Peggy: Hello, everyone, and welcome. Thank you for joining us today. This program is part of an APA series called Essential Science Conversations, where panelists and audience members can engage in an open dialogue about emerging topics in psychological science. Today's conversation will focus on the NIH Loan Repayment Programs. The NIH encourages promising researchers and scientists to pursue research careers by repaying up to $50,000 of their qualified student loan debt each year.

We've assembled a great panel for today's discussion but before we get started, I need to go over a few housekeeping details. Many of you submitted questions for today's program when you register. Thank you so much for doing that. Our panel will try to answer as many of those questions as possible. You can also answer or you can also ask a question as the program is taking place in real-time.

There's a panel labeled Questions in your go-to webinar dashboard. Just click on that panel and type your question into the box and we'll be monitoring those questions throughout the program. This program is being recorded by the way. Once it ends, everyone who registered will receive an email with a link to the recording. You should receive that email a few hours after the webinar ends.

You should also receive a certificate of participation email so look out for that email as well.

I want to thank our co-sponsors for today's program, the APA Science Student Council. They advocate for the needs of research-oriented graduate students. Then we have the American Psychological Association of Graduate Students or APAGS, and they serve as a united voice to enrich and advocate for graduate student development.

Finally, the Committee on Early Career Psychologists. They represent the unique interests and concerns of psychologists in the first 10 years of their careers through advocacy and resources to support career and professional development. Our co-sponsors have been instrumental in getting the word out about today's conversation, which is why we've had almost 800 people register for today's program.

Of course, I have to plug our newly created Essential Science Conversations webpage where you can find recordings of previous conversations as well as link to upcoming programs. Be sure to bookmark this page and check in often while we are planning and organizing more conversations for the very near future. I'll be sure to put the URL in the chatbox as well in just a minute.

That's it for housekeeping, we can begin. I'm very pleased to introduce our hosts for today. We have Dr. Mitch Prinstein who is APA's chief science officer. He is responsible for leading the association's science agenda and advocating for the application of psychological research and knowledge in settings including academia,

government, industry, and law. Welcome, Mitch. At this point, Mitch, I'm going to hand it over to you and you can introduce our panelists.

Dr. Mitch Prinstein: Terrific. Thank you so much, Peggy. Thanks to you, Wes also, and all the APA staff who have helped to put together these Essential Science Conversations. This is an essential conversation today. I'm so excited that we're talking about the Loan Repayment Program.

I will confess that I myself, as a first-generation student becoming a doctorate in psychology, I was thrilled to learn about the Loan Repayment Program. I'm so excited to make sure that as many people as possible who want to pursue scientific careers are able to stay on that path if they still choose because of this Loan Repayment Program. In particular that we're thinking about the ways that we might be able to promote the Loan Repayment Program.

It's just one of many ways that we can reduce barriers to diversifying our workforce as well and making sure that we have lots and lots of representation within science. It's so important for us in our field.

I am incredibly grateful to our wonderful and distinguished panel who'll be joining us today to talk about the Loan Repayment Program. First, we have Matthew Lockhart. He is NIH's acting director of the Division of Loan Repayment. Matthew is responsible for administering and providing leadership for the NIH Loan Repayment Programs as well as representing NIH on matters related to the operations, policy development, and evaluation of the Loan Repayment Program. Of course, we're really excited that we have him here.

Also, very excited to have Dr. Mark Chavez here. Mark is the associate director for research, training and career development at the NIMH, National Institute of Mental Health Division of Translational Research. In addition, he is the NIMH program chief for the Adults Eating Disorders Program and serves as the NIH Loan Repayment Program liaison.

Also, very excited that we have with us today two recent awardees of the Loan Repayment Program. First, we have Dr. Michelle Desir. She is currently doing a postdoc fellowship in child abuse pediatrics at Penn State Hershey Medical Center. Beginning in August of 2022, Michelle will begin her position as assistant professor of psychology at the University of South Carolina.

Congratulations on getting that job.

Also, we have Dr. Marsha Tan. Marsha is an assistant professor in the Department of Public Health Sciences at the University of Chicago. She's completed her postdoctoral training at the Northwestern University Feinberg School of Medicine.

Thank you so much all for being here, and welcome, everybody, to Essential Science Conversations. I'm really excited that we're going to start off with Matthew Lockhart, giving us a brief presentation to tell us all about the Loan Repayment Programs.

Matthew Lockhart: Hello, everyone. Give me just a second to turn on my camera here. Okay. Hi, everyone. Before I go ahead and get started with my presentation, I would like to mention that if you can see me on video, you can see that I'm using American sign language to communicate. I am a deaf person. The voice that you hear is from my interpreter **[unintelligible 00:06:57]** and she'll be voicing for this presentation for me.

