Kelly Cordeira: Good afternoon, everyone, welcome to our aspiring public health professionals webinar featuring CDC's epidemiology elective program, also known as EEP. My name is Kelly Cordeira, and I am an epidemiologist in CDC's Center for Surveillance, Epidemiology, and Laboratory services, and the lead for student programs and partnerships within the Epidemiology Workforce Branch, which includes the Epidemiology Elective Program.

Kelly Cordeira: Today, our program coordinator Chini Sheth will provide a short overview about the experiential program, application process, and our timelines.

Kelly Cordeira: Then I will turn things over to Captain Eric Pevzner who will lead us in a panel discussion with our EEP alumni who are now serving at CDC as Epidemic Intelligence Service officers.

Kelly Cordeira: We will also have time for questions at the end of the session, if you have questions throughout the webinar please add them to the chat.

Kelly Cordeira: Chini?

Chini Sheth: Thank you Kelly.

Chini Sheth: My name is Chini Sheth and I'm an ORISE fellow at CDC and EEP program coordinator.

Chini Sheth: Let's get started. As many of you know, the Epidemiology Elective Program, EEP, introduces medical and veterinary students to applied epidemiology, public health and global health through hands on experience and mentorship by CDC subject matter experts.

Chini Sheth: EEP trains student clinicians in applied epidemiology and places them with mentors for hands on experience, as they provide a public health service for six or eight weeks.

Chini Sheth: These six- or eight-week rotations are available, beginning in January and March of each year.

Chini Sheth: In this picture you'll see EEP student Amy Xie deployed to the Maricopa department of public health in Arizona in March 2020 as a part of CDC's response to the novel coronavirus outbreak.

Chini Sheth: Amy worked side by side with an EIS officer and used her medical training and ability to speak Mandarin to follow up with people who had suspected COVID-19 illness to check their daily symptoms.

Chini Sheth: So, as you can see, medical and veterinary students can get hands-on public health experience with EEP, which is a great step in the journey to becoming a CDC disease detective.

Chini Sheth: The epi elective program is for medical and veterinary students who are enrolled in a fully US accredited medical or veterinary school located in the United States.

Chini Sheth: Each year, we select between 50 to 60 students from different schools and backgrounds to participate in one of four cohorts, two of which start in January and two of which start in March.

Chini Sheth: As a cohort, students start their rotations with a three-day orientation training and then are placed with host sites across the Agency and beyond to complete projects. In many cases students are

provided with opportunities above and beyond their projects. For example, here we have EEP student Anna Laughman.

Chini Sheth: Anna met former US Surgeon General Dr Jerome M Adams during her EEP rotation at a special event highlighting the importance of public health and mosquito vector control.

Chini Sheth: The short-term epidemiology projects vary based on the host side but could include participating in surveillance of a disease, injury, or other health condition, analyzing health data to identify new risk factors for disease, assisting in the field to investigate an outbreak, and contributing to CDC publications and guidelines of major public health importance.

Chini Sheth: During the rotation students could also attend CDC presentations, network with CDC staff and, in some cases, assist EIS officers in the field and co-author scientific articles.

Chini Sheth: So, although many of our students are matched with host sites and mentors in CDC in Atlanta, Georgia, some students match with domestic CDC sites like San Juan, Puerto Rico; Fort Collins, Colorado; Anchorage, Alaska; or Cincinnati, Ohio. Students can support other federal sites like National Park Service and Indian Health Service.

Chini Sheth: As our program expands, we're increasing emphasis on opportunities on placing students with state, tribal, local, and territorial health departments across the United States.

Chini Sheth: Because the bulk of public health work is conducted at the state and local level, these positions often provide a wide breadth of public health experience and can allow students to support public health closer to home. The map provided shows host site locations for the 2022 host sites, but you will see more orange on this map in the future.

Chini Sheth: Another aspect of our growing program is our connection to the EIS Program.

Chini Sheth: Throughout EEP rotations, many students can work closely with our EIS officers and see EEP as an opportunity to network with CDC staff across the agency that can support their future career goals.

Chini Sheth: For example, on the slide you'll see a picture of John Rossow. Back in 2016, John was a veterinary student who participated in EEP.

Chini Sheth: In 2020 John went on to become an EIS officer and was recently selected to a new prestige program called the Future Leaders in Infections and Global Health Threats or, also known as FLIGHT.

Chini Sheth: You will see that John is a lieutenant in the Commissioned Corps of the US Public Health Service.

Chini Sheth: Like John, many of our graduates are on the path to becoming our nation's next health leaders, which may also include other CDC training programs like EIS, the CDC preventative medicine residency program, as well as the FLIGHT program. Another example of this is the story behind this picture.

Chini Sheth: Dr. Alexandra Medley, a veterinarian MPH graduate, is also a FLIGHT officer and former EIS officer who had her first experience at CDC with EEP in 2016.

Chini Sheth: During her rotation she worked with the pox virus and rabies branch to determine strategies to increase rabies vaccination coverage in dogs.

Chini Sheth: On this slide, you will find a testimonial from one of our recent EEP graduates Max Cohen.

Chini Sheth: We know that some students who participate in EEP ultimately decide to stay in veterinary or human medicine, and that is completely okay.

Chini Sheth: This program is designed to provide you with relevant public health skills and experience to help you build your skill set and expertise, including skill set and perspective that can translate into clinical work if that is the career path you choose. You can read more about our alumni testimonials at cdc.gov/EPlelective. We will add a link to the website in the chat box.

Chini Sheth: The application cycle for EEP opens annually. It is currently open through March 31, 2022, and will close at 11:59pm Eastern standard time.

Chini Sheth: All applications and supporting materials must be received by the deadline. Supporting materials include two letters of recommendation, one of which must be completed by a faculty member at your current medical or veterinary school, and the academic endorsement form, which must be signed by the student affairs office at your school.

Chini Sheth: On the application, students can provide their preferences for one of four set rotation dates, geographic location, and topic areas and projects of interest.

Chini Sheth: This information is used to match finalists with host sites.

Chini Sheth: Selected applicants will be notified via email by June 30. To learn more about the application process and for other Frequently Asked Questions please visit the EEP program application information page and we will add that link to the chat as well.

Kelly Cordeira: Thank you, Chini, for that very helpful program overview. Again, if you have questions about the program or the program application process, please go ahead and put your questions in the chat. If you would like to contact us separately to ask those questions you can also email us at epielective@cdc.gov.

