theodore: Fellows placed at field sites will have a high level of engagement with headquarters based-fellows, CDC scientists, leadership, and subject matter experts, as well as the LLS program.

Shaniece Theodore: Of course, we anticipate matching fellows with CDC headquarters labs as well. But I encourage you now to look and think about your options and consider all of them when it comes to where you want to be placed as far as the host site placement for this application year.

Shaniece Theodore: LLS training is largely on the job, experiential and service based. On a daily basis, fellows support the mission objectives of their host labs through research contributions, conducting risk assessments, supporting laboratory operations, or other routine-yet high-performance activities. They also provide service to the nation's public health needs through support of CDC initiatives.

Shaniece Theodore: This is class of 2019 fellow, Nicholas Wiese, who's trapping mongoose for rabies testing in the United States Virgin Islands.

Shaniece Theodore: Service and service learning are the cornerstones of LLS. Fellows provide service to unique host public health laboratories and their host site research program. LLS is not a standard postdoc experience. We are lab scientists and applied research is the key component. When you think of a postdoc, you likely think of the traditional experience at the bench most of the day working on your research. However, for LLS, the applied concept manifests in several ways that extends beyond the bench. It's truly an experience like no other.

Shaniece Theodore: Fellows learn through their service to CDC's mission and partnership with state and local public health laboratories through field deployments and a variety of other unique opportunities that we'll discuss more in the next slide.

Shaniece Theodore: Shown here in this photo, we have class of 2018 fellow, Kara Levinson. She was a field fellow in the New Hampshire Public Health Lab and is now the Deputy Director at the Tennessee Public Health Laboratory.

Shaniece Theodore: One area of service learning as well as leadership experience is the opportunity for a fellow to lead a Lab-Aid. Fellows are trained in the subject matter required; they're backed by a CDC subject matter expert. And they take a leadership role to offer rapid support to meet critical needs of a partner in a public health laboratory.

Shaniece Theodore: Fellows have been involved in disaster response, assist with outbreak investigations, provide surge laboratory capacity, support lab safety and quality needs, they provide technical expertise for surveillance testing or help with laboratory informatics and bioinformatics testing, and workflows.

Shaniece Theodore: Our sister program is the Epidemic Intelligence Service, or EIS for short, and LLS often partners with EIS officers to provide laboratory support for their Epi-Aids. LLS has provided support to state and local jurisdictions on 31 lab and Epi-Aid deployments today.

Shaniece Theodore: Shown here in this photo, on the far left, we have class of 2020 fellow, Stephen LaVoie, offering lab assistance by training staff in the United States Virgin Islands Public Health Lab on COVID testing workflows.

Shaniece Theodore: This timeline highlights a few representative response efforts and opportunities available for a fellow including Lab-Aids and Joint Epi-Aids.

Shaniece Theodore: From 2015 to 2017, fellows assisted with several responses including Legionella, Zika, Ebola, whether internationally or domestically. The program has the flexibility to scale and respond to the agencies as well as the world's mission critical need for public health.

Shaniece Theodore: The first official Lab-Aid response was in Puerto Rico in 2017 to support their lab capacity building efforts following Hurricane Maria. Several Lab-Aids have followed this initial capacity building response. When CDC activates an agency-wide public health response, LLS fellows are highly sought after to respond. The most recent agency response, which is not shown here on this timeline, is the full support of LLS fellows for CDC's COVID-19 response.

Shaniece Theodore: LLS pivoted fully to support the agency and nation's response to COVID-19. LLS fellows were among the first to deploy with Princess Cruise Ship Liner at its docking and at the military base quarantine site repatriating travelers back into the United States. Since then, fellows have played a critical role in field testing and validation studies. Shown here, we have class of 2020 fellow, Jessica Prince Guerra, validating a rapid antigen test in Arizona, providing lab support for epi teams, and coordinating response logistics.

Shaniece Theodore: All the 2019 and 2020 fellows have deployed in support of the COVID-19 response, whether to the field or virtually to the ELC, even working from home. We anticipate that the class of 2020 will have a similar experience. There will still be opportunities to support the COVID-19 response deployed to the field as an SME for laboratory studies or supporting contact tracing and transmission studies as well as virtual deployment.

Shaniece Theodore: In addition to Lab-Aids, Joint Epi-Aids, and agency public health response efforts, fellows can also deploy or serve through their host lab assignment. Shown here, we have on the left, class of 2019 fellow, Oren Mayer, who's providing training in Uganda on proper handling of specimens for Ebola testing. So regardless of how or where they serve, in the field or in their host site, fellows are on the frontlines of public health.

Shaniece Theodore: Our fellows participate in a variety of service-based activities. Not necessarily associated with a deployment that provides unique leadership training opportunities. Many of these are a part of their daily duties with their host lab assignment and our goal is to challenge fellows not just to complete an activity but to take a leadership role in that activity.

Shaniece Theodore: Here we have class of 2018 fellow, Christina Carlson, who's shown here in a photo taken at the World Health Organization. In front of the World Health Organization, Christina served as a consultant to the WHO on global guidance for lab biosafety and biosecurity.