I'm here today to do a brief overview of the NIH LRP for you all. The presentation will be about 15 to 20 minutes long, and we will have the opportunity for questions after the presentation. Next slide, please.

There are a variety of funding opportunity across your research career from early-stage investigator to established investigator. Most applicants that we see for our program are post-docs or early career investigators or scientists.

Also, please note that established investigators can also participate in our program as long as they meet all of the LRP eligibility criteria requirements. It is important to clarify that applicants for the LRP do not have to have an NIH grant to be awarded an award. Next slide, please.

How does the LRP work? The NIH LRP is a two-year commitment and an applicant must commit to performing research during that two years. In turn, NIH will pay up to 50,000 per year of student loans or up to $100,000 over two years. LRP payments are made on a quarterly basis, and the payments are considered taxable income in the perspective of the IRS. To offset that taxable income, we do pay 39% to the IRS to cover federal taxes to reduce any type of tax burden or liability on LRP awardees.

Renewal awardees can receive renewal awards for one to two years. There are no limits on the number of renewal awards that you can receive, and you can continue to apply for our program as a renewal awardee until your loan debt is completely paid in full. All of that goes back to the desired outcome of increasing the nation stock of biomedical research scientists. Next slide.

Here we have five basic eligibility criteria that LRP applicants must satisfy. First, you must be a citizen of the United States or a US national or permanent resident. This must be satisfied by the time that the LRP is awarded, which usually is July 1st of the year following the application deadline. Our application for this year is from September to November 18th. All of the applicants must meet the five eligibility criteria by July 1st, 2022 when the award is awarded.

You must have a qualifying degree, which usually is a doctoral level degree. However, I would mention that are a few exceptions to that, which I'll share a little bit more on later on in the presentation. There are institutes that will accept certain matches degrees or certificates.

Your educational loan debt must be the equivalent or above of 20% of your annual salary. Renewal applicants are not required to meet that criteria as we will be paying off their loans. That we'll be reducing year by year. Also, your research funding must be supported by a domestic US-based non-profit institution or entity. We also accept federal, state, or local research.

[pause 00:11:14]

Also, NIH grants university salaries are also considered eligible for our program.

I would like to emphasize that the applicant's role must be with a non-profit institution. Also, each applicant must have an average of 20 hours per week of protected research time, and that we do verify on a quarterly basis.

The LRP **[inaudible 00:11:52]**, as I mentioned previously, is two years long and we do make quarterly payments. Then within those quarterly payments, we do the service obligation verification. As an example, you can't do research full-time for six months and then do no research for another six months, because we do a quarterly three-month check on that. Next slide, please.

[pause 00:12:16]

We do have an extramural LRP program, and this is for people doing research at non-profit institutions throughout the US. We also do have an intramural program for scientists who are doing research as NIH employees. This presentation will focus on our extramural program.

The extramural program has six different subcategories, as you can see here. I'll share a little bit more information in detail on- or you can find more information for each subcategory on our website.

We also do have a technical assistance webinar with a very in-depth look at our program, and that is recorded. I can share that link with the webinar so you can learn more about each subcategory. On average, we receive 2,500 to 2,600 applications, and about 1,300 awards are made every year. Next slide.

Historically, as I previously mentioned, we award about 1,300 applications, which is about a 50% success rate. You can see the largest categories here are health disparity, pediatrics, and clinical. Those three subcategories are supported by 24 institutes and centers, such as the NIMH.

The **[unintelligible 00:14:09]** that you see on the top of each graph here, the yellow, the dark blue, those are supported by smaller institutes, the clinical research for individuals from disadvantaged backgrounds, and also this contraceptive and infertility research. Those are both supported by one institute each.

The REACH Program, which is our newest, and it opened for the first time this application cycle, we don't have any data on that because we have not made any awards under that program just yet. Next slide.

Here's the NIMH, National Institute of Mental Health, some of their statistics. They usually award about 100 applicants every year, over the last 10 years. You can see that the numbers did decrease a little bit after 2016 and 2017. The reason being that we saw an increase and the applicants, their debt level was higher in those years. That meant that they had to award a higher amount, which resulted in fewer actual awards that they were able to give out due to the high loan-to-debt ratio.

Also, we just increased the cap on a yearly basis that we'll pay from 35,000 to 50,000 annually. Instead of 70,000 that they would have to award an applicant for two years, it moved up to 100,000, which again resulted in less awardees being awarded and a more competitive application process. Next slide.

