NIDCR Oral History Project

Interview with Dr. Isabel Garcia

Conducted on March 5, 2024 by Kenneth Durr

KD: This is an interview with Dr. Isabel Garcia for the NIDCR Oral History Project. Today is March 5, 2024, and I'm Kenneth Durr. Dr. Garcia, great to talk to you after all this time.

IG: Thank you very much. It's one of my favorite topics to talk about.

KD: It has been mine as well for the last few months, so this will be good. I want to really get in at the bottom floor, and as we talk about your career have something to build on. I notice that you studied chemistry in undergrad.

IG: Yes.

KD: Were you a science geek or did you think about medical school, dentistry? How did that work?

IG: Well, I wasn't a science geek, but my dad was a pharmacist, so I think he had a natural love for chemistry. And while I had a number of disagreements with my dad over the years, I think there was some sort of an ionic bond there that connected us, and so he got me interested—

He wanted to pique my interest in pharmacy, and somehow that just didn't happen. But the chemistry idea really stuck with me, and I was fortunate to have had really inspiring teachers, a faculty member when I was an undergraduate, and that's what launched me into chemistry as my field of study.

The notion of dentistry really didn't come until pretty late in my undergraduate training. Back then, it wasn't like now where we really ask our students to almost decide on a career so early in the process, and you have to prepare and you have all the coursework laid out for you and the prerequisites and all that. I wasn't particularly mindful of that. I was, really in a liberal arts institution—

KD: Mary Washington?

IG: Yes. It's now the University of Mary Washington. It was Mary Washington College at the time. And so I was just more focused on learning everything that I could, but then I did take that turn into chemistry. And that got me connected with a set of classmates that were interested primarily in medicine. To be honest, I don't think I thought I would be competitive in medicine, mostly because I didn't really know what kind of preparation was needed for that career. And I settled into dentistry, I have to say honestly, without knowing as much as I should have.

And it was a lucky coincidence that I was well suited for it. I'm a people person, I enjoy the interaction, so later on really loved getting to know patients and the families. I'm also kind of artsy. I do arts and crafts and that sort of thing. You have probably heard a lot about the art and science of dentistry. I like to talk about the science and art of dentistry, in that order. But there is very much a psychomotor component of dentistry, a very technique-oriented, very detail-oriented, and that suited me very well. So I would say it was a lucky coincidence rather than an intentional choice.

And thinking back on it, I was probably the least likely in my family to have chosen dentistry as a career because I was very fearful of the dentist as a child. In fact, I recall locking myself in my room when it was time to go to the dentist, because I associated, like many people do, with fear.

So I had a lot of anxiety related to dental care, which I think made me more sensitive and understanding, perhaps, of many patients that approach us, the majority of whom come in pain or with fear and anxiety like I had. And I think in the end it really proved to be an asset to be able to have more of the personal connection with my future patients.

KD: Your degree at VCU was dental surgery. Is that a specialty or is that sort of an overall category?

IG: In dentistry, the predoctoral curriculum that leads to a dental degree is the Doctor of Dental Surgery, so that's the doctorate that I have.

KD: DDS.

IG: DDS. In this country, we award the DDS or the DMD degree. They are equivalent. That's what dental students earn at the end of the four years.

KD: You went into private practice, right?

IG: Right.

KD: Was that right out of dental school? Were you following the traditional trajectory?

IG: I did. Right after dental school I had had some exposure to public health but not in a formal way, and so I pretty much followed a traditional pattern. One of my operative department faculty had a practice not far from Richmond, where I went to dental school, so I joined as an associate in his practice for a number of years. He was an important mentor for me, sort of getting me started, and that was family dentistry, general dentistry. It was a really great foundation for me. And then I also was working separately in the evenings and weekends starting my own practice near Richmond, Virginia, as well.

So I did that for a number of years and received many letters and cards from patients over the years after I moved away. Those are connections that you make with people really reinforcing why I had chosen dentistry to begin with, because it has really been an incredibly rewarding career that has been pretty far away from my clinical beginnings, but it really all sort of ties back to why you chose dentistry to begin with. It was really that interaction of the science, and the ability to do aesthetic work and meaningful things and restore function that really attracted me to the career.