Shaniece Theodore: So, we spent a good bit of time discussing amazing field response and deployment opportunities through LLS, but the LLS experience doesn't just happen in the field, particularly when there's not a global pandemic. The magic of LLS is in the day-to-day high caliber and challenging activities at a fellow's host site. The ability to engage with public health leadership at all levels across multiple agencies and those partnerships built during the process. It's also mentorship that they receive from leaders and subject matter experts dedicated to the fellow's professional development. I want to be sure to point out that there's a good bit of time that's spent around the conference table, at the lab bench, or with a computer. There's a balance to the LLS experience and as a program, we ensure that fellows receive the full benefits of this whole experience.

Shaniece Theodore: In this photo, we have class of 2019 fellow Shelby Chastain-Potts meeting with her host site supervisor and CDC's lead lab quality expert and Shelby is on this call to share a little bit about her experience today as well as answer questions.

Shaniece Theodore: So, let's talk about the application process for a bit.

Shaniece Theodore: The first step is to submit your application online. The portal is open right now and it'll close on June 4th, so you can access the portal through our website, which is [www.cdc.gov/lls](http://www.cdc.gov/lls). Your application will be reviewed first for basic eligibility. If you don't meet these requirements, your application will be automatically rejected.

Shaniece Theodore: After eligibility review, we review and score your actual application which includes your education, experience, letters of recommendation, etc. Applicants with high quality applications advance to the first round of interviews with the LLS program and the goal of the application is to get the interview, then the goal of your interview is to sell yourself.

Shaniece Theodore: After the program interview, we'll decide which fellows have the opportunity to match for the class. Fellows who score high enough during the program interviews, will then meet all the criteria to be among the next class of fellows. You only need to match with just one lab so next time comes the match interviews. This coincides with the application process. We also review host site applications at the same time that we review fellows' applications. After match interviews, fellows will rank the labs they interviewed with and the labs will rate the fellows. We'll then use an algorithm to assign the final matches.

Shaniece Theodore: So, there's a new angle to the match process this year, and we are terming (calling) it pre match. As I mentioned earlier, public health doesn't just happen at CDC headquarters.

Shaniece Theodore: Here we have class of 2020 fellow, David Payne, who's also on the call with us today to share his experience - who's preparing to run patient samples on a MiSeq instrument. David was assigned or is assigned to the Washington D.C. Public Health Lab. State and local public health partners like D.C. lab are on the frontlines of public health and they offer unique leadership and experiential training that can help drive a fellow's career goals in a way that's different than that of a CDC headquarters placement. We're happy to discuss this aspect more with anyone that's interested but it largely depends on your interests, professional development objectives, as well as your career goals.

Shaniece Theodore: We have new funding to boost capacity and support for jurisdictional labs. LLS is planning to prioritize field placements in the State, Local, Territorial, and Tribal laboratories. One way to accomplish this will be through the pre-match process. The field site laboratory can be eligible for pre match if they have previously applied and interviewed with a candidate, but they were not

assigned one. So, these labs can deliver superior mentorship and training opportunities, they just haven't had the chance to do so yet. They'll be able to interview with interested candidates ahead of the regular match process.

Shaniece Theodore: So how does this impact you as an applicant? It's an advantage to that lab but also to you as a fellow candidate if you choose to interview during the pre-match process because you will interview with a smaller number of host sites and compete with less candidates.

Shaniece Theodore: Fellow candidates that match with their host lab during the pre-match will secure a spot early in the class, even before the other larger applicant pool and other labs conduct their regular match interviews.

Shaniece Theodore: In the case that you don't match during pre-match, you will still advance to the regular match process. However, it's important to note that if you do match in the pre-match process and then decline, you won't be given an opportunity to interview during the regular match process. So again, if you make it to pre-match, you should only assign scores to sites that you're interested in securing a 2-year placement with.

Shaniece Theodore: We're also looking into our ability to offer loan repayment to pre-match field assignees -- but this is not a guarantee at this time. And this higher pre-match process is a bit much to explain through this presentation but we're happy to sit and walk you through the pre-match process, if you're interested in learning more.

Shaniece Theodore: So let's shift gears a bit to talk about how you can do your part during the LLS application process to increase your chances of selection and being a part of the LLS experience.

Shaniece Theodore: LLS is a pretty competitive program. We place between about 6-8 fellows each year, but we do have plans to expand this year. Even still, you need to put your best foot forward on the application. Remember that the goal is to get the interview and I want to share a few tips that we think will help you to create a high-quality competitive application. So, we'll review the five key steps beginning with eligibility, sharing your experience, strongly communicating why LLS is important or the right choice for you, your letters of recommendation, and then drawing on the collective knowledge of the LLS community. So, let's walk through these steps.

Shaniece Theodore: First is eligibility. If you're not eligible, your application won't be reviewed, so be sure to check the eligibility requirements before taking the time to put together an entire application.