This is a snapshot of the results from 2021 with an NIMH, base funded 90 awards, out of 192 applications. That's about a 47% success rate, which is in line with what they've done historically. You can see that NIH **[unintelligible 00:16:17]** success rate is about 58%. Please know that number can change from year-to-year. In total, NIH allocated about $91 million in 2021 and that's the highest amount that we have seen ever for this program. Next slide.

I want to talk about two things that are new for the fiscal 2022 year. The LRP application does have a new home. It's now a now in ASSIST website, and that's a system that is used to prepare and submit applications electronically. NIH also uses this within their institution. If you've already submitted an NIH grant before, then you are probably familiar with the ASSIST system. That's where all LRP will now be housed moving forward. To access ASSIST you must have an eRA Commons ID. This is new for this year. You can't start or submit an application without a Commons ID. Next slide.

Another new thing for 2022 is the REACH Program that I mentioned a little bit earlier. The goal of this program is to recruit and retain researchers who are pursuing major opportunities in emerging areas or in science or gaps in areas of science related to human health. Emerging areas are considered new areas of biomedical research, or it could be a biobehavioral research. That's for a targeted investment that will transform or impact the scientific field for years to come. Each institute or center has their own priority statement for the REACH Program. They are able to decide which areas are considered emerging for their own institutes.

This year is the first time that we're going to be accepting REACH applications and we do encourage applicants who are interested in this program to please review the research priorities statements on our website for each institute and center. Each IC has specific priorities listed there. Next slide.

Now we'll take a brief look at the LRP application. Next.

This is a look at the new ASSIST system. There are about 10 tabs within the application, and we'll go through each tab really briefly here. There's the personal information tab. This is where you fill out the information like your contact, tax information, phone number, email address, what have you. Next will be your employment and affiliation tab, educational training. Also, we have the research information tab and I'll talk a little bit more about the research information tab on the next slide.

The colleague information tab is where the applicant will enter their research mentor information, their supervisor information, and also their institutional business official. We do encourage applicants to fill out that part sooner than later because that will allow the system to send automated emails to those individuals so that they are able to take care of their portion of your application, whether it be recommendation letters or certification.

The educational information tab is where you'll fill in any of your educational background. That will also be blank for renewal applicants because we already have that information.

The funding information and certification tabs, those are both within the LRP. That information we use for the LRP contract.

Once you've completed all of those tasks, you are able to hit submit on the left. Then you do have a validate button as well. That's where you can check for any errors to make sure that the system accepted all of the documentation that you uploaded and all the information that you inputted. You could do a double-check to make sure that all the information is correct. Once that's good to go, then you hit submit.

Unfortunately, we do have a lot of people wait until about the last day to submit their application. We strongly discourage doing that and encourage people to submit in advance because that allows you to have time to correct any errors that may arise. Next slide.

The research funding portion is the meat and potatoes of your application. The research activity should describe the research activities that you will be pursuing during your award for the next two years. That should include some type of timeline. What are your specific roles and responsibilities? What are the research projects that you will be involved in? What's the research environment that you'll have available to

you? Explain the facilities that you can use to execute the research that you will be doing for the next two years.

This should also include information about your branch or department, your lab, and appropriate scientific colleagues that you'll be working with, institutional research facilities that will be available to you. If you do have a research mentor, you should put a brief description of your mentor and their research should also be mentioned there as well.

Also, for FYI, the reviewers will not have any access to your loan documentation. Their loan amount is not considered when they're scoring your application. You just need to meet the 20% debt to income ratio to be considered. Next slide.

[pause 00:22:56]

Here's a graphic example of the application timeline that you can see here. As I mentioned, the application is open from September to November 18th. All of the parts of your application, such as a reference letter, certification, all the other components are still due by November 18th. After November 18th, between November and December, we start vetting all of our applications to make sure that they're eligible and that all the applicants have completed all of the information. That information is then sent to the Center for Scientific Review.

The Center for Scientific Review is a separate entity and they are looking at the science of your application. They determine what NIH institute or center that your application will be assigned to for review. All of the ICs review their applications from about February to April. Then in May or June, that's when they start making their selections. Once their selections are made, that's when we contact you for loan documentation. We review your loan documents to make sure that they are in fact eligible and we are able to figure your loan amount from those documents.

Once all that information is ready by July, then the institutes and centers will make their final funding decisions and notifications will be sent out around August. Next slide.

A few important notes to keep in mind and be aware of, individuals that receive research or salary support from for-profit institutions are ineligible for this program. We don't recommend that you put new research goals within your LRP application. Talk about your current research plan and what you'll be doing for the next two years. It's important to remember that LRP is not a research grant. We are paying down your student loan debt. We are not funding any type of research activity. Next slide.

I do have some resources that I'd like to make sure that you all are aware of. Next slide.

