

Just Building Policy From The Ground Up

Introduction [00:00:05] Now, this is recording, RTI International Center for Forensic Science presents Just Science.

Voiceover [00:00:20] Welcome to Just Science, a podcast for justice professionals and anyone interested in learning more about forensic science, innovative technology, current research, and actionable strategies to improve the criminal justice system. In episode seven, Just Science interviews Dr. Alex Kral, an infectious disease epidemiologist at RTI International, about innovative policy solutions to improve outcomes for people with substance use disorder. Community-based research takes place within community settings and involves community members which allows for a better understanding of the struggles that each specific population faces. Dr. Alex Kral's community-based research approaches help to inform drug policy and provides communities the ability to develop innovative strategies to improve outcomes for people who use drugs. Listen along as our guest discusses the historical context for drug policy, Measure 110 in Oregon, and the Arnold Ventures Project in this episode of Just Science. This season is in collaboration with the Bureau of Justice Assistance Comprehensive Opioid, Stimulant, and Substance Abuse Program funding to respond to illicit substance use and misuse in order to reduce overdose deaths, promote public safety, and support access to services. This season is funded by the National Institute of Justice's Forensic Technology Center of Excellence. Here's your host, Paige Presler-Jur.

Paige Presler-Jur [00:01:36] Hello and welcome to Just Science. I'm your host, Paige Presler-Jur with the Forensic Technology Center of Excellence, a program of the National Institute of Justice. Our focus today is innovative policy solutions to improve outcomes for individuals with substance use disorder and strategies communities can use to implement and evaluate new solutions. We hope this discussion will provide ideas and guidance for communities such as those with the Bureau of Justice Assistance Comprehensive Opioid, Stimulant, and Substance Abuse Program funding, those that are enhancing their efforts to build their capacity to address the substance abuse crisis that threatens the well-being of individuals who use drugs as well as their families, communities, and ultimately, the nation. Here to help us with the discussion is Dr. Alex Kral, an infectious disease epidemiologist with an expertise in community-based research at RTI International. Welcome, Alex.

Alex Kral [00:02:35] Thank you for having me.

Paige Presler-Jur [00:02:36] Can you tell listeners a little more about community-based research, and how it can benefit the specific populations with the most need?

Alex Kral [00:02:45] Yes, community-based research really starts from the point that the people who are experts about the experience of what's going on in communities is actually people in those communities. And that's just as true for people using drugs as it is for anybody else. And so when we're conducting research on drug use or issues that are related to drug use, the idea around community-based research is let's go to the community, let's find out what their concerns are right from the source, and figure out processes by which are best to do that research, that works best for those communities, and then look at solutions based on the kinds of feedback we get from the community themselves.

Paige Presler-Jur [00:03:30] I'd also like for our audience to hear more about your policy and evaluation research, and the path that led you to your current work.

Alex Kral [00:03:38] You know, I've been around for a little while now, and really the way that I started doing research back in college - which was in the mid to late 1980s - at the time, the biggest public health issue of the time was HIV and AIDS. And so I started as a research assistant on a project that was doing research around HIV/AIDS. As I became more interested in that, and as I then continued on to both my masters and then later my PhD, what I realized in HIV/AIDS was that people who used drugs, or specifically at the time people who inject drugs, were highly affected by HIV, but they didn't have much of a voice at the table, both in terms of policy, in terms of what kinds of solutions there were. So that drew me to want to figure out ways to make things better for those people who inject drugs and for those communities. Ultimately, after doing a lot of HIV research, I continued on to do other kinds of research as well, most of it is community-based research, as we mentioned before, regarding really drug policy as it has been in this country.

Paige Presler-Jur [00:04:47] I'm looking forward to our listeners hearing more about how policy and evaluation research can help communities develop innovative strategies to improve outcomes for people who use drugs. First, will you provide some historical context of the changes you have seen over the past decade of people that are using drugs and dying of overdoses in the United States?

