KESSLER FOUNDATION Podcast Transcript

Silvio Lavrador on Traumatic Brain Injury Data Collection at Kessler Foundation

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SILVIO LAVRADOR: 00:08	[music] The more data you have the scientists can utilize to study some of these outcome measures and things like that.
JOAN BANKS-SMITH: 00:15	Welcome to our podcast series, My Life As a Research Assistant. This series is brought to you by Kessler Foundation where we are changing the lives of people with disabilities. I'm your host, editor, and producer, Joan Banks-Smith, creative producer for Kessler Foundation. Research assistants are on the frontlines of our research studies collecting data, conducting interviews, testing subjects, and are the face of Kessler Foundation to our research study participants. In 2020, Kessler Foundation was ranked among one of the best nonprofits to work for and best places to work in New Jersey. Throughout this series, we'll meet up with research assistants from our mobility, spinal cord injury, stroke, traumatic brain injury, and neuroscience and neuropsychology centers who have been with the Foundation for over a year. And some that are now senior research assistants, nurses, MD/MS candidates, postdocs, and those that have entered into many more professions. My life as a research assistant. This week our guest is Silvio Lavrador. Silvio began working at Kessler Foundation in August, 2011. He started in on neuropsychology and neuroscience lab, and then moved over to traumatic brain injury. Welcome, Silvio. It's great to have you here with us today.
LAVRADOR: 01:37	Thank you so much.
BANKS-SMITH: 01:38	If you could just give us a little glimpse of your day to day research that you do here, our listeners will have some idea of what is going on behind the scenes.
LAVRADOR: 01:48	My role here has changed obviously over the four and a half or so years that I've been with the Foundation. Early on in my career here, I was working primarily with doing interventions for clinical trials, studies looking to improve memory and cognition. So basically, I would meet with subjects once or twice a week. We would go through different intervention or therapeutic rehabilitation protocols. These are all cognitive not physical, right. So things that would help them enhance memory or enhance processing speed. I've also administered many neuropsychological evaluations, probably over 100. And that's a full battery, a full gamut of tests that look at a visual spatial skills, memory, all sorts of cognitive functioning. So usually between three, four hour batteries of testing that are done, oftentimes split up into multiple visits. So I've done plenty of that, worked with lots of subjects in that capacity. More recently, my focus has shifted more towards the brain injury model systems project which is a nationwide study that the Foundation is a part of. This particular study is a longitudinal study which tracks individuals with brain injury from their acute hospital stay. So from the the ER immediately after they've had their injury all the way through to about 20 years post injury. So we collect data from those patients from the moment they enter the ER into 20 years out. So the goal is to look at how we can improve outcomes for individuals with brain injury and also what factors are sort of affecting the long term recovery of some of these patients.

LAVRADOR: 03:35 So within that study, my role is primarily during the the primary phases, the acute and the rehabilitation phase. So what we call Form One or Year One. So I'm primarily responsible for obtaining medical records for these patients that have consented to participate with us. I abstract data from those records, I look at their rehabilitation records, and I just basically put everything into a nice neat little package. And then we submit that to the National Data Center along with about - I believe - 10 or 12 other sites nationwide. And that goes into a national database. And then researchers - psychologists, physicians, doctors, whomever - are able to utilize that database in order to conduct long term studies on some of these outcomes in brain injury.

BANKS-SMITH: 04:25 Wow, sounds like you're a busy guy.

LAVRADOR: 04:27 Yeah, I mean it's a study that's constantly in motion. With some studies, you have a set number of participants where you have to recruit 60 and once you recruit 60 subjects and test 60 subjects you're done. With the model systems, it keeps going. It's continuous; there's never an end to it. So long as participants keep coming in to our rehabilitation hospitals and things like that and they're willing to participate, then we'll keep recruiting and we'll keep adding the data. Because the more data you have, the more the scientists can utilize to study some of these outcome measures and things like that.

BANKS-SMITH: 05:08 Now with collecting some of this data, what type of traumatic brain injuries primarily do people have?

LAVRADOR: 05:15 That's a good question. It's interesting. I think a lot of it is seasonal, believe it or not, and a lot of it really depends year to year. So for example, one of the main things I do when I start looking at this longitudinal data is, what was the cause of injury. Right. And if we've had a particularly bad winter, for example, you'll see a lot of falls, a lot of slip and falls outside. Especially with some of the older, elderly populations, which I think makes sense. Right. So you tend to see a lot of that. Certainly, motor vehicle accidents are a huge cause. We have one particular hospital where we see a lot of violence, maybe gunshot wounds, traumatic events, blunt force traumas. But I would say mainly it would be falls and probably motor vehicle accidents shortly right behind that definitely.

BANKS-SMITH: 06:14 Do you see any with certain types of sports? Skiing. I mean obviously right now, the big concern with the NFL and with high school and younger children are football injuries.

LAVRADOR: 06:27 Well to be honest, not so much. Because typically when you look at some of the data that we've collected, you see older individuals who probably aren't practicing sports as much as the younger folks do. Now I just was looking at a record actually about half an hour ago that I was starting to work on. A gentleman who is 27 years old and he was in a ATV, a four wheeler accident. So I guess that's technically considered a sport; it's also a motor vehicle. You do see some ski accidents definitely. But I would not consider it to be a huge part of the sample. I would definitely consider maybe falls a little bit more. However, the National Data Center is attempting to investigate that further where they've actually recently added a concussion questionnaire to the packet. And so patients are asked to respond to this questionnaire, and there's simple questions like, "Have you ever received a concussion playing any type of sports

activities? What sports did you play growing up? How many years did you play those sports?" So I think they're starting to get at that a little bit, and we would have to probably start taking a look at that data and analyzing it to see what the trends are. So it's not something that I've seen a lot of, but it's certainly something that we're now starting to try to dig deeper into.