KD: Yes, it's really interesting because it seems like a lot of people who get into NIDCR start from the science angle; they think more about being scientists first than being practitioners. But there's a significant group that came the other way as you did. Do you see any differences in those types of folks and their approach to the issues that NIDCR grapples with?

IG: I'll start by saying we need both. We need those that have worked out in the communities. Many of the NIDR and NIDCR efforts are really community-health oriented, community-oriented, and so I think it's enormously helpful to have the hands-on experience, to have seen patients, to understand the context of the delivery of dental care, particularly in this country, where the care and the financing are very separate from the medical care delivery and financing.

But obviously, you really need the whole village of research individuals. I loved my interactions with our Intramural Research Program, for example. I sat through many, many meetings of the Board of Scientific Counselors for the Intramural Program, and that's where I learned a lot of the basic science—not to the level of their expertise, of course, but I found it very enriching. So I think that you really need a combination of individuals, particularly now that we understand oral health in the context of overall health as an essential element and not as a separate entity or something that should be episodic care.

And so we all just brought something different to the table, and I think that was probably one of the things that I enjoyed the most about my job—my different jobs at NIDCR. Because I learned tons along the way; hopefully, I contributed as well. But I always felt that it was ultimately my public health lens that guided me the most in the work at NIDCR. And that guides me today. I'm sort of a public health thinker and problem solver.

KD: That leads right into the next subject. I want to talk about the public health angle. You're practicing, you're setting up your own practice, but you turned and went and got an MPH. Talk about what led you in that direction.

IG: After working in the private setting for a number of years, I met Dr. Joe Doherty, who was a really pivotal person in my career, early career in particular, who was the Dental Director for the Commonwealth of Virginia. And so my interactions with him led me to then leave the private sector and I went to work for the state of Virginia in a small program in what is considered now northern Virginia but it's not far from Fredericksburg, where I had gone to college.

And so that was primarily doing clinical dentistry but in a public health setting. I was doing mobile dentistry in a dental trailer that visited schools throughout the county, in Stafford County, and I absolutely loved that job. I worked with very young children with Head Start and pre-Head Start. I worked alone, and oftentimes we'd get one of the school aides in the clinic to come and assist me so I could do four-handed dentistry. It was pretty crazy stuff. And I treated children from pre-Head Start all the way to high school.

I was there for a number of years, and then I began to see that no matter how good my dentistry was clinically, things were failing, and the decay was recurring, the habits were not changed. We were not really addressing what we now understand as the social determinants of health. I did not

have an opportunity to address what happened at home and their nutrition, the health education of the whole household. You're not able to influence any of those factors.

I did start a number of public health-related projects when I was there, doing some surveys in the schools to determine knowledge and attitudes and behaviors about prevention, about oral health and things like that. Then I realized that I loved doing that kind of work but that I needed to have a more sustainable impact in the community. I loved clinical dentistry. I was never one of those dentists that went into public health because I didn't like doing the daily work of patient care, but it was because I felt that I was limited and I could contribute more broadly to the individual's overall health by trying to influence many of the other factors—which, of course, is harder to do, as I learned.

And I came to recognize that I needed public health training formerly, so I went back to school after being out of dental school about seven years, and I had two very productive, happy, and cold, years at Michigan and I completed my graduate work in public health and a residency in dental public health. So that was really sort of the big turn in the road, I think, towards more of a public health orientation in a formal way.

KD: And you had a public health service fellowship at this point?

IG: No. After I finished my graduate work at Michigan, I took my first bona fide public health position in the state of Ohio. So I stayed in the Midwest for a number of years and I went to work now for another department of health; this one was in Columbus, Ohio; and I was directing their evaluation-related projects in the community, a lot of the outreach that was happening throughout the state. I got to travel around the state and put together and evaluate dental sealant programs in the schools. There are some counties in Ohio, particularly southeast counties, that were very

underserved in terms of the dental workforce, and we would go and set up all those programs there.