Shaniece Theodore: You'll need to have a PhD in laboratory science or a laboratory related discipline. For example, microbiology and molecular biology, even chemistry or biochemistry. Some public health and health scientist doctoral programs will also meet the eligibility requirement if they have a lab research component. You can also be considered eligible if you have a doctorate in the less research focused laboratory and public health field such as healthcare science. If you have research experience elsewhere or with a previous masters but know that you may not be as competitive as other applicants.

Shaniece Theodore: Fellows must be a U.S. citizen or have permanent resident status. We can't accept international applications or support visas at this time.

Shaniece Theodore: If you're still in graduate school, you must defend your dissertation before March 31st, the year that you enter the program. So for this application cycle, that would be March 31, 2022.

Shaniece Theodore: If you have a foreign transcript, they must have an accompanying equivalency report. We understand that some international doctoral programs don't provide transcripts - these still must have an equivalency report. A scanned copy of your doctoral diploma won't be sufficient.

Shaniece Theodore: The core of the application, making sure you bring the why factor to your why of LLS and why is LLS right for you and your career goals. Make the best choice for who you ask for recommendation letters and also make sure that you leverage the LLS community, the fellows, alumni, even the program for input and support. Fellows are happy and alumni are happy to meet with candidates that are interested in learning more about the program as well as sharing their LLS experience.

Shaniece Theodore: You'll be asked to work through your work history and experience. Be thorough as well as organized. And I suggest that you lead off with your most recent experience first. For each work experience entry, give us enough details so we understand the scope of a particular project - any technical skills that you gained through that experience.

Shaniece Theodore: You want to focus on how you took initiative or thinking creatively. Discuss whether you managed complex projects or tasks - did you collaborate with others as a part of this project? Discuss if leadership were applicable and any results of publications or relevant abstracts for presentations. We don't expect you to tell us about how you were an amazing leader. You're coming to LLS hopefully to gain leadership experience, but we like to see where you have taken the opportunity to practice leadership and be assertive. Show us that you have leadership potential essentially.

Shaniece Theodore: We've talked a lot about LLS being a service-learning program. Are you service-oriented? That's something to point out in the application. Are you able to share details about how you helped support others, perhaps through mentorship or volunteering? This is important, yet an often overlooked and under delivered part of the application.

Shaniece Theodore: Your application will also include a few personal statement types of questions. One where you can share with us your career goals, your passion for public health. These responses should communicate why LLS is the right fit for you, why is it the next logical step in your career, and how the program will help you reach those goals in public health.

Shaniece Theodore: Where do you want to be in 5 years? Is it in public health? What about LLS appeals to you? These are all things that you should think about when you are writing your personal statement responses.

Shaniece Theodore: What skills or experiences do you need that LLS can help you obtain? It's another question. It's often helpful to have concrete knowledge of the program in order to accurately describe how you can best leverage LLS for your professional development. So make sure that you visit the LLS website and again, please talk to fellows and alumni and ask questions about the program. They're always happy to speak to interested applicants.

Shaniece Theodore: You'll need two letters of recommendation for the application. These should be from supervisors or senior mentors that you know well that can speak about your accomplishments as well as your scientific skills and leadership potential, as well as your ability to manage projects and your time and overall suitability for the program.

Shaniece Theodore: These can be from direct supervisors from a job, perhaps your doctoral or postdoctoral advisors, your PI from grad school, or a member of your thesis or dissertation committee that was hands-on and involved in your project. Often, we receive letters from applicant colleagues or even a committee member who's not clear or did not know the applicant that well, so make sure that you choose carefully. A poor recommendation can hurt your application score and reflect fairly poorly on you as well.

Shaniece Theodore: You can give a heads up to those that are writing recommendation letters on your behalf that it's not really a letter per se, it's a standardized form through which the recommender will answer specific questions but does have the option at the end of the form to add additional comments. We love reading these additional comments and it gives the recommender an opportunity to highlight areas where you excel that our standard questions did not address.

Shaniece Theodore: Again, I think I mentioned this several times to just reach out to current fellows and alumni to learn more about the program. And that includes the program as well. You can always send an email to the LLS mailbox. Once the application portal is open, we can't coach you, but we're happy to answer questions. Our fellows and alumni are happy to chat and support you and share their experiences and give feedback on your application so that you can submit it with confidence. You can find the list of fellows and alumni on the LLS website, and if you need help or contact information, the program can help with that.

Shaniece Theodore: Since we're discussing tips, I want to review a few tips beyond the application process. First, is the interview. Again, the goal of the interview is to sell yourself. You'll meet with at least two program representatives. One which will be the LLS Lead, who's on the line today, either myself or another staff member.

Shaniece Theodore: We'll ask questions that'll allow you to learn more about your career goals, how you manage conflicts, or challenges, taking initiative as well as how well you're able to collaborate with others. We'll seek to better understand how you work in a team, how you pivot to adapt to change in needs or tasks.

Shaniece Theodore: Interviews will be conducted virtually through a video conference call, but it should be treated the same as an in-person interview which requires the same level of professionalism.

Shaniece Theodore: There's usually time for applicants to ask a few questions at the end of the interview as well so be prepared and come with some key questions that you would like to get answered.