Kelly Cordeira: So from here, we will turn it over to Captain Eric Pevzner who is the chief of the Epidemiology Workforce Branch and the chief of the Epidemic Intelligence Service program, and he will introduce each of our panelists and launch discussion with those panelists. Eric, take it over.

Eric Pevzner: Thanks Kelly, and thanks Chini for that great overview and for the introduction, and thanks to everybody for attending.

Eric Pevzner: You know this is a really awesome program. If you really think you have any potential interest in a career in public health and blending your clinical skills with public health training,

Eric Pevzner: this is really a unique opportunity to come to CDC or get assigned to a state or local health department and really gain some experience and see if this feels right for you. And if it does, this is a real

springboard to some awesome opportunities, including the Epidemic Intelligence Service but not limited to that. So.

Eric Pevzner: But instead of hearing it from me, you're going to get to hear it from three people that went through this program, are now current officers in the Epidemic Intelligence Service, and it's got a great ring to it, we've got David, Erin, and Karen -- sounds like some morning show.

Eric Pevzner: And so they've got a diversity of backgrounds and experiences, and so what I'm going to ask is each of you -- we're going to start with David since I mentioned your name first, if you could just say a little bit about your background and how you ended up in the Epi Elective Program.

David Philpott - EIS, HIV Cluster Detection and Response Branch: Thanks Eric. So I'm David Philpott.

David Philpott - EIS, HIV Cluster Detection and Response Branch: I am a pediatrician most recently I finished pediatric residency just before starting EIS, but getting into EEP started, I was a teacher in high school and then I went-- and realized I wanted to do an MPH after thinking about it some more, and in that process met someone who was an EIS officer.

David Philpott - EIS, HIV Cluster Detection and Response Branch: And she was kind of one of my initial mentors and she a) mentioned this program to me because she did it when she was in med school and then did EIS later on, and b) I just figured out that Oh, this is actually – I'm definitely much more of an applied public health person, and I want to kind of get experienced with that soon and on the earlier side to kind of confirm that.

David Philpott - EIS, HIV Cluster Detection and Response Branch: And kind of confirm, maybe EIS down the line, because I thought what she did was really cool. So this was kind of the way for me to help evaluate that.

David Philpott - EIS, HIV Cluster Detection and Response Branch: And it was awesome.

Eric Pevzner: Thanks David, thanks for adding that awesome exclamation mark at the end. All right, now we went from David, let's go over to Erin. Tell us a little bit about your background and how you ended up in epi elective please.

Erin Ricketts, EIS Field Officer in North Carolina: Hi, everybody. I'm Erin Ricketts, I'm also an MD. I am in internal medicine, I finished my residency also right before coming to EIS.

Erin Ricketts, EIS Field Officer in North Carolina: I applied for the EPI elective because when I was about 12 I read a book about the CDC and the EIS and I told my mom I wanted to do that when I grew up, and then I just had to convince everybody else that it would be a good idea, including my school when I tried to convince them that I wanted to do this elective and they had no idea what I was talking about.

Erin Ricketts, EIS Field Officer in North Carolina: Yes, it was a lot of fun, but I actually found EEP because I was stalking the CDC website and all of its programs, and that is how I ended up there and I'm really,

really glad I did because it absolutely solidified my desire to go work in public health, so thanks for having a website.

Eric Pevzner: Great thanks Erin. You know when I was 12 I think I told my mom I was going to be a firefighter so I'm glad you reached what you -- you knew what you were going to do, and you made it happen. I didn't quite make it happen, although some days it does feel like I kind of put out some fires. But anyways.

Erin Ricketts, EIS Field Officer in North Carolina: I will say there was an awkward moment where my mom videotaped me at like six years old saying I was going to be a ballerina artist, so I still haven't lived that one down.

Eric Pevzner: Right, well there's still time.

Eric Pevzner: Alright, thanks, Erin.

Eric Pevzner: Karen, tell us about your background and how you ended in the Epi Elective, please.

Karen Wu: Hi everyone. I'm Karen, I'm a veterinarian by training, so representing all the vets out there. I actually got my MPH prior to going to vet school, which is sort of a weird path, but I definitely wanted to go into public health and I found out about the EIS program which we are all currently a part of, and decided that that's what I needed to do. So, I went to go get my DVM and, like Erin, I was trying to get any public health experience possible during my DVM and I stumbled across the Epi Elective program on the website.

Karen Wu: So I got – I applied, got in, and it was just such a fantastic experience and exposure into CDC and I think, like, it's an excellent opportunity, if you have the chance to do it. Thanks everyone, excited to talk to you all.

Eric Pevzner: Great thanks Karen, so I think that's a perfect entrée. So you know, you mentioned you had a fantastic experience during Epi Elective. Can you talk a little bit about some of the work that you did, and what made it so fantastic for you?

Karen Wu: Yeah sure. So I was with the bacterial special pathogens branch, and I was onboarded as, you know, an Epi Elective student and I was supposed to help with leptospirosis and looking at a literature review on leptospirosis and dogs. However, conveniently enough, there was -- or inconveniently enough for everyone who was involved, there was an epidemiologic assistance requested -- so that's an Epi-Aid -- where the State of Texas requested help from CDC on a mass exposure to Brucella rb51 and conveniently enough, I was there, so I was able to be very involved in this investigation.

Karen Wu: You know, we did things like call households to inform them of the exposure. We then put together a questionnaire and I was able to be very involved in this project, like managing databases, making phone calls, we were very, very involved in this entire investigation, so it was a very special experience.

Eric Pevzner: Awesome thanks Karen. Alright, well we'll keep going back in reverse order here. Over to Erin. Erin, tell us a little bit about Epi Elective experience.

Erin Ricketts, EIS Field Officer in North Carolina: I was placed in the Mycotics Branch. We had way too much fun in the very short time that I was there with EEP. I think -- I think I was part of probably six or so projects in a few weeks ranging from the reviewing new Candida auris outbreaks in the greater Chicago area to trying to determine how to treat swamp cancer, which was the -- I think the more fun name for an oomycetes infection which was really interesting because there was a lot of back and forth in the CDC about where that actually fell, if it's actually not really a fungus and it's not really an algae. It's kind of right in between, and so I think at some point, someone flipped the coin and decided fungus gets it.