That was really an amazing opportunity as well. I was there for several years. We completed something that was never published so it doesn't exist, you know, a survey of five different cities of homeless individuals, the oral health of homeless people living in Ohio. And that took some convincing of all of my bosses and others to actually let us do that and travel with a small team to shelters and people on the streets. It was primarily done in the shelters for safety reasons. We did all the work with portable equipment and documented that there was a tremendous need in this population. So this was in the early 1980s—no, I'm sorry, we were going now to 1990 or so during that time.

That was also a time when it was the later wave of the HIV/AIDS epidemic, and there was a lot of hesitation on the part of dentists to see HIV-infected individuals, people with HIV virus who had, of course, horrible oral manifestations (this is before we had retroviral therapies and all of the advances that we have today) and so I did a bit of work with my director at the time to really look at dentists' attitudes and knowledge and behaviors related to people with HIV/AIDS.

KD: I learned about a new agency when I was doing research: AHRQ, Agency for Healthcare Research and Quality. That sounds like a waystation on the way to NIDCR. Tell me about your work there, your first involvement with the Public Health Service.

IG: I left Ohio to join the Public Health Service in 1992, and so AHRQ, which was called AHCPR at the time, a different name, Agency for Health Care Policy and Research, didn't have the word Quality in it yet, was really quite amazing for me.

First of all, I was a junior officer in the Public Heath Service, so the lowest person in the pecking order, but I was the only dentist in the Division of Primary Care at AHRQ or AHCPR. And it really taught me to justify why oral health is important, why dental care is really pivotal for people. I was with a team of nurses, physicians, there was a health economist and a couple of others, and it was the first time that I found myself in an interdisciplinary group like that, where I was the only dentist representing the group. I had a small portfolio of projects. We were trying to direct the oral health agenda within AHRQ/AHCPR a little bit, which I think we succeeded modestly over the years.

But it was that work at AHRQ that enabled me to then participate in the primary care fellowship in the Public Health Service. And actually they were very generous because I think that was intended for more mid-career people. And I was mid-career based on my dental school graduation, but I was really very junior in terms of the Public Health Service. This was a fellowship that was formed, I think, in around 1991, and it was intentionally to provide leadership, professional development to a whole cadre of interdisciplinary people, so once again I think I was one of two dentists in the room working with physicians, nurses, pharmacists and others. And the focus here was really to become more knowledgeable about health policy, how to be influential in directing policies that could address issues of quality, access, etc.

KD: This sounds like pretty important background for you as you move into the next step of your career.

IG: Yes. And if I could just touch on that point. As I was thinking about that very first experience, it was the interdisciplinarity that really has carried through my whole career. And now we have so much focus on interprofessional education, interdisciplinary practice and models of care, but it was really, back then, that was the beginning of my understanding of how critical that was.

KD: During this period, how much did you know about NIDR?

IG: I knew a lot about NIDR because of the person named Dushanka Kleinman. Dushanka and I had met each other through dental public health circles. And my work was with AHRQ at that time, but we were connected with NIDR, and so it was Dushanka that got me interested in coming to NIDR at the time and eventually I joined a few years later in 1995. So it was really her influence that said, "Why don't you give this a thought?" And it was, of course, an incredible move, and a place that I called home for 19 years, my work home.

KD: What was the opportunity that you saw there?

IG: Dushanka Kleinman was such an incredible role model, not just for me but for many young dental officers in PHS. And I could see the draw was not only that this was an opportunity to delve deeply and learn and contribute to the agenda of NIDCR, but also to work in the context of an enormous agency as NIH. And so they had a lot of oral epidemiology, they had the Caries Program at NIDR. There was a tremendous interest. And as a dentist, I felt that it was sort of coming home. AHCPR was a wonderful opportunity and I enjoyed the camaraderie and the uniqueness of the place, but NIDCR is the dental heart of NIH, right, and I felt very drawn to that.

KD: This was a period of transition. Harold Slavkin came in I think that year. Was this part of a broader transition when you came in, or did it just work out that way?

IG: It was a coincidence that I joined right before Hal landed at NIDR. I think we both began around June of 1995, and it is hard to describe just exactly what happened when Hal came. I'm sure you have heard from many others he was a man of tremendous vision, boundless energy, always

singing and whistling and happy, always engaging and always speaking in full paragraphs about so many things that were incredibly exciting.

