Telling History in Public: Loyola Project for the Innocent Oral History Project
Mehul Anjaria
December 4, 2020 (interview conducted on Zoom)
Interviewed by Veronica Backer-Peral & JJ VanDeventer

SUMMARY:
Mehul Anjaria is the owner of MBA DNA Consulting, LLC in Los Angeles, California. In this interview, Veronica Backer-Peral and J.J. VanDeventer discuss DNA evidence, forensic science, and the criminal justice system with him.

TRANSCRIPT:

Veronica Backer-Peral (VPB): To start off, and just to introduce you, today we are interviewing Mehul Anjaria. Did I pronounce that correctly?

Mehul Anjaria (MA): Mehul Anjaria.

VBP: Mehul Anjaria. Thank you for correcting me. Today we are interviewing Mehul Anjaria, and he's a forensic scientist, for the Telling History in Public Loyola Project for the Innocent Oral History Project. It is December 4, and we are conducting the interview using Zoom. I am Veronica, one of your project interviewers.

JJ VanDeventer: And I am JJ. I'm the other project interviewer.

VBP: So to start off, could you just describe your general background?

MA: Sure. I've worked in the field of forensic science for about 24 years now. 21 of that has been specifically in forensic DNA analysis. And over the course of those years, I've worked in law enforcement crime laboratories. I actually co-founded a private forensic DNA testing laboratory, where we worked for the prosecution, as well as the defense, and actually with inmates directly. And for the last about 10 years, I've been working as an independent consultant, basically, again, working with defense attorneys, civil attorneys, and inmates.

JJVD: Great. And could you next talk about your educational background and employment experience? And one more thing I want to let you know is, if there's any question that you'd not like to answer or anything, it's totally fine. But yes, if you could talk about your educational background and employment?

MA: Sure. So I did a Bachelor of Science degree in biochemistry from the University of Illinois in Chicago. I actually moved out to Southern California in 1996 for my first job in forensics, which was with the San Bernardino County Sheriff's Department. And while I was working there, I pursued a Master's degree at the California State University of Los Angeles, and my thesis work

was in DNA. So that was really my goal in getting in forensics, I wanted to work in DNA. So ultimately, after working about three years in the analysis of drugs and investigating clandestine meth labs, I started working in a crime lab in the DNA unit, and that was the San Bernardino lab. So I was there for about six years, and for the last nine months that I was there, I served as what's known as the DNA technical leader. And that's just the person who's in charge of the technical operations of the laboratory. In 2005, a buddy of mine had this crazy idea that we should leave the Sheriff's Department laboratory and start up our own private DNA testing facility. So I did that. I assisted in basically building the lab from the ground up. Again, I served as the DNA technical leader, I was also the laboratory director, so I was in charge of getting the laboratory accredited and maintaining that accreditation. And then I was also doing DNA testing case work, I was reviewing the work of other laboratories, training analysts and reviewing their work. So I did that until, let's see, that was, brings us to about 2010. And then I decided to work just completely independently as a consultant. And that's what I've been doing for the last decade or so.

VBP: So this isn't actually one of the questions we had prepared, but I'm curious, what do you think are the advantages of working in the private sector in something like DNA analysis, as opposed to maybe working for the government directly?

MA: Well, there's a, there's a couple of things. In my work now, there's actually a large variety. So I'm not just stuck working in a laboratory with test tubes and pipettes, and all of that kind of stuff. I do a number of things. So I might go to a police station and swab evidence, I might go to a jail and take samples from someone, I may go to a jail and consult directly with an inmate. Sometimes I'll go to another crime laboratory and actually observe the DNA analysis, particularly if they're going to consume the samples such that it can't be analyzed twice. And then there's courts, and then there's meeting with attorneys. So for me, now that I'm out of the laboratory, I actually like it better. Now, if you're working in a government crime laboratory, I mean, you know, of course, you have job security, because that's a county job, so it's much more stable. They're bringing the samples to you, you don't have to go and look for the work like you would in the private sector. But I think at this point in my career, I like being independent and doing a variety of tasks.