Shaniece Theodore: For match, candidates receive a packet of applications as well as all of the available labs that are going to be a part of the match process for LLS, so you will have the power to select the labs that you're most interested with.

Shaniece Theodore: We're not privy to the types of questions that the labs ask during match interviews, but this is a great question that you can ask of alums and current fellows. So take advantage of asking them about the match process and the type of interview questions that are asked of candidates.

Shaniece Theodore: You'll also be encouraged to ask questions so that you can determine from your advantage point if this is the right fit for you. And I strongly urge that you don't rate labs that are not a right fit for you. In other words, the goal should not be to just to get any slot in LLS, but rather the goal

should be to match with a lab that is an excellent fit for your goals, both long-term as well as short-term.

Shaniece Theodore: Remember that most of the time during the two-year fellowship will be at this host site. So, it's important that it's a good fit for you as well as a good fit for that lab.

Shaniece Theodore: So we've talked about the program, different experiences that you can expect, and we walked through some tips for preparing your application. So, does LLS sound like the right fit for you? Regardless of whether you are assigned to the field or a headquarters lab, LLS are employees who have unparalleled career opportunities. They're supervised and mentored by scientists who are experts in their fields. Fellows have unique opportunities to engage with multiple different SMEs by participating in or leading cross-cutting projects in the agency or at the field host-site locations. These projects have a direct and positive impact on operations, scientific quality, or public health at large.

Shaniece Theodore: So, are you ready to make a difference? Like Jessica Jacobs shown in this photo here, who's a class of 2019 fellow, assigned to Massachusetts State Public Health Lab. This photo was included in the Atlanta Journal Constitution responder feature and for those that are not familiar with the Atlanta Journal Constitution, it's a local newspaper in the metropolitan area of Atlanta. So, if you're ready to make a difference, not just for others, but a difference for your own career paths and professional development, I urge you to apply to the LLS program.

Shaniece Theodore: Applications as I mentioned are currently open. We opened them on April 1st. Applications will close fairly soon on June 4th, and please be sure to visit the website [www.cdc.gov/lls](http://www.cdc.gov/lls) if you need additional details about the program as well as for information on current and former fellows of the program.

Shaniece Theodore: So we will switch gears. I have two current fellows on the line today, Shelby Chastain-Potts as well as David Payne. And I would love for them to give a brief overview just of their experience in LLS today. Shelby is a second-year fellow and David is a first-year fellow. Shelby, do you want to kick off and just tell us a little about your LLS experience and introduce yourself?

Shelby Chastain-Potts: As Shaniece said, my name is Shelby Chastain-Potts. I am a class of 2019 LLS fellow, and it has been an amazing experience. I can't really say much more beyond that.

Shelby Chastain-Potts: When I first joined the LLS program, I joined the Infectious Disease Pathology Branch. With my group, there weren't many opportunities to deploy as part of the branch normal rules and responsibilities, so I signed up to participate in the Polio response in Ghana.

Shelby Chastain-Potts: So, I deployed for the Polio surge response in Ghana. In addition to working with a laboratory, as she said, there are many different opportunities that you have beyond your normal scope of duties, because you're able to work with several different SMEs across the board.

Shelby Chastain-Potts: This deployment was a great opportunity. It was my first introduction into the EOC as well as working with other responders in the field.

Shelby Chastain-Potts: Little did we know that this two-year span would turn into a major outbreak and required many deployments across many different spectrums such as quality, laboratory services, tracing, epidemiology, surveillance, etc.

Shelby Chastain-Potts: I was quickly brought back from my deployment to assist with the pandemic.

Shelby Chastain-Potts: I then deployed to the D.C. Public Health Lab where I actually got to meet David, who is currently deployed there.

Shelby Chastain-Potts: So I assisted with lean methodology with their laboratory service, trying to basically optimize the intake and output of their test results. You can actually see here in this photo, this is from the D.C. Public Health Lab. I was working with one of the drive-thru centers where we were verifying the patient identifier information on the samples prior to the shipment to the laboratory.

Shelby Chastain-Potts: There are so many components that go into testing that you might not normally think of on a daily basis.

Shelby Chastain-Potts: When we receive samples, one of the high priorities is ensuring that we have the traceability for the patient's information. If we cannot verify who the sample belongs to then we cannot accept it because we cannot provide them with the results. So, this is just one example of the many opportunities that we have to look at the quality systems in place and look for continued improvement.

Shelby Chastain-Potts: After my deployment with D.C., I returned back to my home lab, where we were then receiving all types of samples from the pandemic.

Shelby Chastain-Potts: Due to the short staff, I ended up going back into the lab to help with co-infections, which was beyond my normal scope as an LLS fellow.

Shelby Chastain-Potts: So I was then able to reintroduce myself into the laboratory. It was a great experience because as a laboratorian by background, I started to miss the lab. But as people who were entering into this fellowship were looking for more opportunities such as in service and in leadership, I quickly realized that the trajectory that I had entered into at the beginning of the fellowship had changed my initial thoughts of wanting to stay in the laboratory working on the bench top.

Shelby Chastain-Potts: I quickly realized that the quality component was the highlight of my day.