He started this really extensive process to create a strategic plan with probably the biggest effort that I have ever seen to bring stakeholders together to create a strategic plan. I believe it was called *Shaping the Future*, and he had sailboats and all kinds of things representing what we needed to come together and do the strategic plan. We had focus groups, and it was really an incredibly engaging effort. It was also very, very different. I mean, this was not how the bureaucracy in federal government tends to work. And so he was transformative. He was disruptive in a very positive way.

I think, NIDR was never the same. For one thing, he changed the name where it was under him that we added the C, and so really literally it was never the same place again. So it was a great opportunity to—at this point I'm watching a little bit from a distance, I'm really focusing on science transfer. I was with what was then the Office of Communication and Health Education, working with some people that are still there today who were really amazing to collaborate with.

KD: So you came in to the Science Transfer position, right?

IG: I did.

KD: Tell me what's involved there.

IG: The Science Transfer effort didn't start with me, but it was something that the Institute had been wanting to focus on with the belief that there were a lot of things emanating from research that were not being adopted or were taking decades to be adopted in the clinical, in the practicing community. And so the whole idea was to have that engagement with practitioners to come and learn and interact, learn about the advances of research in the Institute. And so we launched into

a whole series of wonderful symposia that brought together speakers from around the country and practitioners were invited to participate.

So I ran that for a number of years, and of course, the scientific advances were coming faster and faster, and the engagement, I think, was very positive, and really trying to bridge that gap between the science and the practice. But it was for me, a realization that, going back to what we talked about earlier, that we need the engagement of both. You need the scientists, you need to encourage them to speak in terms that are meaningful and understandable to the practicing community, and you need the practicing community to be able to guide relevant research.

This, of course, grew into what we know as the Dental Practice Research Network that we can talk about, but it was at the root of that issue of not being able to translate research, to get it adopted, and to put it to good use to improve the health of communities.

KD: You mentioned the symposia. Were these held at NIH? Did you take this on the road? How did that work?

IG: They were primarily local. This was a time when it wasn't as difficult to travel perhaps, and so I believe here was one symposium that was held in conjunction with an American Dental Association meeting. That was a model that we didn't pursue after that. The ADA meeting was very competitive, and while it was kind of a bigger—we had a lot of publicity—I don't think it was as much draw, and so we reverted back to bringing people to the NIH campus. They could have tours, see a little bit more of the context of research, so we went back to having them in Bethesda.

KD: What other measures did you take, in addition to symposia, visiting NIH?

IG: Measures for?

KD: That were involved in science transfer, this effort to link the practitioners with the scientists.

IG: One of the things that I think was really critical at that time—and I now recognize that NIDR was way ahead of its time in collaboration with the Office of Communication and Health Education. The Institute was producing many materials and tools for practitioners with special emphasis on persons with intellectual and physical disabilities and a whole range of things. I recall being part of educational materials that were being produced for practitioners, and these were practical guides for treating persons with autism or cerebral palsy, Down syndrome. There was a special effort made to begin to highlight what we didn't even call health disparities at the time, but we were focusing on the fact that the prevalence in mortality from oral cancer was much higher among certain groups, particularly at that time it was African-American men. So there were a number of efforts and teaching tools and things for practitioners focusing on oral cancer. And also how to do better oral cancer exams, teaching dentists to work with patients that were receiving radiation therapy for head and neck cancer and being part of that team. So here again, trying to involve dentistry within the context of multidisciplinary care.

And so that was a period when a lot of these publications were made. Eventually we started to put these things on the World Wide Web, which didn't come until a number of years later, a few years later, but those are some of the things that I recall. There was a lot of effort that also began probably around 2017 on temporomandibular joint disorders, a lot of publications. At that time, the Institute did not have a lot of extramural grant funding for TMJ, what we then began to recognize as a broader disorder, TMJ disorders, as a constellation of symptoms. And so that opened up opportunities to begin to work with patient advocates and others.

KD: But this designing/disseminating curriculum sounds like that was a pretty big task in your office.