And so, that was a really interesting project because it was just one person with one infection and the question was how much we had to worry about other people being infected, what we could do to help them treat the infection or prevent it from happening to anybody else again. We didn't have an Epi-Aid for it but there was a lot of discussion about whether it might be necessary and what the local health department should help do to deal with the infection. Just some really, really interesting in-depth conversation about something that's so rare that I hope I never see it again, frankly.

Erin Ricketts, EIS Field Officer in North Carolina: But a lot of fun.

Eric Pevzner: Great, thank you for sharing that rare experience that you know so often a part of some people's training so.

Eric Pevzner: Over to you, David. Why don't you tell us about what was special and helpful for you in your Epi Elective training?

David Philpott - EIS, HIV Cluster Detection and Response Branch: Thanks Eric. So I was in the Division of Global Health Emergency Response and Recovery branch, which you would think that that meant I went a lot of cool places, but actually was great prep for COVID because one other person I worked closely with was in another state.

David Philpott - EIS, HIV Cluster Detection and Response Branch: So I was working remotely with her at that point. But anyway, it was -- it was great in that and actually working with her, I worked with her all throughout the rest of residency on one project and then she actually just gave me another one, because she had no one else to do the work.

David Philpott - EIS, HIV Cluster Detection and Response Branch: But that project was great because it was focused on emergency response, specifically looking at detainees in sub-Saharan Africa, and figuring out, how can we screen those individuals for malnutrition more easily and more quickly.

David Philpott - EIS, HIV Cluster Detection and Response Branch: And the reason I loved the project and the reason that it kind of like made me go 'Yeah, this is what I want to do' even when I was in residency was, we did this analysis -- it's all sensitivity, specificity, all sorts of stuff.

David Philpott - EIS, HIV Cluster Detection and Response Branch: Went through CDC clearance, but the end result was there's a paper out of it that finally got published right as I started EIS, but the main thing was that they've now changed policy. International Committee of the Red Cross has implemented our analysis and changed policy, and now people are able to be screened much more frequently and so they're able to catch detainees in these places of detention for malnutrition much faster. And so that was like immensely satisfying to me because it wasn't just an academic paper that I was cranking out.

David Philpott - EIS, HIV Cluster Detection and Response Branch: It was actually public health action was taken based on the work that I got to do while I was there, and it potentially could impact a lot of people. And so that's kind of the reason that I say it was awesome.

Eric Pevzner: Yeah, that is awesome to get to be here for a short period of time and contribute to an investigation that resulted in policy change that will impact thousands and thousands of lives, so that's -- thanks for sharing that, that's really great.

Eric Pevzner: Who wants to share -- so you know I think a lot of times what we hear from clinicians is, you know, you guys invest a lot of time learning to be clinicians and to work on a one-on-one basis with humans or, in Karen's case, animals.

Eric Pevzner: And that's a significant investment in time, and so now suddenly you're jumping into something else to public health, where it's taking you away from that individual focus to population focus and that's a major decision point for a lot of clinicians. Who wants to kind of speak to that and talk about how Epi Elective might have helped you with that decision?

Erin Ricketts, EIS Field Officer in North Carolina: I think I'll start with that, because I think for me it was -- it was a pretty easy decision.

Erin Ricketts, EIS Field Officer in North Carolina: I always knew that I liked public health and I fell in love with medicine when I was doing that, as well.

Erin Ricketts, EIS Field Officer in North Carolina: Because I think -- I think, for the most part, everybody who ends up here comes here because they want to help people at the end of the day.

Erin Ricketts, EIS Field Officer in North Carolina: And it's a question of how to best do that and what provides us the personal fulfillment that we need in our lives with doing that.

Erin Ricketts, EIS Field Officer in North Carolina: And the question of is that something that I see more in direct one-on-one care or I see more in kind of talking about what David was saying with these big policy changes that can impact so many more people.

Erin Ricketts, EIS Field Officer in North Carolina: And I think that that was something that I really got out of EEP was seeing like yes, I really do get a lot of fulfillment from being able to

Erin Ricketts, EIS Field Officer in North Carolina: impact these systems in this way, and knowing that medicine is not just, you know, learning to take care of one patient at a time.

Erin Ricketts, EIS Field Officer in North Carolina: A lot of our medical training is learning the medical system and what goes into it and how it works and how you get from, you know, a patient who's sick to somebody who's doing better.

Erin Ricketts, EIS Field Officer in North Carolina: And having that background and knowledge and information is so important for a lot of our public health strategies, because we need to know what's going on in the hospitals and the clinics.

Erin Ricketts, EIS Field Officer in North Carolina: And in folks that aren't ending up in the hospitals and the clinics, and having that training does give us the ability to make a difference to all of these people.

Karen Wu: I'm happy to go next.

Karen Wu: So, in terms of veterinary medicine, you know a lot of what we learned, like that clinical information like Erin was just saying, like is really applicable to what we learn.

Karen Wu: There is one thing about medicine, where we learn a lot about population health and so that is sort of reflective in CDC's practices and public health in general, so you actually get to use those skills that you learned about, you know, a herd of cattle and like apply them.

Karen Wu: Also, like one thing that is actually really pertinent right now --

Karen Wu: We are actually looking into an Epi-Aid in cases of Blastomycosis for both animals and humans.

Karen Wu: And actually we're planning on doing, you know, a seroprevalence survey, and so this actually involves you know, using medical skills. So we're going to like collect blood and assist the state and so, you know, this is not the end of your medical career, joining public health. There are many opportunities to use those clinical skills and applying them to public health, and in addition, in other studies that we've been involved in, it's been very helpful to have that clinical knowledge and ability to read a medical chart and also be -- and just have awareness of the disease and just have a baseline, you know, knowledge of them, so you can actually think about them in an epi capacity. Of course I'm actually in the Mycotic Diseases Branch that Erin did her Epi Elective in, and you know, even if you don't know things like, you know, being able to quickly glance at an article and really understanding the, like, pathology behind a disease is very helpful.

Karen Wu: Yeah, thanks. I'll pass it on to David.

David Philpott - EIS, HIV Cluster Detection and Response Branch: Or if you had other question, Eric, we can move on. Okay, so I mean, the main one for me -- I just I can talk a long time -- so the main one for me is.

David Philpott - EIS, HIV Cluster Detection and Response Branch: What I already said, which is like when I was thinking about this, like, I could, you know, see individual patients in the ED, whereas this, like it was like with this analysis we're going to really help a lot of people.

