



The American Association of Immunologists Oral History Project

Transcription

Gabriel Nuñez M.D.
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Interview conducted by
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Williams: This is an interview with Dr. Gabriel Nuñez for the American Association of Immunologists (AAI) Oral History Project. Dr. Nuñez is Paul de Kruif Endowed Professor in the Department of Pathology at the University of Michigan Medical School. He is also the Co-Director of both the Cell Biology Program and the Tumor Immunology and Transplantation Biology Program at the University of Michigan Comprehensive Cancer Center. Dr. Nuñez was the AAI Vanguard Lecturer in 2015. We are at IMMUNOLOGY 2017 in Washington, D.C. Today is Sunday May 14th [2017], and I'm Brian Williams.

Dr. Nuñez, can we start with a little bit of your family background?

Nuñez: Yes. So I grew up in Seville, which is a city in Andalusia, in the southern part of Spain. So I have a large family; we were ten children. I am the oldest. My father was a pharmacist, and I remember helping him in his pharmacy.

was an interest of mine and I was very interested in moviemaking. At the times during the Franco times, many of the movies were actually prohibited, so we have to go overseas or we have to go to special places to watch these sort of movies that were going on in the rest of Europe. We couldn't see them in the public open theaters.

Williams: So were you showing your work in underground places?

Nuñez: No, no, this was basically about myself and showing with friends and things like that I was talking about movies of the time that were being shown in many other places, and we couldn't really see them in Spain at the time because they were censored. So we had to basically either join groups of cinefiles that were interested and brought the movies either in a way that would not be seen or places that I guess the government was not really worried about because they were very limited to the number of people going. It was not announced in a way, so I remember. So I have a large interest both in science but also in the arts, in moviemaking in particular.

Williams: Have you done any moviemaking since—or

Nuñez: No, no. That's something I stopped doing, but I enjoy watching movies, and I'm very interested and I study a lot about the different movements and art of moviemaking, so I'm still very interested in that, yes.

Williams: So what was the tipping point to push you over to medical?

Nuñez: I don't know. I guess it was probably very difficult to see a more easy career in science or medicine than in moviemaking at the time. I think that would probably be very difficult at the time to go through that. We don't think we had very good even movie schools that you could join, so you probably had to go overseas, and it was not easy when you're like a seventeen-year-old to live by yourself. I think 20 years ago.

classes that year because there was prof [unclear] This is not just in the medical school; this is in the entire university system in Spain. That was in '74, '75, '73.

Williams: When did Franco finally

Nuñez: Seventyfive, that's when he die

Williams: So you got an M.D.

Nuñez: Yes.

Williams: Would you have had the opportunity to do a Ph.D. at Seville or not?

Nuñez: Yeah, I could have, but as I mentioned, one way to go into science was to study medicine, and then you could do research in the medical school, but then I realized actually when I was exposed to the clinical medicine, I realized I also liked contact with the patients, so in the last year in the medical school, I was doing research in transplantation, so I went to Rome for a meeting in transplantation.

While in a restaurant, I met a professor from [University of Texas] Southwestern [Medical Center] Peter Stastny, and we started talking, and he told me, "Would you come to join my laboratory in Texas?"

I said, "Well, I'm going to do a residence in Madrid in internal medicine." Well, four months later, I was in Dallas. So that really changed my life. Going to Rome and then meeting this professor in a restaurant really changed my life. I think there was many other attendees that were in the restaurant, and happened to be sitting close to Peter Stastny. He told me, "Well, we work in the same area. Would you like to join the laboratory?" So that really changed my life. So that was about '78.

So in '79, I arrive in Texas and I had to learn English all over again, because I didn't understand anything what the Texans were talking about [laughs]. I used to go to England in the summertime to learn English, so I learned English in England. When I was eighteen, nineteen, I used to go to work in England, very near Spain, so we just take the plane and I'd have different type of job there in the summertime, then go back to medical school. So when I arrive in Texas, I notice they have a different accent [laughs].

Williams: Just before we get to Texas, what about curious about your siblings. Did some of them follow in your footsteps or

Nuñez: Yeah, there were three that went to medical school and then became doctors. One of them died recently of cancer, but the others are still they're all living in Spain. All my family living in Spain. They have not left the town, and that is not

Pathology came as particular interest to me, so I look around and look programs in pathology that would allow me to do research at the same time, do the clinical requirements, but also do more work in the laboratory. So, I interview in a number—there were like five or six programs, residency programs in pathology in the country, that would allow me to do research, and one of them was Washington University. Professor [Emil] Unanue was a very famous immunologist, just came from Harvard [University] to take the chairmanship of Pathology. When I talked to him, he offered me, after the interview, the position, and he said, "Well, I'm coming to St. Louis." And I think that was a very good decision, really, I thought it was very important for me, for my career, in going to Washington University.

Williams: And how so important to your career?