Alex Kral [00:05:08] I've been doing epidemiological studies in the community since 1993, and it has been interesting because for the first 20 or 25 years of that, most of the trends actually that we saw, at least in the community-based, they were fairly flat with regards to both the types of drugs people were using and things like overdose and other kinds of problems that can be associated with especially injection drugs. But in the last five years, that's really, really changed. What's going on around the drug markets and drug supplies has changed hugely in the country with the introduction of fentanyl specifically. And fentanyl is really driving the overdose crisis as we have it. But more so, and what's actually a much bigger issue is really some of these socioeconomic changes and trends that we're seeing in this country. And what really drives drug use is not the availability of drug use. And that's where most of our drug policy looks at, is thinking about, oh, if we can just reduce the availability of drugs, then there won't be drugs anymore. However, that's never really proven to be, to be true. What actually drives drug use is demand rather than supply of drugs. And the demand for drugs is something that's shifted tremendously over the last really two and a half decades. And the conditions that lead to people using or wanting to use drugs or coping through drug use tend to be economic difference in people who have and people who don't have in this country. And really what we've gotten to in this country is a larger, larger gap between the people who have money and the people who don't have money. That was really exacerbated, I believe, in the late 2000s. There was a depression at that time. And what happened to people in this country was- it was a lack of resources from that. A lot of poverty, a lot of jobs lost. You know, these sorts of things really contribute to people turning to things like alcohol and drugs in order to cope with what's going on with them. The other piece is really health care and having a health care system that addresses these issues. And as we've gotten more and more polarized in this country, what's happened is more and more people are out of health insurance or don't have proper health care, don't have access to the kinds of health care they need. In that context, then if they have things like chronic pain, if they have things like emotional problems or psychological problems, they don't have health professionals to turn to, and so what's left is turning to things like street drugs or alcohol or those kinds of things. And that's part of the problem as well. And so, kind of going back to the main problems in this country over the last decade or two has been a widening gap really in terms of what

people have and how they can cope with the kinds of maladies they might have. And that's a big issue. And then what we're seeing at the same time is overdoses. And so people are taking too much of those drugs or they're taking contaminated drugs, and that's leading to overdoses. And at this point, overdoses are at a clip of about 80,000 deaths a year in the United States. You know, it was just a few years ago that number was more like twenty-five thousand. It has been a steep incline in terms of the mortality associated with overdoses in this country in the last few years.

Paige Presler-Jur [00:08:32] What are some strategies that you have evaluated that would help reduce overdoses and overdose deaths?

Alex Kral [00:08:38] Most of the overdose deaths in this country are associated with opioids, and so that's where most of those deaths are. And it's really quite amazing that we have - I mean, really, it's close to like a magic pill, as there is in this world in the sense that, you know, there was the drug naloxone was invented 50, 60 years ago now, and it reverses the effects of opioid overdose such that people don't have to die if they are experiencing opioid overdose. However, until the late 1990s, the only people who had access to naloxone or the brand name Narcan was really paramedics and hospitals. So the problem with that was and continues to be that paramedics don't get to an overdose in time, often. If someone is overdosing somewhere, it requires that there's somebody else there, that that person called for an ambulance in a timely fashion and an ambulance comes there and is prepared to actually do something about it. Well, that amount of time is enough time for someone to actually die during that period of time. And so some activists in the late 1990s, led by Dan Bigg at the Chicago Recovery Alliance up in Chicago, basically argued that naloxone should be in the hands of people who actually use drugs because they're actually there at the site of an overdose and as they started doing that in the late 90s, we were the first researchers in the world to actually look at that particular program and do some research. And so we started a research project where we actually enrolled 24 people who use opioids. We trained them how to use naloxone and we prescribed them naloxone, and we waited six months to see what happened. In that small little pilot project - which was around 2001, 2002, I believe it was - we found that those 24 people, after six months had witnessed 20 overdoses and had saved all 20 of those people. This was the first research project of its kind. And even though it was a small study, we took the results of that data to the Department of Public Health here in San Francisco, and the Director of Public Health said, look, we've got such a big overdose problem, I think we should just start a program. And within three months, they started a program that was actually city-funded to hand out and to train people on how to use naloxone. Since then, there's been a lot of programs that have proliferated around the country and a lot of different work around that, and a lot of research and much of my research agenda has been related to that. But, you know, at this point, most of the country has even heard of, I think, naloxone at this point, if not been trained on it. And there's a lot of different resources that are being placed on that particular issue. One of the projects I'll talk about perhaps a little later is one where we're doing some research to assess how much law enforcement is engaged in training and using naloxone themselves. But much of my research has been, has been related to overdose and naloxone and figuring out how you can get that particular medication in the hands of the right people who are actually there at the time that somebody needs it the most. Many of my other research projects has been about trying to figure out ways to prevent HIV transmission and viral hepatitis transmission. So much of my research in the 90s and early 2000s also was on syringe service programs, trying to evaluate how these programs, which basically provide sterile syringes to people who bring in their used syringes for people in order to make sure that they are not transmitting HIV or other blood-borne viruses. So we did a lot of evaluation of