David Philpott - EIS, HIV Cluster Detection and Response Branch: That's one thing for me and then, just like what Karen was saying, like it is super helpful for me to have my medical training when we're thinking about chart reviews and then also like when we're thinking about outputs for if we're writing up like an MMWR, I love having the clinical background, because I'm like, 'Well I want a pediatrician to read this and I want them to know this from it,' because that's the question they're gonna want to know, and I want to make sure we're aligned with that.

David Philpott - EIS, HIV Cluster Detection and Response Branch: I think is the other thing that I have found immensely helpful.

David Philpott - EIS, HIV Cluster Detection and Response Branch: My work right now -- I work on HIV clusters and I actually also have found how I think clinically is very relevant to think about clusters of disease transmission, which is like taking the history of it, and then what's your assessment of it and what's your plan to work on it is actually extraordinarily applicable to what I do for a lot of these HIV clusters, because we have to decide how to work on it and that's really how I actually process through the problem.

David Philpott - EIS, HIV Cluster Detection and Response Branch: I don't know that everyone that I work with feels that way but that's how that's how I actually process it and just the mode of thinking I have as a clinician I have found is extraordinarily relevant to do that work.

Eric Pevzner: Great.

Eric Pevzner: Thanks each of you for sharing that perspective.

Eric Pevzner: Let's go over to Karen. Karen, you know, so you you, you did your clinical training you, you did Epi Elective, it launched into you applying and being accepted into the Epidemic Intelligence Service. Can you talk about some of your work that you're doing right now as an EIS officer?

Karen Wu: Yeah, there's a lot of different hats that EIS officers wear. I think everyone will agree with that.

Karen Wu: And there's you know field positions and also headquarter positions. So I'm currently in the headquarters.

Karen Wu: I have a lot of different projects going on, of course, like you know I think all of us at this point have been working on COVID in some capacity.

Karen Wu: But in addition to that, currently in EIS, we do have, I am working on, you know things like candidemia surveillance and looking at factors that affect mortality in patients with candidemia and we look at surveillance systems that are currently ongoing in the United States, and we take data from them and do analysis on that.

Karen Wu: There's a lot of work on ringworm which is not necessarily something that my branch actually did in the past. This is kind of a niche that, because I'm a veterinarian it fell very nicely in my lap, and so there's cases of drug-resistant ringworm going on globally, and so therefore, because I'm a veterinarian, this is something that I have now started to lead in my branch and so there's a lot of opportunities and things that you can sort of carve out.

Karen Wu: And I must say I know I'm kind of sounding like a broken record at this point, but as a token veterinarian in the branch it's kind of nice because anything that comes in dealing with an animal automatically gets routed to you, regardless of if you are -- if it's a sea otter which I have never touched in my life, I've only seen in an aquarium, versus like any other animals, like I get looped in and that's actually very nice to have.

Karen Wu: But yeah, we do a lot of different projects from analytics to epi-aids to cluster investigations and supporting state and local health departments. That is another thing that we do pretty often.

Karen Wu: If, you know, fungal diseases pop up in a hospital or other states, and they need a subject matter expert, we get looped in, so lots of different things going on all very exciting. Thanks.

Eric Pevzner: Great, thanks, Karen. If you need any info about, you know, sea otters, just ask me. I've learned a lot about it on animal planet with my boys. But anyways, David, you want to talk a little bit about your EIS experience?

David Philpott - EIS, HIV Cluster Detection and Response Branch: Sure. So, like everyone, I've done some COVID work and then some in my home branch. The COVID work, my first deployment – I'm going to do another one in about a month and change here, but first one was working with the schools group. That was looking mostly at test-to-stay last fall when that was sort of the hot thing to be thinking about. And so I did some remote work and then I went with a team to East St. Louis. It was actually a really cool deployment that I kind of was very proud to be part of looking at how we can think about health equity and implementation of that program because there's a lot of concern that it was very resource intensive.

David Philpott - EIS, HIV Cluster Detection and Response Branch: And the initial sites where it was attempted were all tend to be very wealthy locations.

David Philpott - EIS, HIV Cluster Detection and Response Branch: And so there was some work that -- that CDC and the state health department did, and that I was part of to kind of evaluate whether it was sustainable there. So that was awesome and we have a publication coming out next week next, next week's TMS will be on that so.

David Philpott - EIS, HIV Cluster Detection and Response Branch: Tuesday Monthly Seminar, which is sort of the EIS [inaudible] conference if you will.

David Philpott - EIS, HIV Cluster Detection and Response Branch: For--

David Philpott - EIS, HIV Cluster Detection and Response Branch: On that. Most of my work otherwise is on HIV clusters, as I already mentioned.

David Philpott - EIS, HIV Cluster Detection and Response Branch: We do a lot of work, most of it is supporting state and local health departments, so we have -- we give them tools with which to detect HIV clusters that are growing rapidly and to detect where rapid transmission is happening and to intervene.

David Philpott - EIS, HIV Cluster Detection and Response Branch: Most -- we do some of the detection ourselves, but the goal always is, you know, the --

David Philpott - EIS, HIV Cluster Detection and Response Branch: Who is going to intervene on those clusters is going to be local health departments, so it doesn't make a lot of sense for CDC to be calling, you know, calling the shots but to provide tools for which to do the work. And so that's kind of been my role has been supporting several health departments and currently we're about to start an Epi-Aid, actually in the next few weeks to, to deploy to a specific jurisdiction to help them with a -- some clusters of rapid transmission that they're seeing. Can't say more than that because it's not yet public.

David Philpott - EIS, HIV Cluster Detection and Response Branch: But that's what's coming up.

Eric Pevzner: Alright, thanks, David. All right, Erin, you're up.

Erin Ricketts, EIS Field Officer in North Carolina: I'm a field officer so I'm, I'm based in North Carolina and I'm embedded there in their health department, so my projects are really whatever is happening in North Carolina.

Erin Ricketts, EIS Field Officer in North Carolina: Which, of course, right now is mostly COVID is happening in North Carolina but I've done outbreak investigations of COVID in a hospital setting where a significant amount of transmission was occurring in employees. I've done outbreak investigations on completely unrelated things such as legionella.

Erin Ricketts, EIS Field Officer in North Carolina: I've done projects about how we're recording and reporting deaths in North Carolina and whether it's as accurate as it could be.