First is starting with our website. You see the four arrows that we have listed here? We have the applicant eligibility and program tab. This is information and background information about the LRP. It has all the eligibility criteria and the subcategories listed there, the six that I had previously mentioned. There's a data and reporting tab. That's where you can find information about our program and the historical information of our program from the last 10 years, dating back to 2011.

The contact and engage tab will have information showing you a list of institutes and centers. Each institute and center has their own mission and priorities, and they have their own research funding priorities. They do have a contact person and that is the program officer. You're able to find their information from that tab. If you're unsure of which institute or center would be the best fit for you, we strongly encourage that you reach out to a variety of program officers, and you talk to them about your research plan, learn a little bit more about the institute's research priorities to figure out if it's a good fit.

We also have the LRP Alumni Ambassador network. It's about 800 current and former awardees. These ambassadors are strong advocates for our program. They are always open to chatting with any potential applicants so, please, look at that directory. You can ask them about their experience from former applicants, current awardees, any questions that you may have about the LRP process, their ambassadors are extremely helpful. Next slide.

We also created a new series of video tutorials that you can see here. If you are unfamiliar with the ASSIST system, we do encourage that you take a look at those tutorials and take advantage of the wealth of resources that are available. This will take you through the application, how to submit your references, reference letters, how that could be submitted on your behalf. There's also information in relation to IBO certification and how that process works.

Then once you're done with your application, if you'd like to check your status, there's also a video tutorial explaining that as well, and where you can see if all of your reference letters and IBO certifications have been submitted. Next slide.

To wrap up my presentation, I just want to give you all a few key takeaways here. First, remember that the LRP is a two-year research commitment. We pay up to $50,000 of your student loan debt per year up to $100,000 over two years. If you're new to the program this year, remember that the ASSIST is now where our application is housed and we do have a new program, our REACH program. If you think it might be a good fit, we do encourage you to take a look at our website.

Again, our website does have a wealth of information and resources available to you, so please take advantage of them, and visit our website and visit it often.

Lastly, and most importantly, the application deadline for this year is November 18th. Next slide.

If you do need to contact us, we do have a variety of avenues for you to do so. We have our information staff available and ready to answer any questions that you may have. We're also on social media, which you can see here, and those are all great ways to contact us as well. That wraps up my presentation. I'll go ahead and turn it over to Mitch.

Dr. Prinstein: Thank you so much, Matthew. That was fantastic. Incredibly informative and really, really helpful. Thank you. I'd like to invite all of our panelists to turn on their screens and we can have a discussion about the Loan Repayment Program.

As I mentioned before, my loan repayment was more than my mortgage and I was paying a tremendous amount to repay my loans when I was a postdoc, and this was a lifesaver for me. I can imagine for many, many others as well, this is just an amazing, amazing program and we're really grateful.

I wanted to start by asking Mark and Matthew, people hearing about this program and wanting to get information can pursue many of the resources that, Matthew, you just shared within your presentation. At what point does it make sense to contact the program officer within the institute that you think your research might be the best fit and what kinds of things might be useful to hear about from your program officer?

Dr. Mark Chavez: My recommendation would be what a person should do if they're entering a loan repayment program is first, review the information that's available on the LRP website. The website is very clear, it's very, very informative. If you have remaining questions and very likely you may, if you have questions at that point, specific questions, that's when I think it's worth reaching out to the liaison at the given institute that you may be applying to. It would be me if it's NIMH.

A lot of the questions that I'm asked are questions that are readily available on the web page. There are other questions that are a little bit more nuanced and I think those it's worth having a discussion about.

When somebody contacts me-- You got to remember I probably get 18 to 20 emails a day, people, "Is this a good fit?" "Is this--" We get a lot of emails. To make it a little more efficient process for everybody, I think one of the things is, if you have specific questions, when you contact us in that email, let us know what that question is. In addition to that, give a brief description of the research project that you're proposing over that two-year period of time.

That way we get a pretty good idea is this really a good fit for NIMH? Is this really something that may be more appropriate for NIDA or NIAAA or Childhelp, or another institute. That way we can work out where you think your application would be most appropriately assigned. Say that I would have somebody, this is solid application, looks like a good project, but this really is outside of NIMH referral guidelines. This really look like it'd be much more appropriate for NIDA. What you would then want to

do is make sure you follow up the LRP liaison there and just make sure you get that confirmation.

My advice would be it's not a problem to contact us. That's what we're here for. One of my jobs at NIMH is to be the liaison, but try to do your homework first because a lot of times people just say, "I want to chat." I don't have time just to have a chat. What is it you specifically need to know? What can I be helpful with?