IG: The designing curriculum was a Hal venture. It was not designed for practitioners. What I described was really more focused on dentists. The curriculum activities were all related to Dr. Slavkin's really keen interest in making sure that the interest in oral health should begin early in life, the interest in science should begin early in life, and so he, working with—there was an Office of Science and Education at NIH at the time, led by a very talented man by the name of Bruce Fuchs. And so I was asked to lead the oral health piece of these curricula that were being developed, but it was for schoolteachers to have the tools to then talk to young people about the importance of many different topics, to understand the science behind it, to embrace a mind of inquiry using, in our case, oral health as the example.

To this day, I have to thank Hal, bless him, for letting me lead that activity and getting involved with some incredible people that actually developed the curriculum. We worked with two companies to do this, and they tested the curriculum with teachers nationwide before it was developed. That activity was also unique in that we developed the only curriculum that was for elementary school children; all the others were for middle and high school children. And it was a really great opportunity to be able to distill the essentials of oral health in very simple ways that young children can understand. In that way, I think it was very valuable.

KD: Was this a one-and-done effort, or did the curriculum project continue?

IG: If I recall, it continued for a number of years. The curriculum supplements, as they were called, were initially in hard copies and came with a DVD with a disk. Remember the old floppy disks? And eventually I think they began to incorporate more technology as our ability to do things in a virtual format increased. And I recall that they continued for a number of years, and then eventually I think the process sort of saw its end and the Office of Science Education was no

longer supported at NIH. So I think there were some revisions to the other supplements. The oral health curriculum, I think, was really a pretty self-sustained activity.

KD: At some point you become the Director of Science Policy and Analysis. Was this a continuation of what you were doing with Science Transfer, or was there something new here?

IG: The something new was Larry Tabak. I was happy doing my thing in Science Transfer and all of this science education and health education. And then Dr. Tabak came, I think it was around 2000. And I recall my first meeting with Larry. And despite the almost ten years that followed working together, I was never really sure whether we had hit it off well at the beginning of not because I came in swinging the bat pretty hard for science transfer and health education and communication and all this. And Larry was, let's just say, highly skeptical. I think he understood my point of view but might not have appreciated all that I had to say. I think, perhaps, he found my enthusiasm for the topic and the ability to stand up for what was really a tiny piece of NIDR at the time—NIDCR now.

Then Larry had a few meetings with me and started talking to me about, "You know, why don't you think about doing bigger things in the Institute?" At that time, I had already been involved in the development of the Health Disparities Strategic Plan that was started under Dr. Slavkin, so I had a little bit of experience working with strategic plans. And he asked me to be involved in the development. It was now my second strategic plan at NIDCR, and that was, I believe, the 2003 to 2008 strategic plan.

I thought he was out of his mind when he asked me. It was like, "Oh, why don't you work on this?" And I had, other than my limited experience with the previous plan, I had no idea. And so luckily this was all done in a team, and I had some fantastic people to work with, and so we did

produce that first strategic plan, which was a wonderful collaboration. It was the only strategic plan of the four that I had the opportunity to work on that actually developed an implementation plan. So it was very detailed, very action-oriented, and I think it was, hopefully, very useful to move forward a lot of the agenda that was part of the Institute at the time.

KD: You mentioned Dr. Slavkin's strategic plan, which came out in 1997. And you talked about the work must have been going on pretty shortly after you got there, so this was a big project.

IG: Yes. I started in '95, and two years later was the first strategic plan. I was involved, but as a stakeholder and member of the community, but I really was not involved other than providing input. But I watched the process. And of course, that process involved the whole cohort of people that did this for a business, and so still I felt pretty new in terms of strategic plan development when it came my turn to lead the one that happened in 2003.

KD: You mentioned the disparities strategic plan, and that was something that Harold Slavkin was particularly interested in. Did you work on that one?

IG: I did. In fact, again, it's always a team effort. I believe it was the only health disparities strategic plan that was ever developed separately from any of the other strategic plans. Later on it was decided that health disparities should not live separately, that it's an integral part of everything we do, that it really needs to be totally embedded in the fabric of the organization, so that's why there weren't any others after that. Health disparities then became part and parcel of everything we were doing in the Institute. So by the time 2003 came, that strategic plan had many aspects relevant to health disparities; it was no longer a standalone one.