those kinds of programs as well. And then more recently, in the last decade or so, I've been involved doing research on something called safe consumption sites. The idea for that is essentially people are able to come to a site where they're monitored while they're using their drugs and in case they overdose, there's someone there to save them immediately. These kinds of sites have, you know, they exist in 12 different countries around the world, in Europe and Canada and Australia. But none of these sanctioned programs exist in the US so far. And what we've been trying to do is get a sense about whether those programs would work in the US and have evaluated the last six years, have evaluated in an unsanctioned program, an underground program that has been providing this service to see if that's one of the potential solutions to this overdose crisis we have.

Paige Presler-Jur [00:13:13] And based on what you've told us thus far, I think it is important to have you help our listeners understand the difficulties of studying subjects that involve something illegal and/or stigmatized and ways to mitigate those challenges.

Alex Kral [00:13:28] Yeah, studying illicit drug use is not the same as studying obesity or studying other- or cancer or something else. In order to do community-based work, we need to be listening to the people most affected. However, in doing that work, the kinds of things that they are involved in are illicit, and if not illicit, they- they're also stigmatized, highly stigmatized. And so it's very important in doing this kind of research that that you have to be quite confidential with that work. But you also have to gain the trust of the people in the community. And so it's important to have a longstanding presence in the community, to be asking the right kinds of questions, to not be judgmental when coming to do that kind of work, and also to work hand-in-hand with the community-based organizations that are actively working with these populations because they know best, and they have taught me and my colleagues, how do we best work with this population - what's OK and not OK, what's going to work and not going to work? So doing this kind of work is incredibly time intensive because it's not sort of just drawing up a research question and making a survey, and implementing a survey, analyzing the results, and writing it up. But it actually requires that you're in the community continuously, that you're going to community meetings regularly, that you're- that you're working with people and constantly figuring out making sure that that how you're doing your work, through the process of your doing the work is in no way making anybody uncomfortable, is not in any way going to expose anybody to potential legal concerns or, you know, as you're doing that. And so it's quite a time intensive process to do that. But it's also quite rewarding in the sense that these are- these are difficult issues, and there are a lot of successes out there. And so it's quite worth doing it. And like most things in life, the more you invest in something, the more you get out of it - my thinking anyway. So in terms of doing something like studying an unsanctioned safe consumption site, which I talked about earlier, this is a site that is potentially an illegal site and the people who are working it are potentially could get in trouble with the law. And so we've had to go through lengths of making sure that all of our research is done in a way that's not going to expose them in any kind of way whatsoever. And that's presented lots of problems and concerns in terms of how you do that, even in terms of having institutional review boards, you know, not know where the city is, where the work is being done, you know, to making sure all of your study protocols and things are not in any way identifying where or who you're doing this work with. And that's been quite a challenge, but also an interesting sort of puzzle to figure out along the way.

Paige Presler-Jur [00:16:20] It's been great to hear historical context from you. In terms of current strategies being implemented, what are your thoughts about Measure 110 that just passed in the state of Oregon, effectively decriminalizing drugs?