I think most of the liaisons are going to provide the best guidance they can but make it a little easier and a little more efficient by again, doing your homework first, knowing the questions that you want to ask, because sometimes they'll just ask a simple eligibility question which is right on the-- It's on your open eligibility; it's right there. It's literally a bulleted point.

Also, say that somebody is working in the area, they're looking to do something to look at relapse within the context of bipolar disorder. That's pretty much in NIMH going to be a focus and a priority for us to be doing. If that's what you're doing, that is going to be in our referral guidelines. Here's one thing I think is very important is they're always making sure your research aligns with NIMH priorities.

Well, NIMH priorities change over time, and really, my perspective largest priority that NIMH has, is that people are really conducting solid science. Really, that's really our priority, really good science that falls within our referral guidelines. That's the most important thing to do.

There are areas we really emphasize, I think areas in suicide research, in health disparities. There are a number of areas that we consider understudied that we think are very important and it's going to be helpful if you're focusing on one of those areas, but you don't have to change your whole career just to focus on one of our priorities.

The first thing you want to do is make sure the research you're doing fits our referral guidelines. If it's really good, and it's solid research, even though may not be in one of these very hot priority areas, if it does well in review and everything else, your application very well could be funded. We're not going to push you to the side and only go look for those applications. We're focusing in very, very narrow and specific areas.

The main thing is doing solid science, being in a position where the reviewers, I think, can see that not only is a project you're doing, is it a solid project, but it's also setting you up for that next stage of your research career. Did that answer the question, Mitch?

Dr. Prinstein: That's great. Thank you so much, really helpful.

Matthew: I would like to add to that, just a couple of things here. Please make sure you contact the program officer before you apply. Please don't wait until the deadline, on November 18th. They get so many calls around that time, and they may not have the time to answer your question. Please contact them as soon as you can.

Dr. Prinstein: Terrific. Yes, that's great advice. Program officers have always been so, so helpful. Although as Mark points out, really, really busy, but so helpful, if you could provide very specific, quick questions, and I totally recommend that. I'm glad that you both mentioned that. Thank you.

I assume that there are many people who are very excited about the program, they feel that they're eligible, but there's that whole service requirement afterwards. There might be some questions about, I want to go into a research career, I'm hoping to go into a research career, but what if I don't get a job? What if there's an opportunity that comes up six months in, in my career that takes me a little bit away from research? Can you say a little bit more about that service requirement and how it's handled as people are entering into the unknown job market, or what their first few years will look like as a researcher?

Dr. Chavez: Matthew, do you want to **[inaudible 00:36:31]** [crosstalk]--

Matthew: Sure.

Dr. Chavez: Oh, go ahead.

Matthew: I'm glad to answer this question. When you're applying to the program, the program is intended for people who are committed to a research career. If you're not committed, it will absolutely show in your application, and it may not score well. Mark, do you have anything to add?

Dr. Chavez: No. I think part of Mitch's question is, so to say that you get awarded an LRP. You received that award, and in your postdoc and a year and a half into that, you get an offer to do something else but it's still going to be potentially aligned with research. What happens then if you no longer meet the eligibility criteria for the LRP? When you leave, do you end up having to pay back what you received because you're no longer pursuing a research career? Would the type of position you take allow you to just terminate it without having to pay penalties? Is that what you're asking, Mitch?

Dr. Prinstein: Yes.

Matthew: Okay. We do have a process set in place for those types of situations, and we do understand that life happens, of course. Sometimes it could be a situation that you just described, or it could be something else that comes up that couldn't have been foreseen, maybe something with your spouse, they have to move or relocate. We do have a process where the individual can send a request for termination. You

can request a termination without penalty, but you do have to have some type of justification. We can't just allow anyone to leave the program as they would like.

You do have to have a justifiable reason as to why you're leaving the program. That's then given to the funding institute and center, and if they agree to release you from your contract obligation, then you would be good to go at that point.

Dr. Prinstein: Thank you so much. Marcia, Michelle, how hard is it to fill out this application and how did you demonstrate in your application that you are making this research commitment?

Dr. Michelle Desir: I can go first or you can **[unintelligible 00:38:58]**

Dr. Marsha Tan: [inaudible 00:38:58]

Dr. Desir: Sure. This application takes time. I definitely recommend starting it well ahead of time. I know for me, even though I had submitted applications before funding applications, for example, the NSF Graduate Fellowship Program. This was my first NIH application and there are just so many different pieces that go into putting together NIH application. I was doing a biosketch for the first time, for example, and just learning more about significance and innovation sections. I definitely recommend if you haven't already started, definitely to get on it soon.