JJVD: Thank you. So before we move on and talk about some questions about the criminal justice system, do you mind telling us, what got you interested in forensic science in the first place and how it all came about?

MA: Sure, sure. So as I said, my undergraduate studies were in biochemistry. And, you know, I was trying to figure out exactly what to do with that. There was a time where I thought I wanted to go to med school. My father actually had a lot of illnesses, I spent a lot of times in hospitals. My mom was a nurse, so I was really exposed to the health field. But when it came time to do that, I realized that the cost and the time and all of the school that you had to go through, so I started looking for something in the alternative. And I didn't really want to be stuck in a research lab, just doing some kind of biochemistry assays, or something like that. But in the

course of my studies, I really enjoyed molecular biology and DNA. And so I was trying to figure out, well, what can I do with that, that I would enjoy. And about my, I'd say junior year, when I was at the University of Illinois at Chicago, there was a career fair. And the Illinois State Police had a booth there, and they were talking about how they do DNA analysis in a crime lab. And I assumed that you had to be a police officer in order to do that, and I found out that you didn't, that civilians can do it. And for me, I thought, wow, this is a cool way to use my knowledge and interest in DNA and molecular biology, something that, it's a great application of that, but you're doing something cool. You know, you're working on actual criminal cases, you're not stuck in the lab, you might go to a crime scene, you might go to a court, and it had the variety I was looking for. So I became interested in it, I learned more about the field. And right about that time is when the OJ Simpson trial was going on, so there was actually, this is the first time that I think that the public really became aware of the power of DNA testing. And I was sort of fascinated with the interplay in court with the attorneys and how knowledgeable some of them seemed to be about this technology, and what a challenge it was for the DNA analysts who were in the crime scene getting grilled. So I kind of wanted to get in on that type of challenge. So that just convinced me to do it. And at the time, like I say, I was living in Chicago, I applied for jobs all over the entire United States, I would have went anywhere to get my foot in the door. Now, I was a big fan of Southern California having, you know, been out here on vacation previously. So it just so happened, luckily for me, my first job was with the San Bernardino County Sheriff's Department.

VBP: So getting into, you know, the criminal justice system, can you tell us about how DNA gets used in criminal cases, both to convict and also to exonerate?

MA: Yeah. So if you look at the history of DNA, it was first used in forensic science and about the mid-1980s. And at that time, you needed a lot of DNA, so you needed a blood stain maybe the size of a dime, the laboratory work would take four to six weeks, and it was it was very hands-on and labor-intensive, and it couldn't be automated. So there weren't a lot of cases that really you could do DNA on, because of all of those reasons. But as we moved into the late 1980s, early 1990s, there were some better techniques where you needed less DNA, and you could do it a lot quicker. And actually, the data was a little bit more precise. So it was a little bit, I guess, easier on the interpretation, a little bit less controversial. And from that point on, you know, it's just gotten more sensitive, it's gotten more automated, it's gotten more powerful. So now, if you think about any type of crime, you can imagine, not just a violent crime, not just a rape or a murder, but a property crime, you might do DNA on. You might swab the steering wheel of a stolen vehicle. I mean, honestly, even like littering, you know, if somebody spit out a piece of gum and was littering, you could do DNA on that. Some other cool applications I've seen is like, let's say, an individual got a DUI, and their blood was tested and it came back as a high alcohol content. Well, they may feel like that's, there's no way that that's my blood. Well, how can you check it? You can do a DNA testing on the vial. So now it's broadened so much that it's in a lot of cases in the criminal justice system. And something that may be talked about too much these days is sort of the CSI effect in that the public knows a lot

more about forensic science, so they're kind of expecting to see the scientific type of analysis in almost any time type of case.