Alex Kral [00:16:34] Measure 110 just passed in Oregon in the election year now in November of 2020, and it's the first of its kind. And essentially what it does is decriminalize drug use. And it also provides money for and resources for treatment and prevention and other kinds of services that are needed to address the problem. And the thinking in general here is for us to think about drug usage really as a health and social service issue and not as a criminal issue. By doing that, the hope is both that you're actually addressing the needs of the people who are using drugs and you're able to provide them with the kinds of resources that they need. At this point, this country arrests and locks up more people than any in the world. This has been a concerted effort for at least the last 50 years, but it has for the last 50 years been known as the war on drugs, which has from its beginnings been racially motivated. And the goal- the goal was, 50 years ago was to figure out ways to disenfranchise and to lock up people of color in this country. And they've done that process essentially in the name of drug use and in the name of figuring out ways to stop the supply of drugs in this country. But over these last 50 years, this country has spent an enormous amount of money trying to stop the supply of drugs by limiting drugs to coming into the borders, whether that be through the southern border or elsewhere or in the community through policing and policing strategies. Those have been the main ways that we really as a society have been trying to limit drug use in this country. And yet, despite all those resources, we have way more people using drugs today than we did 50 years ago or 10 years ago - it's getting worse and worse. So there's actually no data that shows that trying to reduce that supply is somehow in these various ways actually successful at any level, whether it be local, state, or federal level. And so locking people up, on the other hand, has been incredibly problematic for huge communities, and it has not been successful. So the idea is that while they're locked up, their communities, their families are hurting. They have lost their loved ones for a period of time. And then when they come back into community and re-enter into the community, they have less resources, they have less abilities to be productive members of society and lots of stigma. And they've limited the number of jobs they can get, et cetera. And so this intervention, the supply side intervention, is incredibly hurtful and is really part of what's made this country worse and worse in terms of thinking about the things I talked about earlier, whereby the people who are at the lower margins economically in this country, that group is getting larger and larger and larger in great part because they have been incarcerated and they have less possibilities thereafter. And so you're actually making- you're taking a problem and you're actually making it much, much worse by incarcerating people. And so the idea here in Oregon is to take this out of the realm of criminal justice, out of the criminal legal system - not locking people up for it instead and providing them with the kinds of resources they might actually need instead. That could be anything from substance use treatment to, you know, groups to various different ways that people can get help from social and health services instead of criminal justice type solutions. And the idea is hopefully actually will lead to less drug use and it will lead to less problems associated with drug use, including overdoses and other kinds of problems that we see.

Paige Presler-Jur [00:20:32] How do you see the role of law enforcement changing as drug use has become more common?

Alex Kral [00:20:37] Yeah, so law enforcement has been featured quite extensively in the United States in terms of our drug response or response to people using drugs, as I mentioned. But beyond just sort of them being forced to implement the war on drug philosophies and principles, as drug use is getting more and more common and the problems associated with drug use are getting more and more common in our communities, a larger and larger portion of the time that law enforcement spends out on

the streets is actually dealing with issues related to drug use. And so what has slowly happened is that law enforcement has taken on more and more of a role really of a social worker in the sense that they come to these places, they're part of maybe disputes, they're part of drug use issues and people are needing their help in various different ways. The problem is that law enforcement is not, generally, not been trained as social workers. That's not really part of their training in some sort of way. And they don't generally have lots of training on how to cope with people using drugs and all the various things. And they're also not really taught culturally sensitive ways to handle and talk with people who use drugs. And that's quite stressful, I think, for law enforcement as well. And so I think it's put a huge strain on policing in the country by people basically being taken on a very difficult, complex problem that's of huge proportions and not being provided with the kinds of means to be able to be helpful. And many times, they do want to be helpful, but they don't know how to do that. And really the main tools they've been given to arrest people and incarcerate them, that's the main tool they've been given. And so I think, you know, there are many police departments in the country at this point and in the last few years, that have been, you know, recognizing this and have been trying to figure out ways to ameliorate the situation. Some bring on social workers as part of their force. Some police departments work in tandem with social workers and community-based organizations. And then one of the things we're seeing very, very recently now in a couple of cities, and I know here in San Francisco - in San Francisco, we're doing this as a just starting the last couple of months - is that when 911 calls come in that are really about drugs or drug related or mental health issues is to not send law enforcement out there, but rather send out a team of social workers instead. And I think that shows a lot of promise, I think, by again, treating- treating this as a mental health, you know, and a social and a health issue, as opposed to and sending the right kinds of people out there who are actually experienced and been trained in how to cope with this rather than police who haven't been trained in it, and frankly, could probably- their time could be better used in other scenarios. The other way that I think policing can change is if you take drugs out of the equation for them, I think that's going to make things much better for policing in general. And I think that sometimes law enforcement get quite frustrated that here they are and they're coming in and they go into a neighborhood and they've gotten call for something scary related to drugs. And they come in and they arrest some people, and they go into jail. And then maybe a month later or whatever it is, those people are right back out there in the community again and they see the same people again. And so they get frustrated that there's this sort of revolving door between jail and community among people using drugs. And I think that they themselves often recognize that, you know, what they're doing and the policing they're doing here isn't actually working. It isn't making a better contribution to peace and productivity in our communities. I feel like there is a potential at this point, at this juncture for these kinds of perhaps seen as progressive solutions, but for them to actually work out much better for law enforcement. And to me, I would think that law enforcement unions or police unions, that they would be all for this in the sense that this can make policing a lot easier and better if they don't have to deal with these very stressful situations for which they haven't been adequately trained.