It was for me pretty easy to demonstrate my research commitment just because I applied for it during the first year of my postdoc fellowship. The institution that I'm currently at was committed to having me here for that two-year loan repayment program period. Something that's also helped, and this is something that from my understanding is a big part or something that's a part of the evaluation criteria, is it certainly does help, especially if you're doing a mentored award like I was as a postdoc, that your advisor has NIH funding, especially from the institute to which you're applying. I have my award through Child Health and Human Development. My primary mentor-- Sorry, the light's going off. My primary mentor, he has NICHD funding. That was something that was really helpful showing that the person that's mentoring me also has that research commitment.

Dr. Prinstein: Great.

Dr. Tan: Yes, I agree with everything Michelle said. My story is that I applied my first year of postdoc, but it was a two-year postdoc, so I really wasn't able to show that commitment of two years during the award period. That would have been the following year, the second year of postdoc, and then the unknown of me trying to find a job after that. I didn't get awarded that first year. Also, I applied for the health disparities award under a mentored award, but my mentor was not necessarily a health disparities researcher. I think those were the things where I didn't get selected.

When I sat on a faculty position at the University of Chicago, I applied in that very first year. Literally, the first month that I started, I applied for the Clinical Research Award, because that was the benefit. I've been doing cancer prevention research for years now, so my story was clear. Matthew was saying, I wasn't trying to fit my story into any institute or anything like that. I just wrote about what I was doing. I clearly had two projects that were cancer prevention related.

I wrote about those, it does take time, but there are a lot of pieces, your personal statement, your career plan, the research activity statement. Everything takes time. Even if you haven't started right now, start right now, drafting those applications.

For me, I asked for a sample application from a mentor. My mentor at the time had submitted and was awarded LRP, and he gave me one. I asked for samples from my colleagues, everybody I could think of, to see like, how do people actually structure these two pages of a curriculum plan? What does that look like?

It can look very different, but I just at least got an idea of like, "Okay, some people have little boxes of timelines that show what they do for those two years. Some people bullet point things." I was able to get an idea of how to start from those samples.

Dr. Desir: Just to add [crosstalk]--

Dr. Chavez: Marsha, can I ask you a quick question? Obviously, when you were a postdoc, you applied as a mentor applicant. When you received your faculty position, did you apply as mentor still or did you come as an independent?

Dr. Tan: I applied as independent. Yes, that's a good question. I was unsure about if I needed to do that or not, but I decided to. I learned that different institutes, and you can correct me if I'm wrong, Mark, might have slightly more nuanced views of what independence is. I know one of my colleagues, for NIMHD, they're expecting to have like grant funding, already grant funding to be considered independent, although that's not an official definition. For NCI, I didn't have any grant funding, but I applied as independent.

Dr. Chavez: At NIMH, we pretty much follow the LRP's guidelines on who's mentored versus who's independent. For example, you may have an NIMH K award, well, that's a mentored award. If you're on a K award, a mentored career development award, well, obviously, you're in a mentor status, so that's how a person should apply.

One thing I can tell you from a review perspective that I saw happen, that can happen sometimes, I think quite often the reviewers view everybody coming into an LRP as being into that mentored status, even if they have a faculty position, even if they had their current funding, even if they had their own lab, their own resources to support their project. If somebody does have all of those things in place, you apply

as independent, be extremely explicit about that so that reviewers aren't criticizing you for not having a really strong mentorship team when you may not necessarily need that.

I think sometimes, the majority of applicants that come in, come in and under mentored status, so I think reviewers get used to seeing that. If you are going to submit as independent, make sure you're explicit about that this is independent while you're independent, so that reviewers review it within that context and not as if you are in mentor status. I'm just saying that based on a lot of conversations I've had with people who didn't successfully apply last fiscal year.

Dr. Tan: Also, to add to that, and not to confuse anyone, even in my career development plan, I was clear about my time that I had protected for research, what I was planning on doing, what I was going to do for professional development. I had a paragraph at the end of what mentorship I was getting, even as a junior faculty member. I was very clear that I had three senior faculty members that committed to mentoring me, although I was applying for this independent award.

Dr. Chavez: I think that's very appropriate, and that was a very smart way that you had that at the end so that it was crystal clear. I think that was a really good approach.

Dr. Prinstein: Thank you so much. Can you say a word or two about what you want to make sure you clearly communicate in the personal statement, versus the research statement, versus the career development plan statement? What is a common error that you think sometimes comes up in how people sort their information into those different statements?

Dr. Chavez: For me, that's hard to speak to, because again, I rarely read the whole application. What I'm saying is, sometimes I'll see those brief reviewer comments. I think the most important thing, for the personal statement, I do think you want to show that you actually have had an interest in research, a long-standing in research. Obviously, you already have completed your terminal degree. If you're applying for a loan repayment program, I think you will probably have some type of a track record of having been interested in research, what you did, how productive you were.