Shelby Chastain-Potts: Luckily, I was able to transition once we were able to bring in more people to help staff for our co-infection testing.

Shelby Chastain-Potts: My supervisors at IDPB have been amazing and they have provided such great opportunities, including the opportunity to step in as the Interim Quality Manager for my branch.

Shelby Chastain-Potts: I began this step in September, so I have now had a wide diverse experience as a fellow working in the field deployment, working in the laboratory at the bench, as well as the quality management systems.

Shelby Chastain-Potts: This diversity has truly allowed me the opportunity to identify what the next steps are for me.

Shelby Chastain-Potts: I have actually accepted a new position, prior to the end of the fellowship, with my host site. I am now the QMS and CLIA Compliance Unit Lead. We just completed our CLIA inspection, and it went very well. And I get so excited about the little, minute details that people hate,

pretty much, working in the lab, but I am your girl. If you ever have any quality questions, please come to me, and I'm happy to speak more about all of my love for quality. But that's kind of an overview of my experience.

David Payne: I'm David. I'm a first year, about to be a second year.

David Payne: Like Shelby said, we actually met — she was on a Lab-Aid in D.C. when I started my fellowship. So, a Lab-Aid is essentially where a state or local public health lab calls Tara, I don't know the actual process, but let's just say they call the backbone and Tara picks up and says, "Okay, sure. I can send you an LLS fellow." And they go out and do their thing. And Shelby was the one to do their thing because here in D.C., we were really struggling. We were a really small lab. We've grown quite a lot since the beginning of the pandemic. We just needed some experienced people, and they knew I was coming with no experience, but another person was coming, so they called for Shelby first, which is great. I just got to continue some of the stuff she started.

David Payne: When I got here, my overarching project has obviously been COVID-related because everything is COVID-related now, right?

David Payne: I drove a U-HAUL into town with my wife and my small children late Thursday night. And Friday morning at 7 am, Shelby and I and the lab director and a couple of other people were at a clinic evaluating them for whether or not they could run a rapid COVID test. We were going to put instruments in their facility. So, that was just a baptism by fire because I have barely been in town and I have never heard of this test or anything like that and I started training people on it before I'd ever actually run it. So, one thing you will learn is to learn quickly.

David Payne: But since then, I've placed these in 14 other sites around the district and I support them with their quality programs. I help them with proficiency testing with training and like I said, that's been sort of my overarching thing. But while I'm here in the D.C. public health lab, I've rotated through all of the different departments, learning how all of the pieces of the machine fit together, with the idea that I am finding ways that they can put together better or ways they can communicate better. So, I spent two months in the accessioning department pulling up test request forms and tubes of samples making sure that the patient identifiers matched, and I did a thousand of those a day for two months and putting stickers on tubes. Which showed me a lot of the places where that process needed to be improved, because it was a very laborious process with lots of manual steps. And so, from there, I moved on to some of the testing departments and again, I spent a month pipetting individual COVID samples to run on our Panther, which is the testing instrument. And from there, I moved on to next-gen sequencing, where they were sequencing about 10-15 samples a week, and my job there was to increase our capacity. They just told me that they want to be sampling 100 samples a week, make that happen. So, I looked at the workflow and all those things and I sort of done that everywhere I go. I look at the workflow, I look at how we can make it better, just cause this pandemic really hit us all by surprise and we didn't have processes in place to run this many things.

David Payne: Statistically, we get a lot in D.C. In 2019, the lab ran 8,000 tests. Total tests for the whole year of everything: rabies, STDs, all this stuff. At our peak in December, we were running 8,000 COVID tests a week, which is a lot more and needs a lot more infrastructure. So anyways, that's one of the big things that my fellowship has been is really focused on optimizing workflows and processes, which is not something I ever anticipated when I was an academic postdoc, so if you're in that boat, you'll figure it out. I don't have a good conclusion like Shelby did. I'm done!

Tara Henning: I'll add to David. David is also about to start doing some rotations with partnering clinical laboratories and hospital laboratories and I think that highlights one of the unique things that you could do with LLS and Shelby kind of touched on this. You leverage your LLS experience to what your career goals are and your interests.

Tara Henning: David has interest in sitting for his clinical board certification exams and this is one way that we'll allow you to meet that eligibility criteria, and LLS can be a conduit to that.

Tara Henning: We are not a board certification program, but we certainly help support you and tie you in with the opportunities that you need in order to meet those requirements.

David Payne: Tara has been very helpful in that. We meet and talk about what are my goals for my career and I do the same with my lab director here. And like she said, one of them was sitting for boards and so he said, "Well, we work with all the local hospitals. I'll make some phone calls and give you some spots." So, the program has been tremendous for that.

Shaniece Theodore: Thank you David and Shelby for sharing your experience.

Shaniece Theodore: I just wanted to mention before we start the Q&A portion of this session that May 18th, we have a session on Handshake at 3:00, where fellows will be able to go more in depth about their LLS experience because that entire session is just dedicated to the LLS fellow experience. So, be sure to join us. The details for that call as well as the access information is also on the LLS website.