Paige Presler-Jur [00:24:46] You mentioned before about having a project where you're talking to law enforcement about these conversations. I was hoping you could tell us more about that.

Alex Kral [00:24:54] Hope Smiley-McDonald at RTI and I have a project that's supported by Arnold Ventures, that's essentially trying to figure out at this point what the scope of that naloxone intervention is within law enforcement. We know that many police departments at this point have equipped their officers with naloxone, and really, that's- that's a new

function, again. We were talking about functions for police and how this might change policing. But essentially what that's doing is it means then that that police person is going into a community when there's an overdose, if they see somebody overdosed, they're doing what is a medical intervention, actually, not a traditional justice policing type of function. And they're actually reviving somebody with this medication. That is a new function in many ways for policing, and it's one that's controversial, I believe. Some police departments are doing this, and some are not. However, as with many interventions within policing, they often get implemented and they don't get fully evaluated or researched and we don't know what's going on with them. And this was the case with naloxone and policing in the United States. You know, there's 18,000 law enforcement agencies in the United States. We don't know what percent of them or how many of them are actually equipping their officers with naloxone, and how long have they been doing that? How many people are they saving with overdose in a year through this process? How much is that costing them, that program? There's a lot of different kinds of questions we don't know anything about, and so that's what our project is setting out to study. And we started by doing some qualitative research, and we went to five different jurisdictions around the country and interviewed lots of people in the police department, also some community folks, not just police, but also fire and EMT. And to get a sense about what is going on in these jurisdictions around both how they operate when there is an overdose and how they're using naloxone and what that's- what that's meaning to them. That we've completed just as COVID was hitting, and we were lucky to be able to do four of those five in person, and then one of those police departments ended up doing the interviews by video. But what we've done is we have taken what we learned from that and have created a survey that's going to be implemented in February of 2021. And we are essentially going to survey 20 percent of all law enforcement agencies in the country to get a sense of the scope of naloxone and what they're doing with that. And from that, we imagine we can learn a lot more about how effective this is, and probably that could lead to a bunch of other research that can look at what kinds of models they've created, which ones work better than others, those sorts of things, and also look at cost effectiveness and other kinds of things as well. So it's a very exciting project. We are about to take that survey live, and that's really exciting for us and hope to get results by this summer and be able to then have some sort of a symposium that was going to be in person - we'll have to see what that can be maybe in the fall - where we can get more feedback also from experiences of law enforcement agencies and to try to see if we can then see how this can also affect law enforcement policies around the country with respect to this.

Paige Presler-Jur [00:28:30] That is really exciting. Sounds like a great follow up Just Science podcast to hear what you and Dr. Smiley-McDonald learned through that survey. What have you found to be the most surprising thus far on the Arnold Ventures project?

Alex Kral [00:28:43] Qualitative research in many ways is more interesting than quantitative research because it allows for new topics to emerge that you weren't even expecting to study when you first start doing that. Peyton Attaway, with one of our research associates on the project, has written and we're hoping to get published a paper in a peer-reviewed journal soon on some of our findings regarding the issue of fentanyl, and much of what we learned in the field was that many police agencies, one of the reasons they started a naloxone program was because they wanted to make sure that the police officers were going to be safe themselves. It wasn't necessarily to start helping the public per se or to take on that risk and that liability of working with the public. And something that emerged from that was that there's a quite a great deal of fear among police officers that they come on to a scene and that somehow there's fentanyl on the scene and this powder somehow might get into their nose or into their, you know, they-

even if they touch it, they could overdose and die themselves. And there's a great amount of fear about this. However, there's actually no scientific evidence that this is something that they should be afraid of. You can hold the whole bag full of powdered fentanyl and you can wash your hands with it all day long if you want to, and it does not break your skin barrier. And there's no way for you to actually overdose by doing that. And so there's a lot of misinformation out there about this particular concern. Unless you're going in there and you're actually sticking your nose in a powder bag and sniffing it up or something like that, there really is absolutely no risk associated with there being fentanyl on these scenes. However, they're spending a lot of time and a lot of worry about this, and I can understand that. And we have documented cases where police officers say that they overdosed or thought that they overdosed. But when you actually ask the questions related to that and ask about the overdose and what really happened, every time that's been the case around the country, what you come to find out is that it's not an overdose at all. It's actually the opposite. It tends to be a panic attack because the police officer is actually so worried about it that they're getting worked up and getting panicked. And so what's happening is their heart rate is actually increasing, whereas the definition of an overdose is that you're not breathing anymore - your heart rate and your breathing is so low that you no longer live. And so it's quite the opposite. So it was a surprise to us that almost all of the officers that we spoke to mentioned this as a big concern. And I think this is a - it is the occupational concern for police that they are worried about this when they actually need not be worried about it.