KD: I think earlier in our talk here you mentioned this was before the word *disparities* emerged. The word must have emerged during that disparities strategic planning period. I want to get a sense of

what did that concept of health disparities . . . did that focus people? Did that change things in some way or make the process easier to make it crystalize?

IG: I think you have to remember that NIDR, and then later NIDCR to a lesser extent, always had a very strong interest and portfolio and expertise in behavioral science. And so I think the underpinnings of trying to understand the drivers of health disparities really began with the understanding of the multiple factors that contribute to these inequalities in health. And so this is a time, by 2003, when the new strategic plan was created, health disparities was really federal-wide. There were many agencies and institutes that were involved to be able to develop what I would call scientifically based approaches to conceptualize the whole notion of health disparities and health disparities research to more accurately reflect the growing diversity in the country.

That also brought up the need for better data, better data position and analysis. We did not have really well-characterized names of various population groups. Some of our national surveys, for example, did not include sufficient information to be able to examine at a deep level many of these disparities. There was a need to conduct a lot of surveys with well-defined populations, and that was part of the strategic plan. And again, the whole notion of interdisciplinarity was a central piece of that.

KD: Dr. Tabak wanted you to look at bigger things. Talk about some of the bigger things that the Office of Science Policy and Analysis undertook during the years you were there, 2004-2007.

IG: Those were pretty fast-moving years, I would say. By that point, the Office had been reorganized from when I was first started and it was actually called OPEC, Office of Planning, Evaluation and Communications. And so now you have the two separate branches, communications and health education on one side, and then science policy on the other. And so I think those were

really growing years for both OSPA and for me. I recall a lot of focus on building the team, a lot of focus on the evaluation aspect of it, a lot of the internal data that we had to be able to categorize grants in various groups, various themes by science area or re-sited within the Office.

So I recall a lot of process-related work, a lot of team building, a lot of effort to get better data. I was very much involved in getting the community to respond to a lot of inquiries about our scientific direction and things of that nature. There isn't a project that stands out in my mind from those years. I would characterize it really more as getting unity with the group, defining the purpose clearly, and getting the team behind what was going on and being able to support the mission of the Institute.

KD: One initiative that I ran across was the Dental Public Health Residency Program.

IG: I started working with Dr. Rob Selwitz as a co-Director of the NIDCR Residency for Dental Public Health, which was Commission on Dental Accreditation-approved residency accredited. So eventually I took over the program when he retired. I think I took it over in 2005 or so. Dr. Kleinman had been heavily involved and had been Director or co-Director many years before me, so once again I'm following, I'm seeing the footsteps of Dushanka and trying to accomplish as much as she did in her lifetime.

That was a really wonderful experience for me, because it was the first time where I really began to do more mentoring hands on, directly, with our Dental Public Health Residency. We were incredibly fortunate to attract incredibly well-qualified applicants to that effort. I have to say some of my mentees and trainees at the time are people that I'm in touch with still today. Many of my residents email me and let me know what's going on in their lives. I haven't collaborated

scientifically with any of them academically, but I have hired one of them. In not too long, one of my former residents became part of our community, Dentistry Behavioral Science Department.

And so it's one of those stories, one of those experiences that keeps on giving. The projects were great to work with. I think it was a really great contribution to the field of dental public health, and I list those as probably my most accomplished individual mentees over the years.

KD: Would you bring public health students to NIH for a semester or something like that?

IG: It was a 12-month program, and this was for dentists that already had to have credentials in public health. And then they were doing their residency, so they already had a masters level of training, but they come to focus on dental public health-related projects. It was a dedicated 12 months on site. We didn't have any of the hybrid programs where you can do things online. It was on site, on the campus for a year.

KD: So they were NIDCR employees.

IG: Yes.

KD: At some point here, Dr. Tabak asked you to become Deputy. Was that a surprise, or were you being groomed for that?

IG: If I was being groomed no one told me about it. Once again, Larry calls me in. By that time, he had seen the experience of directing, first as interim, and then as formal Director of OSPA, and now he's starting to think about bigger things and all of that. And so I would say it was a conversation that evolved over time. He was hinting at various things and eventually I guess he popped the question, and the partnership began, I think it was around 2007. And that was pretty transformative for me.