Shaniece Theodore: So, we're happy to open up for questions, and you can throw questions to the program as well as to Shelby and David.

Tara Henning: Shaniece, I'll help read off one of the questions. We already have one in the Q&A box. Is it better to ask your last PI for recommendation or the person who knows you more even after years of finishing your PhD?

Shaniece Theodore: I think for us as a whole, we just want letters that are coming from folks that know you well, that played a supervisory role, as well as just really understand your work and who you are as a person. I wouldn't say either or matters but Tara, you can —

Tara Henning: I would say if you don't already have the second, then ask for both of them. I think it also depends on how long you've been out of graduate school and maybe reading into that question, you may be a little ways out of grad school, but whoever writes that recommendation letter needs to be in a level of seniority and have supervisory authority over you so that we can decide that's not one of your buddies, or one of your colleagues down the hall that's writing that letter on your behalf. It's hard for us to take it seriously at that point.

Tara Henning: I'm happy to help monitor Q&A.

Tara Henning: What types of "jobs" do LLS fellows find after the program?

Shaniece Theodore: So, Shelby talked about the job that she recently transitioned to. She's still a fellow but she's graduating fairly soon. One more month and she'll be on her way, but she already has a position which is really awesome.

Shaniece Theodore: The jobs vary. We have a list of alumni on the website, and we have all their current positions, we keep that up to date. So, we have everywhere from the deputy director of a state public health lab to some fellows going to be in team leads, so scientific team leads at the CDC, some are focused more on quality management as QMS officers. It really depends, the jobs vary. It really depends on what you want to do. So, we don't push fellows down any specific path. You really determine where you want to go after LLS because the training is broad, so you can focus on and do whatever it is you feel like doing at the end of the fellowship. There's tons of opportunities and fellows can transition into multiple roles with the training that they receive in the program.

Shaniece Theodore: For example, David is probably moving on to a big position one day as a director of a state public health lab.

Tara Henning: [crosses fingers] I'm doing this for you, David.

David Payne: We'll see. Let's count the chickens after they hatch.

Tara Henning: Okay. I think it's also important to note — so as a program, that's one of the best parts of my job.

Tara Henning: Currently, we have some fellows who are about to graduate who have their jobs squared away and there are others who are still finalizing details and those guys are kind of sweating it a little bit and I know it's stressful, but I always joke that we've never had someone not be able to pay their mortgage.

Tara Henning: But we also start pretty early, trying to find out what your interests are, where you want to be, more importantly, maybe where you don't want to be. And then as a program, we can't guarantee a position, but I can guarantee our whole support behind you.

Tara Henning: So, we try to connect you with opportunities, we give you input on interviews, we help you with your resume, we tie you in with people who are hiring officials or know people in the know.

Tara Henning: We've had folks who have taken positions in the clinical realm. They are the lead for clinical diagnostic laboratories. For instance, one of our alums is the director at Children's Hospital Laboratory. We've had folks who've gone to take positions in state laboratories. Diana Riner is a unit lead at the Michigan State Public Health Laboratory. Randy Fowler is director of Mycobacteriology Lab at New York City.

Tara Henning: We also have sort of this gray area of public health. One of our 2017 alums, Cecilia Kretz, she works with APHL, the Association for Public Health Laboratories, but she is the manager for the CDC Cooperative Agreements which is sort of a grant funding mechanism. It's how we push money out to the state partners through sort of this central clearinghouse of APHL and it's a lot of money, as in hundred plus million-dollar cooperative agreements here. And she manages the National Center for Emerging Zoonotic Infectious Disease and their portfolio, which covers anything from foodborne to antibiotic resistance to AMD. And she sits in a very unique position in public health that's neither at a state jurisdictional laboratory or even CDC.

Tara Henning: Ultimately, our goal is to train and retain fellows in public health, but we do have folks - one of our more recent graduates, class of 2018 fellow, Erin Scherer, she accepted a directorship position in the research laboratory or vaccine center type laboratory with Emory, so it covers the gamut. I hesitate to say that we have fellows that go do this, this, and this because they direct that and

that was their path. So, it's just like Shaniece said, the training is broad, the opportunities are endless, and as a program, we try to help you as best as we can to plug you in with what's best for you.

Shaniece Theodore: Yeah, the world is really yours. It's open. Lots of opportunities to fall into different areas based on your interests.

Shaniece Theodore: I'm seeing the questions now. I was looking at the wrong box in both places.

Shaniece Theodore: But I did want to go back to that question because I'm reading it and it's reading differently from when you said it out loud. For the question about years after finishing the PhD, I think if you have completed your PhD maybe seven years ago, for example, it's a judgment call. You want to get as recent of a supervisor as possible to write your recommendation letters. It's fine to have a PI from school if you graduated a while back, but it's really a judgement call. I think your best bet is to get a most recent supervisor to write that letter.

Shaniece Theodore: There's a question about - do the reference letters need to be uploaded before the June 4th deadline? Yes, so, the deadline is the same for the application as well as the letters of recommendation.