Nuñez: Because there were outstanding immunologists. The department was really a leader in immunology. I didn't work in immunology; I work actually with Professor Stanley Korsmeyer. He just came from NIH [National Institutes of Health]. He was an oncologist working in lymphoma, and also was very good. But I was exposed to a lot of immunology in the department because that was the

Nuñez: Well, at that time, because I was in a new field, apoptosis, so it was really limited. There was Craig Thompson, a very famous immunologist, who came, and he also was interested in apoptosis, so we collaborated with him, with Craig, and so I worked in this area for about ten years. Then my focus changed, and I can explain to you why that happened. I went back to immunology.

infection were ϕ ll-like receptors

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population in 100 years There's not enough. You have to think of pre-antibiotic era.

There's where we are now We still are where we were before Right now, our genetic makeup is reflecting more of pre-antibiotic era and exposure to microbes Our lives and our genetic makeup has been really largely affected by these continuous encounter with pathogens, which now we are diminishing particularly in the developed world, because we know what is causing it, we can do something about it We can clean the water, we can do sanitation, and that was not really known until literally recently in human history.

Williams: Let's turn to the AAI for a moment You joined in 1985, I believe.

Nuñez:

think you have to choose your—you cannot be everywhere I mean, you have to choose your area of interest and I think the journal is something I decided to do. I could do something there, yeah.

Williams: Help me with my confusion here, because I would not have thought that a Spanish native would be considered a minority in this country.

Nuñez: Yeah, I think this is a very, very good point learned because I didn't know when they asked me if I'm—I sometimes I put it—I don't reply or sometimes put Hispanic or sometimes I say European—I don't know what I am. [laughs] So I don't typically use this for anything—I don't—so, yeah, it could be confusing. The definition of the State Department, at least for some time, not sure currently, they said I was someone with a Spanish culture background or something like that, because you were qualified. But someone from Spain, you could make the argument they're Europeans and they came over—I don't know exactly what they are particularly. [laughs] So I don't want to take any strong views on this because I don't think it's necessary, but, yeah, sometimes there is confusion, including for myself. What am I? [laughs]

Williams: Have you taken on a bit of a mission to work with Americans with Hispanic backgrounds?

Nuñez: Unfortunately, there are not many applicants, but I have taken a postdoc recently from Mexico and also I have some applicants from Hispanic background, and there's one now we seem going to interview next week, hopefully can join as a student, maybe can join my laboratory. So, yeah, I think that is something would be very interesting in to do this, but, unfortunately, we don't have many applicants. We don't have many applicants, but I think there's a problem that we have to solve, which is basically graduation high schools. There's a lot of loss of potentially talented individuals, minority individuals at that stage. So they don't have a chance to even to make it. So you have a lot of attrition at that level. So I think if we increase the pool there, I think the number of applicants to bring some of these individuals to some universities so they can work there for two months or three months or a year, and then if they are talented, they will make it.

I think when the number of positions is so small, it's very difficult, because you don't want to push someone because they're a minority if he's not talented, because that's a failure. So I think what you need to do is that you need to increase the pool of minorities working early on, to increase the number. Now you can select these talented individuals. By then the numbers already to begin with is very small, so then you cannot push it because at the end, it's a failure. So I think we have to work early on to increase the pool, and then we can find those talented individuals. They can be very successful. Then they would be, not because they are minority, because they are talented, so I think we should focus on that, because otherwise, they cannot survive. You cannot put someone artificially because they're a minority. So the problem is to increase the number of those individuals that they can have

now the chance to show that they are talented, and I think that's the way I think it should be done.

I mean, what I said, all the people felt the same. This is not—but I think it's a problem with the number. We don't see many applicants. Graduate students, we don't see many postdoctoral fellows that come in. There are some, but it's 10 percent or 15 percent, and I think we have to increase the pool so we'll see these very minority talented individuals. They can compete with anybody else. I don't think they want to be seen because they are helped because they are minorities. I think they wanted to show they are talented like anybody else. I think the help that's given to them is not the help that's given to the majority.

particularly in the '50s. Already there were experiments that you treat the animals with antibiotics to make them more sensitive, for example, to *Salmonella* through the oral route. So there was the concept of the protection of the microbiota against *Salmonella* colonization. So those were already concepts that came from the '50s, but then the microbiota field sort of died out after the '60s. Now we have better tools to understand, and we can understand why the microbiota help us from pathogens and things like that.

Now we have a good example. We use these tools to treating diseases *Clostridium difficile*, which is colitis, which is introduced into individuals.

depending on the people who work in the laboratory. I've been very, very lucky to have outstanding individuals. More than fifty postdocs come to my laboratory over the years. Really, I learn from them as well. I mentor them, but I learn from them as well. I think the key in a scientist's career is also to be surrounded by talented individuals, and I think that's really the ones who do the work and the ones that bring new ideas and make you younger when you become older. So I'm really grateful, grateful, super grateful to the very talented individuals that over the years have come to my laboratory. I think they deserve all the credit for the work.

[End of interview]