Erin Ricketts, EIS Field Officer in North Carolina: That was my, my surveillance evaluation project and that work is actually going to result in some big changes to how North Carolina reports their deaths that should be coming up in the next few weeks, so if you start to hear angry news articles about that it's my fault, you can blame me.

Erin Ricketts, EIS Field Officer in North Carolina: Should be great, I'm very excited, um, but it's, it's really fun and really varied you never know what's going to happen. I'm actually so excited to hear that you all have expertise in sea otters because one of the other things that I do is I will sometimes answer the

phone line for our state epidemiology on-call line, and recently we did receive a call with somebody who swears they were bitten by a sea otter in the middle of the state which seems unlikely to me, but we did recommend they see their doctor anyway um.

Erin Ricketts, EIS Field Officer in North Carolina: I'll have to pick your brains about that.

Eric Pevzner: Thanks Erin, yeah there's a lot of biting things out there we need to be careful of, so.

Eric Pevzner: All right, well, thank you all for sharing some of you guys' experience. We got a question in the chat I think it'd be helpful if each of you could answer, and the question is "How did you manage to

Eric Pevzner: integrate the Epi Elective training into your course in your clinical training requirements?"

Karen Wu: I'm happy to start.

David Philpott - EIS, HIV Cluster Detection and Response Branch: Yeah, go ahead.

Karen Wu: Okay, so it has been a little while, and so I think the Epi Elective Program is now -- there's like a set time, which actually would make things a lot easier. Previously the Epi Elective Program, like, had different time periods that you could choose, and then you would essentially be made aware, and you just had to go during that time I believe. So, hopefully the Epi Elective Program can confirm that.

Karen Wu: However, what I did was I actually blocked off as much time as possible in subsequent months. So like I did, like, a whole six months and I just blocked it all off, so that if I got in, like this was a giant block of time where I could schedule the six to eight weeks anywhere in those six months, if possible. And then I scheduled everything around that so, like, any of my outside clinical rotations at like vet clinics or at like the Georgia department of Public Health or other, like, places that can be more flexible, I scheduled them around my Epi Electives.

Kelly Cordeira: And I can jump in very quickly on how the rotations work.

Kelly Cordeira: So we used to do it that way.

Kelly Cordeira: But what we found is that by putting students in cohorts, it creates more opportunities for networking among students.

Kelly Cordeira: And so now our options are two rotations in January and two rotations in March. So there's a six-week option in January and an eight-week option in January, and then also a six-week in March and an eight-week in March as well. When you're applying to the program, you'll have the opportunity to select all that apply, so all of the different rotations that you're available for and that's going to help us with the matching algorithm. So if you're selected as a finalist for the Program, and

you've selected your availability for all four rotations, there'll be a higher likelihood of matching with a host site.

Kelly Cordeira: So availability does matter.

Erin Ricketts, EIS Field Officer in North Carolina: I think very similarly, once I learned that this was an opportunity, I very carefully tried to put a huge chunk of time in my schedule for it, which my school did not understand whatsoever. Um, they were very confused as to why I wanted to schedule things the way I did. I'm very happy that I did it, but I would highly recommend having ongoing conversations with your school if your school is like mine and does not like to personalize things, perhaps, for things that are not their more standard rotations, because after a lot of conversations with people, it made a lot more sense to them why I wanted to schedule like three months of online electives in case I wanted to switch around the time last minute, which I did end up doing for when I got my dates for EEP.

David Philpott - EIS, HIV Cluster Detection and Response Branch: Yeah.

David Philpott - EIS, HIV Cluster Detection and Response Branch: It's been a minute, I was trying to remember, but I remember like I basically planned my fourth year anticipating I was going to try to do this program.

David Philpott - EIS, HIV Cluster Detection and Response Branch: And started conversations with people on the earlier side and then also kind of gave myself a bolus of time where I had some flexibility and I think I had to do what, one week less of the EEP than initially because my school was like "Hard pass, you can't miss that week of didactics" or something.

David Philpott - EIS, HIV Cluster Detection and Response Branch: I am, I remember it was a small little fire to put out, but it wasn't that bad. And once we figured out where I was going and everything, it worked out.

Eric Pevzner: Great thanks. You know our comments about sea otters have generated a lot of interest in some of the chat, but as far as other things to share with the audience, you know for people out there that are listening to, you know, this panel here today, what advice would you have to people that are, you know, considering about applying to the Epi Elective Program and potentially considering blending, you know, clinical training and public health?

David Philpott - EIS, HIV Cluster Detection and Response Branch: I think I – I think this is probably what I already said.

David Philpott - EIS, HIV Cluster Detection and Response Branch: But I think you'll have a different experience here than if you're doing -- even if you're like considering an MPH -- I guess if maybe you work with a local health department it'll might be a little similar, but my experience was all very

academic, publish a paper, do the analysis, that sort of thing, and it's a very different environment when you're trying to take public health action.

David Philpott - EIS, HIV Cluster Detection and Response Branch: And even if, during your eight weeks or whatever timeline you are here for, that doesn't happen, you will at least be a part of it and be working with people who that is their end goal.

David Philpott - EIS, HIV Cluster Detection and Response Branch: As -- and so I think if you're -- if you're at all interested in a career in public health, and you're like "Well I'm not much of an academic person," because that was sometimes a turnoff for me, that's not what you're here to do.

David Philpott - EIS, HIV Cluster Detection and Response Branch: And so I think that, for me, is like why I really valued the experience, too, because it really solidified that this is a very different environment.

David Philpott - EIS, HIV Cluster Detection and Response Branch: I had a statistician in the cubicle next to me for when I was doing the analysis, to be clear, which was actually really nice compared to the academic environment where I had to go beg somebody to help me.

David Philpott - EIS, HIV Cluster Detection and Response Branch: Whereas there's somebody whose job it is to help get this work done that's next to me in the cubicle at our office, but beyond that it was also just a different experience, so I really recommend it.

Erin Ricketts, EIS Field Officer in North Carolina: I really highly recommend it, I mean if this is something that -- pretty much my thought process is, if you have gone to the point where you are seeing this webinar and you are a candidate for this program, you should apply to this program because you are the person that we probably want and will probably want the experiences from this program.

Erin Ricketts, EIS Field Officer in North Carolina: If this sounds at all interesting, it is for you. Don't worry about whether you think you're the best candidate for it; you might be. Apply, it's the only way you find out.