Shaniece Theodore: And then there's questions in the chat box that I'll go to. Is there a limit to time since graduation from PhD eligibility? We don't have a limit on the number of years after your graduation, so no.

Tara Henning: I want to comment on that one real quick, Shaniece.

Tara Henning: Something to keep in mind though is that this is a training fellowship. If you graduated years ago with your doctorate and you've assumed different leadership roles or risen in the ranks of your current position, it can be somewhat difficult to step back and take that role of a trainee. I'll be completely candid. We've had some fellows struggle where they came from more of a leadership role, they were now in a trainee role, weren't necessarily in charge and that's not because they were not able to or had the capacity to lead, it's just that that was not the right time for them.

Tara Henning: Part of working in the federal government and in federal service, and particularly in service to state and local partners, is kind of knowing where you fit in the scheme of things. So that was hard for them, just because they had been used to being so assertive. I think that we've been able to flex more muscles in these pandemic operations because our fellows were called upon to lead, no matter what and where they were. That's something to keep in mind is that if you've been out of graduate school or out of your postdoc long as that you've assumed more leadership role in your current position, you can guarantee we're going to ask you to reflect on your ability to step back from that and be in a trainee state of mind. So, reflect on that and come up with a good answer.

Shaniece Theodore: Hint, hint.

Shaniece Theodore: Okay, there's another question. Which part of the application is most important? Personal statement, recommendation, transcripts, or are they all equal? And I would say they're all equal.

Shaniece Theodore: One, according to our rubric, doesn't have more weight than the other, so I'm sure all of them will be judged equally the same. And Tara, you can add anything.

Tara Henning: I have had some folks who, and I'm trying to now think back, and I don't want to call anybody out, where I was like, "What did they do in undergrad?" Because I'm looking at their GPA and of course we pull it together when they're in graduate school and it may not tank your application, but it also is a flag for me so that if you get to the program interview stage, I'm probably going to ask you about it. What happened? Can you kind of explain because everybody has their own personal experiences in situations that can affect our GPA. So, I would say the only thing maybe slightly gray is the transcript, but a poor personal statement and recommendation will tank your application.

Shaniece Theodore: I don't see any other questions at the moment in the Q&A box or chat box. So, we'll just wait a second to see if there's any questions. And Shelby and David, if there's anything you want to add in.

David Payne: One just popped up in the Q&A about what March 2022 is.

Shaniece Theodore: March 2022 was mentioned as the date of the start of the program for the upcoming class. It's not.

Shaniece Theodore: Each class or cohort starts in July, so our cohort for the class of 2021 will begin July 2021. The period that you're applying for right now for the application that's open, that cohort will begin in July 2022. So, what I mentioned about the March 2022 deadline was that if you are currently in a PhD program, the deadline to defend your dissertation is March 31, 2022 in order to be eligible for the cohort for the class of 2022. So, if you're currently in your PhD, you need to defend by March 31, 2022 in order to be eligible for class of 2022.

Tara Henning: I see there was another question about when the next webinar is to hear from current and former fellows?

Shaniece Theodore: Oh yes, May 18th, 3:00 to 4:00 on Handshake. And that information is on the LLS website as well. So, the link to actually log in to the zoom call is on the website.

Tara Henning: And for those who are not familiar with Handshake, it's a career sourcing --- and I'm probably going to mess this up, but you do not have to have an account with Handshake to participate in that webinar. You can access it directly from the link that's provided on the LLS website.

Shaniece Theodore: There's a question for the dissertation defense date. What if we are not completely sure if we will be able to defend by March 31st? I'm in my last year and still planning the feasibility to defend by then.

Shaniece Theodore: Tara, I'll let you take this one.

Tara Henning: You can apply. If you do not have your defense documentation signed off or a letter from your department because not everybody defends but they can meet their graduation requirement, but they just have a grace graduation date. In those cases, we accept a letter from your department or a person of authority that says you met all the graduation requirements.

Tara Henning: If you do not have either one of these, then you will be asked to give up your spot. We can't make exceptions. We need to have that documentation for our HR, our human resources hiring processes and there's no way to get around that.

David Payne: I would just add to that.

David Payne: Tell your committee that. Tell them, I have a job lined up but if I don't defend by this date, I won't get this job. They want to get you a job, at least mine did.

Tara Henning: It depends whether you will be able to finish up your work or if you're anticipating a delay and if that happens, that committee tends to take their time a little bit but be your own advocate and drive it.

Shaniece Theodore: There's a question. Do a lack of formal microbiology classes hurt my chances of getting into the fellowship program? I have learned quite a bit informally through research training. And my answer to that will be no. So, the fellows background varies tremendously, but what we look for eligibility really is just a PhD in biological sciences. And when you come into the program, I think Christine says it best is that you will learn as you go, a lot of what you need to know. Fellows may have a specialty in one area, and they go into a host site where they are not familiar with that specific virus, haven't worked on it before, that specific subject matter area, and they dive right in and they become experts in that particular area. Shelby?

Shelby Chastain-Potts: Yes, I would like to add a little to that.

Shelby Chastain-Potts: My background is actually biomedical engineering, so I had no official microbiology. We definitely have diverse experiences from our PhDs, post docs, and professional experiences.