Paige Presler-Jur [00:31:37] For jurisdictions who want to support people who use drugs and those with substance use disorder, what ways do you suggest to talk to the public and stakeholders about different innovative strategies?

Alex Kral [00:31:49] I think the best place to start is to talk to people and especially talk to youth and talk to people in the community about the realities of drug use. For so long now, people are so nervous - and I understand why people are so nervous to talk about drug use, but we need to talk about it real, like there needs to be a real conversation about the realities. One of the things that you see a lot when it gets to drug prevention programs, especially for youth and teenagers, is the amount of lying that goes on there and how problematic that is. Because what happens is, you know, in a scenario whereby you tell teenagers who are maybe 15 years old or something like that that marijuana is evil, it is horrible, and if you start using marijuana, you're going to go crazy. You know, all kinds of horrible things are going to happen to you. And you tell them that. And then what happens is they're at a party or at a friend's house and there are some people using marijuana and they see them having a good time, and then they see them next week and they're perfectly fine, and there's actually no problem going on with them necessarily. What's going to happen is they're not going to trust the adults who are educating them. They're not going to trust them because the information they're giving doesn't square with what they're actually seeing out there. And that's a big problem when we're talking about drug prevention out there, is that unless we're having the real conversations, there's so much drug use going on in this country, people are going to find out what the real thing is and how do you want them to find out? Do you want them just to find out from their friends or do you want them to find out from professionals who actually have studied this and who knows - who know more deeply about it? You know, I would say a little bit of both, probably, is the answer. But the way that we've gone about educating people about drug use so far in this country has actually discredited the people who are doing the educating because they're not having real conversations about it. So I think that's a place to start. And if you're in a community or if you're a parent or if you're a teacher or whoever it might be, is to really think about and to educate yourself about drug use. Maybe you've never

used drugs yourself. And drug use is a scary topic, but going to learn more about what drug use actually is and why are people using drugs? That's another thing that no one ever talks about is pleasure. You know, everyone's always like, oh, well, drugs is a coping mechanism- this isn't that. Well, you know, a lot of people use drugs because they like it and they find it pleasurable. People use alcohol because they like it. You know, if we don't address things and if we don't address pleasure as part of drug use, we're missing the whole point because that's how many people start drug use and they do find pleasure in it until perhaps maybe they don't because they've gone down a path that's not a healthy path. If people can have and get more educated on what drug use really is and what problematic drug use looks like compared to non-problematic drug use, what are some concerns to think about? What are the advantages and disadvantages of how you use drugs? And a lot of times when we get to, you know, a book written by Zinberg back in the 70s called Drug and Setting, which is drug use involves both the drug and what kind of drug it is - is it an upper or a downer, is it - what does the drug do to you; set which is what are the characteristics and what do you bring to it as a person into the scenario, and then setting is the environment around you and how you're using it. I mean, if you're using drugs by yourself or using in a setting or if you're out at a concert someplace or where you are when you're using drugs matters a lot along with what it is you bring to it and what the drugs are. And so if we can really learn and get people to understand and educate themselves more about drug use realistically and start having honest conversations with people about what that is, that's a great place to start.

Paige Presler-Jur [00:35:41] What future research would you like to see to increase access to community programs for individuals who are using drugs?