Erin Ricketts, EIS Field Officer in North Carolina: This, this -- I love, I love taking care of patients and I love public health, and I at some point may see more patients than I am right now, because right now I'm just working on public health work.

Erin Ricketts, EIS Field Officer in North Carolina: But I don't think I'll ever give up public health, and I wouldn't have known that if I hadn't been able to get into this and really get that experience. I could easily have fallen down the other end and ended up in academic medicine writing those papers on repeat, like David's worst nightmares, which you know, it's -- I'm really, I really am happy to be making that difference and that's something that I hope to do for the rest of my career.

Erin Ricketts, EIS Field Officer in North Carolina: Sorry David.

Karen Wu: Yeah, so I feel like you know, our experiences at CDC and the Epi Elective Program are just our experiences. You know, we're three people who did this program. There are many, many students out there who have different experiences and they're not necessarily reflective of what we've seen. So

you know, like and also, we are only a slight representation of like what MDs and DVMs and medical professionals do at CDC, so like Erin said, if you're even thinking about doing it, it's -- or doing public health, it's worth looking into so that not only do you get first-hand experience working on some of these projects that we do, but also you can talk to others at CDC. The Epidemiology Elective Program is a great way to meet public health professionals, especially in the Federal Government if you're at a local, then at the local government.

Karen Wu: And then you can chat with these people to see like how they feel about integrating, you know, their medical profession into public health decisions.

Karen Wu: Everyone's job is slightly different, and everyone treats -- you know, approaches things at a different way, so it's just very insightful to hear from other people, like, at CDC and just to pitch ideas to them, see what their experiences were.

Karen Wu: And you'll find that, like everyone is so willing to talk and loves talking about public health because that's what we're all here for.

Karen Wu: Okay.

Eric Pevzner: Great, thank you. I know it's been answered in the chat, but since we had several questions, I don't know, Kelly or Harrison, if one of you want to talk about, there seems to be a lot of interest as far as what makes a candidate competitive. You know, how did we -- how are we have such great wisdom that we knew that Erin, David, and Karen would excel in Epi Elective and go on to these great public health careers? What is it that we're looking for in applicants?

Kelly Cordeira: I feel like I should go back to their applications and try to pick out exactly why we selected them for this program. I think that would be a fun, a fun activity for the program to learn a little bit about our selection process. So we look at all the applications -- we typically receive around 120, 150 applications per year.

Kelly Cordeira: And mentioned that we accept about 50 to 60 applicants and match them with different host sites. I will mention that there are a lot of qualified candidates out there that we are just not able to match, unfortunately.

Kelly Cordeira: And in the future we're looking to identify more host sites, particularly at the state and local health departments, so we can place more students and again fill some of those spots with qualified candidates.

Kelly Cordeira: In terms of what we're looking for, we do an application review process, so we do have a very standardized way we take a look at applications.

Kelly Cordeira: And so, some of the things that we're looking for Harrison already mentioned in the chat. So, um, your education and experience.

Kelly Cordeira: This doesn't mean that you've needed to have a full-time job for a very long time.

Kelly Cordeira: It's just we're looking for sort of a breadth of experience, potentially something public health related within your experiences, and these can be volunteer experiences or work experiences.

Kelly Cordeira: We're just kind of looking for the, sort of the breadth of your experience in general.

Kelly Cordeira: We also look for your history of professional development. And so these don't necessarily mean we're looking for you to have statistical software skills or all kinds of language skills, although we do kind of check for those things just to again look at sort of you holistically and how you would fit in with public health. There's a lot of different needs in public health within our host sites. And as Erin and Karen were mentioning earlier, there's such a wide breadth of different opportunities with different hosts sites that we try to mark these things to get an idea of who you are and which host sites you might be suitable for.

Kelly Cordeira: Some of the other skills that we look for -- the history of things like writing grants to learn a little bit about your scientific writing skills. We look for presentations or publications in medicine, veterinary medicine, it could be in public health. Again you don't necessarily need to have public health experience to participate in the Program.

Kelly Cordeira: Other things we look for are leadership or other achievements, generally just experience -- how well you work with others. These are types of things that we're typically trying to get, again, that holistic view of sort of who you are, your willingness to serve others, and your interest in public health.

Kelly Cordeira: We also, in your personal statement -- this is probably the most highly regarded part of your application, we really are looking at how you're motivated within public health, why you want to participate in the Program, how you think this program is going to impact your career path.

Kelly Cordeira: And again, we mentioned earlier that it's not necessarily that we're only here to recruit people who are interested in the EIS Program, or we're only interested in recruiting people to come to CDC. We are truly interested in bringing students in who may even just have a speckle of interest in public health or students who are just looking for a small perspective in public health, even if that means that you all go back to clinical practice at the end of your medical or veterinary school.

Kelly Cordeira: So just really keeping that in mind, we -- you know, you don't need to write your entire personal statement about how you want to do EIS if you don't really want to do EIS. We want to learn about you and we want to learn about what you're interested in, so that we can get an idea of how you fit into our host site offerings.

Kelly Cordeira: And as I said, most candidates who apply, you are all very well qualified. You've made it this far, you're in medical school, you're in veterinary school.

Kelly Cordeira: You are all qualified to be in public health. What we're looking for is how we can match you well with the different host site offerings that we have at the Agency, and sometimes that means that we don't match really good qualified candidates.

Kelly Cordeira: Over.

Eric Pevzner: Thanks, Kelly, that's a really helpful overview. And like Kelly said, even if you have just that spackling or whatever, a little something of interest in public health, this is a great opportunity to explore it.

Eric Pevzner: The other thing I just want to mention is under Kelly's leadership, this program continues to evolve and there's some awesome new elements that I don't think were in place when Karen, David, and Erin did it, which is one: There's this orientation that we offer for everyone and now you have this great opportunity that even if you choose a state or local health department assignment, which is a great assignment, if you've never worked in public health, and you've never worked at a state or local health department, this is where it happens.

Eric Pevzner: This is where the rubber meets the road, as they say, and this is where people should consider getting that experience so you can now have that assignment of state or local health department, and we still have this orientation that we bring people to CDC in person for a couple day orientation, you get to meet some of our staff, you get to meet leadership, you get to meet your other members of the cohort before you go out to your assignment.

Eric Pevzner: So that's one thing that's really been awesome and the second element is the fact that we do have all these expanded placements at state or local health departments.