JJVD: So, kind of going off of that talking about certain types of cases. So, you know, we've talked a lot about how, or especially in our course how, you know, a lot of times DNA was used to convict people, but also how it is used to prove it innocence.

MA: That's right.

JJVD: So when you are dealing with cases like that, how does one, what's kind of the process about, you know, reopening a case and examining, you know, DNA that is from the past or maybe from, you know, several decades ago?

MA: Well, two things. If you're talking about you know, exoneration, in a post-conviction posture, it's a very long process, because legally, the defendant has to go through all of their appeals. And of course, that takes years and years and years. And then ultimately, they have to find an attorney, and perhaps an expert who's really willing to take on the case, somebody like the Loyola Project for the Innocent. And so really, step one is, you know, some legal procedures like filing a habeas corpus petition and then a motion to do post-conviction DNA testing. Well, you got to find the evidence. You know, if these cases are 20-30 years old, sometimes the records aren't that good, maybe the evidence wasn't even preserved. So even when you get to the point of finding the money, finding the attorney, finding the right argument, and the court is agreeable to it, you have to have the evidence there as well. So it's a very tedious process. Now, sometimes it's kind of slam dunk. So let's say there was a rape case from the 80s. Defendant is convicted. He says, I never did it. There was no DNA testing in the 80s. So if we're lucky enough now in post-conviction that maybe there's a vaginal swab left with sperm, well that's pretty easy, you get an answer, and if it's not that person, then they're out. But what I'm finding my current work is, we have to get creative with the types of samples we look at. And it's not always a slam dunk thing, like, you know, a sexual assault. So for example, a case I'm working on right now, we're actually looking at the lift of a palm print that was left on a car. And so the idea is that by simply touching something, we may leave enough DNA behind that can be detected. So if that fingerprint was preserved in a fingerprint card, it's possible there could be DNA on that. So these are the types of things you have to look at, about, you know, what could give probative evidence to demonstrate someone's innocence. And, obviously, typically, the whole thing is like, who is the, what's the identification of the perpetrator? So if you can find a probative enough piece of evidence, and still be able to get DNA. Now DNA is very hardy, right. We hear cold cases that are 40, 50, 60 years old, that are being saved, solved. But still, it will degrade with time, particularly if it's not preserved properly. Well, a lot of these cases in the 80s, they weren't thinking about DNA, so maybe they weren't wearing gloves, maybe they weren't saving the evidence, maybe they weren't packaging it properly. So a lot of times we're looking at evidence, that's kind of the leftovers. So luckily, there's a lot more tools that will allow us to get more DNA off of an item, one tool that that we've been using a lot recently, it's called the M-vac, it's almost like a wet vac for

sucking up DNA. And it's just a major improvement over swabbing evidence or taking cuttings and allows you to get every last piece of DNA, which is critical if the evidence is very old, and there's not much DNA left. And then on top of that, there's much better ways to interpret that evidence. Because the older it is, the more that it's mixed, the more that it's potentially contaminated, the harder it is to make sense of what the results mean. And you don't always get like a real like, yes, it's him; no, it's not him. There's mixtures there's in between. So even when you get results, you really have to be able to persuade the court that this is actually probative, and this tends to show the person's ID and their innocence.

VBP: So you gave several examples of when DNA, you know, where you could find DNA to reopen cases, but what's the most common type of DNA evidence that you normally see, that leads to their re-evaluation of a case

MA: You're talking about purely in post-conviction, or any?

VBP: Specifically post-conviction, but if an answer stands out, for me, that would also be

MA: Well, I'll just start with the any. You know, it used to be of course, like I was saying, you would need blood, you would need semen, you would need a lot of saliva, so the sample types of limited. Well, really, anything goes now, because we're in the era of touch DNA. So if something was simply touched or handled: the handle of a knife, the handle of a gun. So, you know, again, we can get very creative. So in a crime lab now, most of the samples that come in are not big bloodstains, they're swabs of items that may have been touched, like the steering wheel or something like that. So it's a lot of just swabs that are that are colorless.