Alex Kral [00:35:48] We have a lot of privilege in this country. We're well resourced. There's a lot of possibilities for doing good research in terms of drug use. We have the National Institute of Drug Abuse, which is a, you know, the largest institute in the world that makes grants and contracts to study drug use. We've got SAMHSA. We have a lot of resources. And I think that the key here is that we need those institutes also to realize and to be honest about these sorts of issues and to be willing to fund research that's innovative and that maybe is thinking outside the box. And that's really important at this point. And so that means that perhaps there are some innovative new controversial topics, whether that is like safe consumption sites I talked about earlier, which sounds, to some people, sounds very controversial, like why would you let somebody knowingly go and use drugs somewhere? That seems very crazy in many different ways. But on the other hand, those people are going to be using drugs no matter what, and better that they're doing it in a place where they're monitoring in case they overdose, and someone can actually help them or that people can talk to them about entering into drug treatment or other kinds of things. But the idea is these have been shown to work and been researched, too, shown to work in other countries. Why wouldn't we also see if they might work here and not to be so afraid of these new ideas that maybe don't square with us, but let's see if they work or don't work. I think that's an important piece of it - at this point - is being OK with that. The other thing is that being OK with ideologies that look at things like, for example, what I talked about, like what's the role of pleasure in drug use? I can tell you that if you were to look through most of the research that our federal government is funding on drug use, almost none of that, almost absolutely none of it is actually done with the real pleasure. Well, why is that? You know, I think that we need to look at that particular piece and it's still- it gets back to this issue of us being able to be honest with ourselves and be honest with each other about why are people using drugs and what is the role of drug use. And if we're not willing to even research it and understand it, then I don't think there's any hope at

that point that we're going to be able to solve any kinds of problems that are associated with that drug use.

Paige Presler-Jur [00:38:13] We're running near the end of our time together. Are there any final thoughts you'd like to share with our listeners?

Alex Kral [00:38:18] You know, if you've come this long and listened this long, thank you very much. That is great. I hope that people understand that drug use, that I think drug use is something that's incredibly serious. It can be a huge problem. Like I talked about at the beginning, lots of people are dying at rates we've never seen before. And this is something that we really need to address. And what I'm suggesting is that we can't go about doing things the way we have been doing them, because clearly those are not working. And so when I'm talking about these kind of new ways of thinking about - and whether that's thinking about pleasure or whether it's talking to youth about what drugs really actually are like or whether it's trying new methods of maybe observing people or monitoring people when they're using drugs or some of these innovative things. What I'm trying to say is we need to think outside the box. We need new thinking. We need innovative strategies because it's a very complex problem. None of these solutions that I've talked about are by themselves going to fix this large, complex problem either - it's going to take a multitude of diverse approaches for different kinds of people and different kinds of settings. But we really do need to not be afraid of trying new things and a great way to figure out, well, what are these new things going to be? Well, why not look at other countries around the world and see what have they done and it's worked there and maybe be OK with trying them here - even if they don't seem like what we are used to over here, we should try those kinds of things. That's kind of my main message, but beyond that, and getting back to what I talked about at the beginning, it really starts by actually talking to the people who use drugs themselves. They are the experts - they are who will teach us what will happen. All the research and evaluation that I've actually been involved with, I've created and thought of none of it. It has all come from the community themselves. You know, needle exchange was started not by researchers. Needle exchange programs were started by people who were concerned about HIV among themselves, among their friends and their community. Naloxone - that program in Chicago I mentioned, that was people using drugs themselves who said, you know what, why don't we have this medication, let's just do it ourselves. But the point here is most of these innovative solutions that exist out there are conceived of by people using drugs themselves. And so we need to listen to them to get ideas for what might work. And then we can use things like science and evaluation to assess what the outcomes might be of those. And then policy and drug policy can then, you know, essentially be driven by starting with what's the problem? What's a solution from drug users? Here's the data that shows that works. OK, it works. OK, now let's institute a policy then that works for the country and really building it from the ground up. That's how we're going to be successful at figuring out, you know, this very serious and complex problem that we have in the country.

Paige Presler-Jur [00:41:32] I'd like to thank our guest today for sitting down with Just Science to discuss the importance of community-based research and evaluation in order to apply innovative approaches as part of a community's overall strategy to address substance use disorder. Thank you, Alex.

Alex Kral [00:41:49] Thank you very much for having me.

Paige Presler-Jur [00:41:50] If you enjoyed today's conversation, be sure to like and follow Just Science on your podcast platform of choice. For more information on today's

topic and resources in the field of forensic science, visit ForensicCOE.org. I'm Paige Presler-Jur, and this has been another episode of Just Science.

Voiceover [00:42:12] Next week, Just Science sits down with DeMia Pressley from the DEA's Diversion Control Division to discuss the importance of information sharing across law enforcement and public health agencies through forensic partnerships. Opinions or points of views expressed in this podcast represent a consensus of the authors and do not necessarily represent the official position or policies of its funding.