Eric Pevzner: We didn't always have that. It used to be limited to CDC headquarters, which is a great opportunity, but if you really want to understand public health, it's not here at CDC per se.

Eric Pevzner: It's really getting that experience of a state or local health department first, gaining that, and then that really informs your thinking and your work someday when you do come to CDC, so.

Eric Pevzner: They're both great opportunities, but the program continues to evolve and expand. It keeps getting -- as some people said it's awesome, so it gets awesome-er, or more awesome, every year, and it's in part because of the great people we can attract, like the Karens, the Davids, and the Erins, so.

Eric Pevzner: We hope that many of you will really consider this program and tell your friends about it, too. So the next thing I want to ask is for Karen, Erin, and David is what's something that really surprised you in your Epi Elective experience? Something that you didn't anticipate -- not necessarily that you were going to get sent out on this or whatever, but what was something about the experience that you didn't anticipate that kind of surprised you?

Erin Ricketts, EIS Field Officer in North Carolina: This may sound really --

Karen Wu: No, go ahead.

Erin Ricketts, EIS Field Officer in North Carolina: This may sound a little bit stupid, but everyone was incredibly accessible. I came from a pretty rigid hierarchical medical school where if you didn't use a "doctor" before someone's name, you would probably get a talking to.

Erin Ricketts, EIS Field Officer in North Carolina: And I was told many times to stop calling people Dr. So-and-So during my time at the EEP Elective.

Erin Ricketts, EIS Field Officer in North Carolina: They...

Erin Ricketts, EIS Field Officer in North Carolina: Everybody was -- they wanted to really break down any kind of hierarchical barriers, because they wanted that communication between the elective students and then everybody else working on the team. They wanted to make sure that you knew you were part of the team, and that you were an important part of the team, and that you were involved in everything that was going on. And that -- I don't know why it surprised me, but it did, and it was such a friendly environment, an environment where you could really jump in and do things. I found that to be a big surprise for me.

Eric Pevzner: Thanks. Karen?

Karen Wu: Yeah.

Karen Wu: I think one thing that happened during my Epi Elective -- so you know, we were working on an Epi-aid for this mass exposure and we were, you know, administering questionnaires to hundreds of household so, like I think like 300 or 400 households, so this was a really big lift for CDC.

Karen Wu: And so this started out at the branch level but eventually got a little bit too big for us to handle, and so we put out a request to CDC as a whole agency, to EIS officers, to Epidemiology Elective students, to all others who are very busy.

Karen Wu: And we had a call center, and we had so many volunteers come in.

Karen Wu: And just to, you know volunteer to essentially read off of a scripted questionnaire and ask people if they've drunk raw milk in the near past, if they had any, you know, signs, symptoms, and you know their knowledge, attitudes, and practices towards raw milk. And we had so many volunteers, and like, I don't think it's necessarily surprising to me that, you know, public health professionals are passionate about public health, but more just that so many people were willing to take time out of their very, very busy day just to support this response.

Karen Wu: And this was even -- this is just so obvious during the COVID response, it almost sounds silly that I'm like harping on a call center of like, you know, 10 people. Now we have like this huge agency response, and people are taking the times out of their very busy schedule just to support our agency goals, and it's just -- and you know, it's not only like surprising to see how many people do participate and volunteer, but it's also just like very uplifting and like gives you hope.

Karen Wu: Thank you.

Eric Pevzner: Yep, we all need some hope.

Eric Pevzner: A lot of these days, so that's great. David, did you want to comment?

David Philpott - EIS, HIV Cluster Detection and Response Branch: Um, I was trying to think of, like, specific things that were surprising. I mean, I think that the thing that was surprising in both when I was doing my EEP and in EIS is just the value of how many different backgrounds people and how many different flavors of training people come in with at CDC.

David Philpott - EIS, HIV Cluster Detection and Response Branch: And then, a huge value that every individual brings, because something that is obvious to you because of your training will not be obvious to somebody else and vice versa.

David Philpott - EIS, HIV Cluster Detection and Response Branch: And then you get all of these variety of perspectives at CDC that are just so unique and, like, the best part actually in a lot of ways, especially when I was in Atlanta EEP, was just the long list of conversations. My supervisor in my EEP was like "Meet this person, meet this person, meet this person." And everyone just, like, made an hour just to like shoot the breeze with me about public health. And that's when I was like, wow people like have a lot of different backgrounds that go into this. They all have very different perspectives. This one's PhD in Microbiology, this one's Epi, this one's a vet. Like it was just such a, an eye opening experience because of just the diversity of perspectives people bring and everyone actually really brings something different that's really needed for the work that we do.

Eric Pevzner: Great thanks to all of you.

Eric Pevzner: So we've got about nine minutes left and I just want to encourage anyone that has a question to throw it out to us because we'd rather focus our remaining time on answering anything that's really going to be helpful to you if you're considering applying or want more information about this program.

Eric Pevzner: I don't see any open questions in the chat right now.

Eric Pevzner: Alright, so we'll see if something pops up. In the meantime, are there any parting words that any of the three of you would like to share, if you think back to when you were in your veterinary or your medical training, and you're kind of wondering about, you know, is public health the direction I want to go, even though Erin knew since she was eight or nine, I can't remember, and Karen --

Erin Ricketts, EIS Field Officer in North Carolina: It was 12 don't, don't oversell it. It's --

Eric Pevzner: 12, and Karen, you already had your MPH. You had, you know you were kind of thinking there but is there anything that you'd want to share that you think would be really helpful that was back in your thinking back then, as you were along that continuum of planning for that transition from going from clinical to public health training?

Erin Ricketts, EIS Field Officer in North Carolina: I want to make sure everybody knows it doesn't have to be one or the other. A lot of people do both.

Erin Ricketts, EIS Field Officer in North Carolina: And there are a variety of ways to do that, especially from a local health department situation. If you, if you are at all interested in being the first person to get the sea otter bite call, you know, look at the local health departments.

Erin Ricketts, EIS Field Officer in North Carolina: Really consider working with them, because if you, if you're torn between clinical and public health work, that is a great place where you can do both because a lot of people, especially at a local level, will have a local clinic and then also do their local public health work. It's a huge thing. Don't feel like it has to be one or the other, and you have to choose right now when you apply for this program.