BANKS-SMITH: 07:47 If I were on the fence about becoming a research participant, what would you do or say to help ease that decision?

LAVRADOR: 07:56 Well one of the things I would say is that I think the media - maybe Hollywood even a little bit - does a very poor job of sort of showcasing what research is. I think a lot of us when we think of research we think of these very sterile rooms with very cold individuals wearing sort of white lab coats walking around, things that are very secretive. I think a lot of people think there is an element of deception to it where what you're doing is not really what's being studied and they're trying to trick you. I think a lot of times we've seen that in movies and TV shows depicting mad scientists in research projects and things of that nature. I think what people have to understand is research really isn't like that at all. I mean even if you look at how our facility has been designed, because we've had renovations and we've redeveloped the facility. Everything is geared towards warmth, towards comfort, towards a sense of inviting the subjects in and making them feel comfortable. You know you can have-- and you could sit down, you can have a cup of coffee, you can relax. You can bring family members with you that have a nice waiting and lounge area that they can relax in. Everything is disclosed, everything is up front, everything is on paper, you're allowed to review the information. And it's completely voluntary from start to finish. So even if you begin a project and for whatever reason you're not comfortable with it or you just don't have the time for it or it's not what you expected it to be, you can just cancel; you can drop out. There's no penalties, there's no repercussions. Nobody is going to come after you. You're not going to get solicitations and phone calls. It's very patient subject oriented. It's all about the patient. The way we look at it is, the patients - the subjects - they're the ones coming in dedicating their time and their energy and their effort towards the cause. And so we have to be understanding of that and really do our best to make them feel comfortable and secure and just know that we're there for them.

LAVRADOR: 09:56 And then the other thing I would say is that when you look at any type of medical practices, medical advances - especially in rehabilitation - and you say, "Oh wow, look at these new things that they're doing. Last time I was at the doctor they didn't have this." Well what people have to realize a lot of times is that that stuff is all coming out of research. The things that are in practice now within the clinical fields and the rehab fields, those are things that were research projects maybe 5, 6, 10 years ago. And those outcomes show that some of these things actually work and that they help improve either functioning, cognitive, or physical or what have you. And so everything we see today is pretty much borne out of research that was done years ago. So I would say to those individuals not only is it something that's might benefit you now, but you're really paying it forward for 5, 10, 15, maybe even 20 years into the future. A lot of the research that's done now, especially in rehabilitation and clinical trials, is used to show insurance companies that these things work. Because you know how insurance companies are; they'll find any way to not pay for something, right. They'll

tell you it doesn't work and they'll pull out their own research showing that something is not effective and therefore they won't pay for it. Well we can do research that shows well hey wait a minute this actually is effective. We have data that proves that this stuff works. And it's strong ammunition for a health care provider, a case manager, family member to take to the insurance company and say, "Wait a minute. I think this deserves some coverage because it does work and it'll help our family, our friends." And so there's those three things, I'd say, are huge factors as to why I think people should definitely consider doing research.

BANKS-SMITH: 11:44 Last question for you. In your dealings with different types of participants, is there a participant that stands out in your mind?

LAVRADOR: 11:52 Definitely. I've worked with over probably 150 different participants. I had this one particular individual who was just a great guy, fantastic guy. And his injury was quite severe, but he just had the best attitude; he had a fantastic attitude. He always told jokes, and he would just rattle them off. He had a bank of maybe 15 to 20 jokes that he would just rattle off. And it's interesting to see how somebody who you know is dealing with their own issues, their own problems, how they can just sort of still live that normal life and still laugh and smile and engage with people. And it's funny, because I started thinking to myself, "Man, I know I need a joke or two." So we had met multiple times. He had participated in a few different studies with us. And I remember I went home and I researched online and I dug up I think three or four jokes. So the next time he came in, I said, "Hey, I have a couple for you." So I just started kind of throwing some quick one liners at him. I think one of the ones I had remembered was - what did I say to him - I said, "How do you throw a party in space?" He was like, "Well how?" I said, "Well, you planet." And he laughed and laughed and laughed. He thought it was hilarious. And yeah just different things like that. He always invited me to his house. He said, "Oh come to my house; we're having a barbecue. We have a beach house." And I said, "Well you know I can't do that." But it just-- you become so friendly and so comfortable and it's great. It really is.

BANKS-SMITH: 13:32 That's great. Well I just want to thank you for all the research that you do in helping to make people's lives better.

LAVRADOR: 13:39 Thank you so much.

ANNOUNCER: 13:42 To learn more about career opportunities at Kessler Foundation, be sure and check out the program notes for links. Follow us on Facebook, Twitter, and Instagram. Listen to us on Apple podcasts, Spotify, Soundcloud, or wherever you get your podcasts. This podcast was recorded during the summer of 2016 and was edited and produced by Joan Bank-Smith, Creative Producer for Kessler Foundation.