Then I think talking about the current environment change, the current research you're in, I think that's an appropriate thing to be describing, and why it's an optimal environment for you to be able to try to initiate and hopefully, sustain an independent research career at some point. I think each of those sections, the personal statement really ought to be about that commitment to research and what you've done in the past, and give the reviewers an idea about your promise as becoming a researcher.

I think, for the research focus, really describe that two years. That's what you need to be doing. "This is what I'm doing." I think one of the things that's really critical about that, and Matt said this earlier, what he was saying, you can't propose aspirational

things to your plan, it's like, if my mentor's grants get funded, then I'm going to do this, this and this." Well, what if it doesn't get funded? Reviewers, they can't review that.

That two years of research can't be aspirational. It has to be what you're really doing. I think one thing that's very important also with that is that this is really to help people stay in science and move and continue in a scientific career. They want to see that you have a vision for where you're going. What are the scientific next steps you're going to be taking at the end of this two-year period of time when you'd be supporting another loan repayment program?

Are the activities or research activities that you're involved in, are they going to be serving as preliminary data for that subsequent application you want to come in with to continue your research trajectory? Those are the type of details I think can be very, very important for reviewers. They want to see you have a vision for establishing your own research program. You may be at that very first step of doing that, but they want to see that you at least have some vision for what those next steps would be. I think that's also a really critical component to include in that.

The other thing is that two-year research plan that you're going to be describing, quite often, people ask me, "Is this feasible within two years?" It's like, "I don't know. I don't do this research. I'm not there. I don't know rate of recruitment. I don't know this." That's something where I think you sit down with your mentor, and you really work out the nuts and bolts about what you're going to be doing over that two years and what you're proposing. You're in the best position to answer whether that's a feasible two-year project or not.

It's hard for me to do it sitting in Maryland and trying to know what's going on in your laboratory.

It really comes down to thinking through what you're doing, thinking through where you want to see these research activities, and these career development activities, where they're going to take you at that end of that LRP period, because the reviewers want to see that, that you have that kind of vision. Did that answer your question, Mitch? From my **[inaudible 00:49:11]**.

Dr. Prinstein: That's fantastic. Thank you. What did you find, Michelle and Marsha? Where do people need to plan to spend more time than they think they might need to spend? What was it like to have to fill those out? Not everyone knows what the next two years are going to be, or what their plan is so I'm curious about that.

Dr. Desir: I know one thing that I was definitely told was to spend more time maybe than you expect on that training and mentoring plan or that career development plan. Something that I heard repeated during webinars, during different panels that I had attended, and information sessions, was that people will appropriately spend a lot of time on the research projects and activities but then leave the mentoring and training

plan until the last minute. That's something that's extremely important because they need to be able to know you're going to actually be able to carry out these research projects and activities.

Certainly, don't blow off that training and mentoring plan **[inaudible 00:50:11]**, "Well, it's just two pages. It's not going to be a big deal." That is something that is really strongly evaluated. Especially if you're applying as a mentor researcher, they want to know what other resources that are going to be in place, how are you going to be able to actually achieve the training and mentoring plan goals that you're outlining.

That was something that I was definitely told repeatedly, is a lot of people that aren't awarded the plan or aren't awarded the LRP is that the reviewers can tell they didn't really put much time or thought into their training and mentoring **[inaudible 00:50:44]**

Dr. Prinstein: That makes sense.

Dr. Tan: I agree with that. I was going to say the same thing. Also that I feel like it always takes them the longest time to cut down a personal statement to one page. That's the hardest part for me, is to get everything about my life as a researcher in one page, but I agree with the career development plan to really focus on that.

Then if you're thinking about that too, you have to make the assumption that the reviewer, they don't have the whole picture of you. That sound like a broken record in each of my statements, I say the same thing about this is going to support me developing as an independent investigator. I just keep bringing it back to that. It seems silly to keep writing the same things over and over again to really refocus that you really have to do that, because you can't assume that the reviewer is making that jump or understanding like what you mean by saying you're going to go to this workshop, so you have to really bring it back home.

Dr. Prinstein: It's clear that NIH wants to support the development of researchers who are doing research in high-priority areas for NIH. Is NIH also interested in folks who are likely to become NIH-funded PIs? Is that something that there's an emphasis on placing within one's application that that's part of the future plan, or that's not something that is giving any preferential treatment?

Dr. Chavez: I think **[inaudible 00:52:16]** [crosstalk]--

Matthew: [inaudible 00:52:16]--

Dr. Chavez: Go ahead.