Erin Ricketts, EIS Field Officer in North Carolina: Because one great thing about this program is that it will give you some experience to see if this is something you want to pursue long term.

Eric Pevzner: Karen or David, anything you want to add?

David Philpott - EIS, HIV Cluster Detection and Response Branch: I don't think so. I was thinking, like, it's okay if you feel like in your medical training, especially if you're like in medical school now and then you're about to do residency, sometimes you'll enjoy residency and other times you probably feel like a bit of a fish out of water and that's fine too.

David Philpott - EIS, HIV Cluster Detection and Response Branch: So, like if that happens, maybe you, maybe keep considering public health and then also, I think the other thing that's really important to do now that -- now I thought of something that's helpful. If you make, if you do this program, you make relationships here, keep in touch with those people.

David Philpott - EIS, HIV Cluster Detection and Response Branch: Like it's, it's true everywhere in life, but especially like CDC in working in public health, it's all about the relationships you know and the networks that you have in terms of your ability to get things done. And just if you're interested in it, just maintain those relationships, even though you're busy during residency, because it's really just helpful to kind of be able to talk to folks. And then potentially there's possible work in the future that comes from those conversations.

Eric Pevzner: So that's great David. So, you know, it seems like you made some relationships during Epi Elective. Is that kind of how you maintained ties to public health while you were wrapping up your clinical training, as you transitioned then to EIS?

David Philpott - EIS, HIV Cluster Detection and Response Branch: Yeah absolutely. I mean, I was in touch with someone in Center for Global Health all throughout residency. She was sometimes frustrated with me when I would be super slow, when I was working a block of nights, but to respond to emails, but --

David Philpott - EIS, HIV Cluster Detection and Response Branch: Yes, that's the honest way, and you know, and also just someone that I worked with was when I was doing my MPH but who also had CDC ties, so I -- it was just an important thing to kind of -- we were working on a paper, but I think, even if you're not doing that, I think just reaching out, asking if you can just touch base with people. Check in and say "Hey I'm still thinking about this." If you do this program, or if you don't, I mean just maintain the network that you have in public health because those conversations are helpful as you think about what you're going to do with your career, whether or not you want to work at CDC or a local health department.

Erin Ricketts, EIS Field Officer in North Carolina: To add to that.

Eric Pevzner: Okay, I'm sorry

Erin Ricketts, EIS Field Officer in North Carolina: I didn't -- oh no sorry.

Eric Pevzner: No, go ahead.

Erin Ricketts, EIS Field Officer in North Carolina: I didn't, I didn't have an ongoing project after I finished EEP with, with the folks that I worked with, but I mentioned that swamp cancer case before, and I actually ended up joining a support group for people who had pets affected by this oomycetes, and several years later, another human did become infected, and I found out on this Facebook page and actually was messaging -- I sent an email to my previous CDC supervisor and said "Hey, there's actually another human case right now, I don't know if you've heard about this." And they had not yet, so you never know.

Eric Pevzner: That's really interesting, and you know, Erin, I think that, even though you necessarily didn't focus on those connections, I think you still had a strong public health connection during -- I think you had a minor endeavor on the side that you were working on that kept you connected with public health. You want to talk a little bit about that?

Erin Ricketts, EIS Field Officer in North Carolina: So I'm a complete lunatic, and I decided that residency wasn't quite strenuous enough and that I really needed to have another, you know, really large-scale project to spend all of my time and energy on because I was getting too much sleep.

Erin Ricketts, EIS Field Officer in North Carolina: So what I decided to do was to work with a local community -- community health project and set up a formal, legalized syringe exchange program in my area which did not have any sort of harm reduction, official harm reduction systems in place. So, it was

started. I founded a nonprofit that now provides harm reduction, a wide variety of harm reduction strategies to the inland southern California area, and while I was struggling with COVID and doing nothing but COVID in the ICU at the end of my residency, the harm reduction group was saving literally hundreds of lives with Narcan they were able to pass out, so it was, it was a pretty fantastic project. I perhaps don't recommend it for the sleep aspect but I --

Erin Ricketts, EIS Field Officer in North Carolina: I wanted to do public health and after EEP, I knew I wanted to public health, and I always had my eyes open for things that needed to be done and that I could help with, and I jumped on it when it happened, and it was awesome.

Eric Pevzner: Thanks that's really helpful. So it's just showing that, you know, when you do Epi Elective, it doesn't have to be the end of your --

Eric Pevzner: You don't have to go into, you know, a hole and hide from public health until you get into the next phase. You know, you saw there's kind of lower intensity things that David elected to do like maintaining relationships with people from CDC to the opposite of the insanity spectrum where Erin decided to start a nonprofit and save thousands of lives so.

Eric Pevzner: Karen, is there anything else that you wanted to add?

Karen Wu: Yeah just like recapping everything that's sort of been said, and I think like one of the, like, key points is that this is just such a great exposure into CDC and the federal government, it is --

Karen Wu: It can be challenging to sort of, you know, have your foot in the door, and this is just, just such a great way.

Karen Wu: I feel like that's what, this is what clinics is for is to explore different options and, like, what you want to do with your life, and there's no other time that you can just spend six weeks floating from here to there to different branches to local health departments to federal, and like it's just a great time and an excellent program to --

Karen Wu: Really, for you to experience, like, what is possible with CDC and how things work with that at a federal and/or state level.

Eric Pevzner: Well, that seemed like a drop the mic moment right there, so I don't think I have anything else to say. I'll hand it back over to Kelly. Anything you want to send us home with?

Kelly Cordeira: No, thank you all for joining us today. Eric, David, Erin, and Karen, thank you for your experiences and for such high praise of the Program.

Kelly Cordeira: We certainly appreciate it, and we look forward to all of the applicants for this year's program, for spring of 2023.

Kelly Cordeira: To close out, we do have a quick request. We are opening an evaluation for this webinar today, so we can get a better idea of what applicants to the program are looking for in the future.

Kelly Cordeira: We're going to drop that link in the chat. It should just take you just a couple of minutes, and we really appreciate, if you could offer that feedback for us.

Kelly Cordeira: And thank you Erin for dropping that in there. And that should be it. Thank you all again for attending today's webinar.

Kelly Cordeira: If you have questions, please feel free to check out our websites, CDC.gov/EpiElective or contact us at EpiElective@cdc.gov. Thank you so much, we appreciate your time and we look forward to seeing you in the future at CDC. Thank you.