VBP: So if I give you this pen right now, you could get my DNA.

MA: Most likely, yeah. I mean, even if that was, let's say that was a brand new pen that had been bleached down and cleaned, and you touched it just instantaneously, it's possible that we could still detect your DNA. It depends on a lot of factors, you know, some of us just have more DNA in our hands than others. If you happen to wipe your brow before you touch the pen, all of these kinds of things go into it. So I would say though, in postconviction, you hope that you get sexual assault swabs that have semen on them, because semen's very hardy, it has a lot of DNA, it's going to get you that probably definite identification of the person. But that doesn't seem to be the case in the cases I've been working at lately. It's like looking at clothes if an attacker might have ripped the clothes off, or touched them, or handled a weapon or something like that. So the variety of DNA samples is just almost endless.

JJVD: Okay, so the next question I have, so I, so we're getting pretty close to actually our kind of wrap up questions. But before we get to there, I wanted to talk about challenges in these types of cases. So you know, what, in your experience, you know, especially, probably, I guess, over time, as technology has improved, you know, what has, what's, what are the biggest

challenges in, in your field, would you say, specifically with DNA, or with maybe another aspect of forensic science?

MA: I suppose in any type of forensic science, the challenge is getting the technical information across to a jury, so that they have all the facts and can make an informed decision. I talked about all these technological advances. That's great, but that is creating very, very complicated data. You know, you look at clinical testing, say like COVID-19, you either have it or you don't. You know, the answers are pretty similar. But now with DNA, you're going to hear stuff like, well, we got a partial profile, assuming a mixture of three people, this person's included. Now I'm going to throw statistics at you. So how do you convey that to a juror in understandable terms? So I think it's that, I think, there's a lot of scrutiny on forensic science right now, because some of the methods that have been used really haven't been validated properly. And there have been analysts who are kind of pushing the limits in their testimony. Luckily, in DNA, at least we have a statistic, we can say, well, one in 38 quadrillion people would have this DNA. But if you look at something like maybe tire tracks or even fingerprints, a lot of that testimony is more, well, it's my opinion as the examiner. And as we unpeel the layers, especially some of the older forensic techniques, we find out that, boy, maybe there's not the scientific foundation that we thought there was that would allow you to give such a strong conclusion. And this is a big deal, someone's life and liberty is at stake. So, just kind of going back to DNA, yeah, we've got the tools to do, we can look at rougher samples. In other words, samples where you don't get all of the information you might want to get, it might be mixed in, we have tools, but that has to be interpreted very carefully. Because you could have the same problem where people could take shortcuts, not make the right assumptions about it, just not know their craft, and then present something to the jury that's not really reflective of what the evidence shows. So that's really my role as a defense DNA consultant is to go in, have another look at the evidence, make sure that all parties understand it. The strengths and the weaknesses, because there's always weaknesses, even with DNA. I mean, yeah, DNA is the gold standard, but not all DNA is alike. You know, not every result is, hey, it's a blood stain, it's from one person, and the numbers are one in 38 quadrillion. You know, there's a whole spectrum of results, and sometimes it could just be what's the integrity of the evidence. Like was there a chain of custody maintained from the time the evidence was collected at the crime scene to the time that it was analyzed in lab? If it's not, then that evidence has no worth in a court of law, no matter what kind of great technology you use or what super results you got from. So those are, those are the considerations and the challenges, and particularly in older cases, like I say, some of the preservation and chain of custody may not have been followed, and the results that you get aren't those nice, pristine ones. So trying to use the right technology to get as much information as possible, and conveying that either to the judge or the jury, I think those are some of the big challenges.

VBP: There's a lot of controversy about, you know, DNA storage. I know that one of the California propositions that didn't pass, one of the parts that it included was keeping a lot more people's DNA on file for future criminal use. I wonder if, as someone who works in this field, do you have any opinions on that?