Matthew: Just a quick saying. It's not required, but it absolutely is helpful.

Dr. Chavez: That's what I was talking about earlier. It's not like you know where you're going to be in two years. You're going to apply for a faculty position say, if you're a postdoc, you don't know where you're going to get a faculty position, so I'm not saying that. What I'm saying is, you're spending two years of doing research and at that stage, then after the two years after the postdoc, you move into a faculty position.

Most places you go to is if you want to sustain that research, typically people have to be able to get funding to do that. That two years that you're spending doing research is at postdoc, what I'm talking about is you don't know where you're going to go, but you have an idea for what your research is going to be. Are you going to take some of this data that you've been doing those two years, is that going to serve as preliminary data for a subsequent application you may be coming again with?

That's what you want to lay off for reviewers. You don't have to tell them where you're going to go because you don't know that, but if you're spending two years doing research, then research ought to be setting you up for whatever is coming next in terms of a grant application, and most grant applications want to see some preliminary data.

That's the type of details I think it's important to convey to reviewers.

Dr. Prinstein: We have a few questions coming in about the kind of feedback that you get whether you're funded or not. This goes through the Center for Scientific Review, so you get a score, you get narrative feedback. Can you discuss that then with your program officer? Any thoughts about that?

Dr. Chavez: The way it works at NIMH, I never get contacted by anybody who gets paid, which is fine. It's the individuals who may not have successfully competed. What we technically get back is at NIMH, each application gets reviewed by two separate reviewers, so what we end up with, we end up getting a score and typically each reviewer provides a very brief overall summary content.

As Matt said earlier, these are not grant applications, so they're not reviewed. They don't get a full summary statement the way that you would get if you submitted a grant application, but one of the things that reviewers are asked to do is provide a brief overall summary statement. Sometimes this can be a paragraph, two paragraphs, and they get their overall impressions of the application.

Typically, at least at NIMH, when I get contacted about that, what I do is I discuss that with them. I typically give them verbatim or read them that comment. Sometimes in that comment, there could be some useful information where they talk about, it could be potentially concerned about the lack of publications for something at this research career stage, or there was really a mismatch between a mentor and what this person's research project is going to be.

They can provide their type of feedback, and I think if a person's going to come back in and submit the following year, they know these are things that they can work on because some of those concerns, there is a reasonable likelihood they're going to come up even if you have a different set of reviewers. That's typically the type of feedback we're able to provide is very, very brief.

Usually, after I talk to somebody about that, I tend to read those two very brief statements, I tell them, "You know as much about the review as I do." That is the kind of feedback. At least at NIMH, that's what we try to do in terms of providing that feedback.

Dr. Prinstein: Other thoughts about the process of receiving that feedback and resubmitting? Okay. **[inaudible 00:55:49]** [crosstalk]--

Dr. Chavez: [inaudible 00:55:49] A lot of times, we want to pay an LRP applicant. We really would like to be able to pay it, and we just run out of money. Sometimes when we get that feedback, there really isn't anything that critical that they can really work on, and in those circumstances, I think what you want to do is you just want to keep being as productive as you can, develop that publication record and coming again, but there's a number of applications.

Just likes grant applications, every year, we leave really strong applications at the table that we can't pay simply because the money runs out before we can get to it. The other thing is being persistent, don't give up. As a scientist, you want to stay as productive as you possibly can anyway. That's just in your own best interest to do. Sometimes when you get feedback, there's really nothing that was that reviewers found wrong with the application.

Again, I think really what you have to focus on is what you can do to make that your track record on what you're proposing as strong as possible. That could be having additional preliminary data, could be expanding some of your skill sets, and some additional areas beyond what you initially did. It could be generating publications. Publications are always critical.

Dr. Prinstein: This is such incredibly helpful information. I want to thank everybody on our panel, Mark, Marsha, Mathew, Michelle, for participating. I want to thank NIH for having the Loan Repayment Program and supporting it for so many years. It's an incredible program that makes a huge difference for science that many psychological scientists have benefited from. Thank you all so much.

I want to thank everybody who's listened to this presentation for joining and to invite you that you join our future Essential Science Conversations. Google APA Science Spotlight to make sure that you are receiving our newsletters every two weeks that announce the time and opportunity to register for these Essential Science Conversations. Thank you all again so much for all this fantastic information. Really appreciate it.

Dr. Chavez: Thank you.

Matthew: Thank you.

Dr. Tan: Thank you.

Matthew: Thank you. Bye-bye.

Dr. Prinstein: Have a great day everybody and thanks. Bye-bye.

Dr. Desir: Bye.

[00:58:08] [END OF AUDIO]