Shelby Chastain-Potts: One recommendation that I would make in regards to entering into the interview process is to think about the skill sets that they are using in the laboratory, not necessarily the type of disease. Have you done PCR work? Have you done next-gen sequencing? Are they using these techniques? What you already know, and they can apply those skills to a new pathogen. I think it's more important than being concerned necessarily with the specifics of microbiology.

Shaniece Theodore: I agree. I couldn't have said it better.

Shaniece Theodore: The next question is - is the recommendation letter uploaded by the candidate or by the reference person? So, it's uploaded by the individual that you ask for the letter of recommendation and it's not necessarily an upload, we also don't allow attachments. So, they'll just be filling in fields in the recommendation form essentially and the candidates are not previewed to the letter of recommendation that is submitted.

Shaniece Theodore: If fellows are streamed throughout the country, how do they interact as a cohort? That's a great question. So, the last several classes, we had both CDC headquarter fellows as well as fellows at state and public health labs, and I think David is at D.C. public health lab, so he can talk a bit about how he's able to stay connected with his cohort being that he is in D.C. and majority of the class is in Atlanta.

David Payne: So, I was really worried about that actually. I'm the only field fellow in my year. And then the greatest thing happened: there was this pandemic.

David Payne: I was worried that everybody was going to get lunch together, and they can't do that and that's great.

David Payne: So, we interact over zoom, we do the same kinds of things, I do the same things from D.C. that they were doing from Atlanta because they're all teleworking. At some point that is going to end, but I think we all sort of have grown accustomed to virtual meetings, and so we have a WhatsApp group that we are always talking on. Every other Friday, we get together and have a virtual lunch where we put our laptops down in the break room and eat lunch together. You find a way. I don't feel like I'm getting shortchanged at all by being out in the field, I still interact with all of my fellows.

Tara Henning: I'll comment further on that. Outside of pandemic operations, all fellows, whether you're field or headquarters, participate in their initial summer course training, also second year summer course, all course. So, we have a variety of courses and these are kind of intensive and the initial summer course is a month long so you're going to get a lot of time with them. And then the other ones are about a week. And then we also bring our field fellows back in for critical seminars, for other training opportunities. You'll interact not only with your cohort of LLS, but also with your EIS officer, partners on deployments. We also have initiated a new program here at CDC, it's brand new called an Internal Lab-Aid, they changed the name but essentially where we provide this laboratory support that we used to do with jurisdictional labs and still do, but sometimes there are headquarter labs that need that same opportunity and it's also a great time for our fellows to build a cross-train with other CDC labs. Well, if you're a field fellow, right now we have our Massachusetts field fellow in headquarters right now doing that, and so she's able to hobnob with her colleagues and interact with other subject matter experts here on campus as well.

Shelby Chastain-Potts: So, we also have not only our class WhatsApp chat, but we have a two year, the ones that are currently active but then an alumni chat as well. It's amazing. You can't understand how great of a resource that is just to have all those people in one location. So, with all these deployments or just working at your natural host site, we typically have questions. We just go to that chat and send it there.

Shelby Chastain-Potts: We understand that we're not the smartest people. We have our own expertise in different areas, but we know someone from this LLS program that is an expert in each of these scenarios. And so we have that foundation, that network that we can reach out to and just from those chats and then like David mentioned, we have some late-night meetings on zoom where it's just having a few drinks necessarily just to connect with one another and see how everyone is doing. So, you'll definitely be able to connect no matter where you are.

Shaniece Theodore: We don't have too much more time left. We have like 2 minutes before we have to end the call. I see quite a bit of questions about specific eligibility - if I have a degree in this area, do I qualify? Am I eligible? Feel free to send that to the LLS email, [lls@cdc.gov](mailto:lls@cdc.gov) and then we can address your specific eligibility questions.

Shaniece Theodore: There's a couple more. I'm just trying to see what we can get to before the two minutes end.

Shaniece Theodore: When will the first round of interviews begin and what is the time frame between the program interview and the host site match interview?

Shaniece Theodore: So, apologies because we recently changed our schedule and I no longer know it by heart, but everything is posted on the LLS website. The time frame between program interviews and match interviews is typically between about a month to two months, so we should be wrapping up eligibility reviews within maybe around June and then the actual application review process will conclude around July or August and then interviews will happen shortly after. So, between August and

September, but I don't have the exact dates but if you go to the website, we have a timeline of what happens in which month and we stick really closely to that specific timeline.

Shaniece Theodore: And it's 1:59, so I don't think we have any more time for questions. This was a really great discussion. I want to thank Shelby and David for joining and sharing their experiences. If you have additional questions, feel free to email us. You can also reach out to Shelby or David if you have additional questions.

Shaniece Theodore: Oh, great. David put his email in the chat.

Shaniece Theodore: Take advantage of reaching out to current fellows to ask about the application process as well as pick their brain a little bit about what they're doing in the fellowship. It'll help you prepare your application and make it stronger. So thank you everyone for joining today and we look forward to receiving your application.