MA: Well, there's no doubt that the bigger these databases are, the more crimes we can solve. And that has to be good, right? There's nothing wrong with that. But a lot of times when you talk about rules for collecting samples from people who are convicted, or maybe even arrested, there's also remedies in there. Like, let's say, I'm arrested, they take my DNA, but I go to trial, and I'm found not guilty, so my DNA should be yanked out of the database. And I'm not so sure that they make it easy all the time for someone to have their DNA, their DNA removed from there. So I think it really has to be fair on both sides. And you know, really now we're moving into a bigger discussion, we're talking about genetic genealogy, and some of the privacy concerns there. So we're past the standard FBI's DNA database, where, hey, there's there's some legislation, you know, if you're convicted, if you're arrested. But now we're talking about genetic genealogy, where people are putting their DNA in a databases for hobby, and they're unwittingly potentially implicating a distant relative in a crime. So there's all sorts of ethical and privacy rules that are still being worked out with that technology. But it's being used more and more in the resolution of cases.

VBP: But if my distant family member convicted a crime, you know, isn't it, isn't it a good thing for that, that DNA to be stored and for that criminal to be found? Or is there a harm in having, in having innocent individuals' DNA stored?

MA: Well, well, that's just it, because now if you're casting a larger dragnet, you better be really sure about your data that you really hit that person. Because you could get in a situation where you start harassing a bunch of innocent people if your technology is not as tight. So you got to make sure that if you do get a lead, say, with genetic genealogy, there's a way to really refine it, so when you start going after people and pulling DNA from them, you know that you're going after the right person.

JJVD: So kind of going off what she was just talking about, in, I would say, a bit more of a wider perspective. You know, there's, I think, we're all, you know, the criminal justice system is something that's a point of controversy in this country, especially right now. So, in your opinion, as somebody that works in the private sector and who has also worked in the criminal justice system, you know, what kind of, what are the main reforms that are needed? Or changes, in your opinion, you know, both broad and small, or if there are any that are more important to you?

MA: There's a ton. I think it's, there has to be fairplay. There has to be a level playing field between the defense and the prosecution. There has to be transparency. If the defense wants all the test results, the prosecution needs to give it over they, they can't selectively hold back something that could be helpful for the defense. We have to understand that we've made a lot of mistakes in the criminal justice system. That used to be something, I think, that was abstract. We thought, well, once in a while we make a mistake. But now that we see the wrongful convictions, we're seeing that this happens a little bit more often than we thought. So, if somebody is going to be convicted, it, there has to be something more than flimsy evidence.

We've had some, you know, people could get convicted by eyewitness ID that is faulty. So if there's nobody checking out that evidence or an expert on the other side, some of that might slip through. Some of the evidence, maybe, we shouldn't even be entering into a trial at all. So I think we have to have a better gateway into some of the scientific, or other type of evidence, to see should that even be presented to the jury, because if it's not reliable, the jury may hang their hat on that to convict somebody. So I think, not vilifying the prosecution, but realizing that they may not always be right. And that probably they shouldn't have all the power, that the defense should have some, some more say so in this and some right to test the evidence and see the results and have the resources that they need, so that the case is properly vetted because we all want the convictions to be proper. I mean, I don't think anybody's saying we shouldn't convict people who are truly guilty. But we just have to make sure that the due diligence is done because you're talking about people's lives. And not just theirs, you're talking about their family, the impact of someone who's wrongfully convicted. And you're talking about costs to the criminal justice system if you don't get it right in the first place.

VBP: Are there any past cases that stand out to you that you worked on?

MA: Yeah, I mean, I have had, I had one case where the individual, when I started working with him, he was incarcerated. And he had already had two trials. One he was convicted on and then that was actually turned over on appeal. Then he went to trial again, and it was a hung jury, so he was on trial number three. So I actually, I worked as a DNA consultant with him and kind of helped him develop some new DNA evidence and challenge some of the existing DNA evidence. And we went to trial, and it was a hung jury again. So surprisingly, they wanted to try him for a fourth time. So we went in again, and then finally got a not guilty after all that time. So, you know, persistence is really the key here and looking at every possible piece of evidence, not leaving a stone unturned. And as a defendant, you just got to hope that you have a team that that's willing to do that, to really go the extra mile, and hang in there and persevere.

JJVD: Okay, um, this was also a question that I didn't, it wasn't planned. But my professor gave me the idea a little bit earlier. So as somebody who's been in the, you know, in the, working in forensic science a long time, you know, I think you mentioned it earlier, but there's the CSI effect. So, you know, we, you know, this is kind of a, we love our shows, I love Dexter, it's one of my favorite shows. But you know, what, in your opinion – and, you know, Veronica, if you want to add on this, too, but – you know, with, you know, these shows and stuff, you know, how is that, how have you seen that change over the years? How is that, you know, how is it becoming more powerful? What are your thoughts on, you know, the shows and the media fascination?

MA: Well, I think the positive is that people have become more interested in forensic science per se. So, while the jurors may have a lot of misconceptions about forensic science, I think they have more familiarity. I mean, at this point, everybody's heard of DNA, although they don't know the ins and outs. You know, there has been a pressure, I think, by the public to

want to see more scientific testing in cases, which I think initially was seen as a burden, like, aw, come on, we can't, you can't do that for every case like we do on TV. But really, the more sure we are of a conviction, the better science that we use, the better. So I think in that regard, it's actually a positive. So I don't know, CSI effect, I think maybe we're past that, because it's been in the public, what, 20 years probably now. So I'm not sure it's having as much of an effect now as it did maybe five to 10 years ago.

VBP: So for our final question, unless, JJ, there's anything you want to add afterwards...we're wondering, what's the biggest takeaway that you'd like people to get from your experience?

MA: Well, that unfortunately, the criminal justice system is very, it's not clean. It's not nice and clean. It's not uniform. There are definitely some inequities, as we know it, as we've seen from the wrongful convictions. So I would say that we can't villainize the defense. They have a right to be at the table, and they serve a very important part of this process. There has to be a cross check. Anything you do, I mean, if you go to the doctor, you're diagnosed with cancer, you want a second opinion. So I think the same should be true in criminal justice, that just because law enforcement...because they're law enforcement doesn't mean they're always right or that they wear the proverbial white hat. So I think we need to stop stigmatizing the sides. And, yes, the legal system is confrontational, but both sides have a right to be at the table, and both sides have very strong reasons for what they're doing. So I think there just has to be more quality control, basically, in prosecutions. Can't just let prosecutors throw anything at the wall and see what will stick and, hopefully, jurors are becoming more wise and more critical of some of the evidence, perhaps because of the TV shows. And I guess that summarizes it.

VBP: Quick follow up. Have you seen any big changes in your career, because of the protests this summer and the, you know, the movements that have come out of it?

MA: Well, you know, ironically, at the same time that was going on, COVID hit, so all the courts have slowed down. So I mean, a lot of the things that, a lot of the cases that I had that were going to go to trial have been postponed and postponed. So I haven't actually seen a lot of activity in the criminal justice system, so I think we'll have to wait to see what the effect will be.

JJVD: Well, Mr. Anjaria, am I saying that correctly?

MA: Anjaria.

JJVD: Anjaria, excuse me. I believe that's all of our questions. But once again, thank you so much for coming onto our Zoom tonight and meeting with us. This is all really great information. But yes, thank you so much once again.

MA: Well, it was my pleasure, nice to speaking with you, and I hope my comments were helpful.

JJVD: They definitely were, thank you.

MA: Great, great. Take care.

VBP: Bye.

JJVD: Thanks. Bye bye.