Of course, I had been working with Dr. Tabak closely, but now I was part of the Office of the Director, and so it sort of evolved, I think, over time, and he began to give me responsibilities to represent the Institute here and there. And so I would say it evolved over time.

KD: This was another instance of your following in Dushanka Kleinman's footsteps, right?

IG: Yes. And I remember moving into Dushanka's office, the corner office opposite the Director's office, and always feeling like I was occupying her space because Dushanka was just so legendary. It eventually became my own, but I always felt her presence in a very positive way, of course. She made it very clear when we talked about this that it needed to be my experience and that we all brought unique talents and opportunities to the position and that I shouldn't feel that I needed to emulate her. Of course, I felt that I did, but she was always very kind and very supportive.

KD: That starts to address what was going to be my next question, which was does this Office of the Deputy have a job description, or is it whatever the Director wants it to be on any given day or week or month?

IG: Oh, it has a job description, but what you get to do ranges from things that are on paper to whatever fire needs to be put out to whatever problem du jour occurs. And you're there to serve the Institute, but you are there to adapt to your director and to support him or her as they see fit. And because I had been in the Institute for a number of years before Larry came as Director, and course I understood the bureaucracy of DHHS, the bureaucracy of NIH, and the Institute, part of my job, too, was orienting him to a very different way of doing work, which I now understand a lot better being on the academic side.

Larry came from an academic environment (that happened with Dr. Somerman as well) and so part of the job, too, was just working with him to have him come to learn more and understand the inner workings of government and how things got done and why things took so long and all of the nuances. And so I'd like to think that I was a good bureaucrat and that I was helpful in teaching him a number of things, but I certainly got way more back from him in terms of his mentoring for me, which has really been for my whole career now.

KD: What were some of those things you got back from him?

IG: I have to say that Larry and I had a very symbiotic relationship. He's the basic scientist, and I'm the public healther. And so, while our viewpoints were very different from one another, we always had a synergy in terms of how we worked together and all that. Larry really taught me how to take things in, be able to have really good data, to be able to make decisions that were data driven and not a knee-jerk reaction. I really watched him be so systematic about doing things. I'm a deliberative person by nature, but Larry is both. He could take quick action, he could be deliberative as he needed to be, and I learned a lot by observing him and how he handled difficult situations, difficult topics.

Not everything that we got to work on was fun in a sense that they were politically sensitive things, we had patient advocates to work with, a lot of delicate things happened in the whole world. And I think above all, Larry always said, "You have to be true to yourself. You have to be forthright. You never compromise on the things that really, really matter." I think he had a very strong moral compass and that was a direction I followed.

KD: One of his signature initiatives was the PBRN, which you mentioned very briefly. Did that evolve slowly out of what had come before, or did this happen as an initiative all of a sudden?

IG: I don't think a lot of people knew the history, but the PBRN started around 2005. About six years before that, NIDCR had partnered with AHRQ. So here comes AHRQ again. And the Institute had funded an evidence-based practice center that was at the Research Triangle Institute at UNC, and it was part of a whole collection of evidence-based centers that was being funded by AHRQ. And so we picked up one of them and it focused on oral health. So that was almost the precursor to the PBRN idea.

I worked in the Division of Primary Care at AHRQ with a man called Dr. Paul Nutting, who actually had started the Practice-Based Network idea in Colorado in medicine many, many years before. So I take no credit for having made that connection, but I had the experience of the PBRNs from my AHCPR years. So that grew into this tremendous effort, and it was, I think, Larry's keen understanding of the need to connect once again the practicing community to do research that was relevant to solving everyday problems that are faced in clinical dentistry.

KD: What was the big challenge in getting this up and running?

IG: Well, the people that eventually were not funded by PBRNs were very unhappy because it was a big bolus of money being set aside, and they were funded for many, many years. The project period was very lengthy, and that was unprecedented. And so some individuals in the extramural community saw NIDCR as sort of diverting money and putting a big set-aside in this huge effort that allowed . . . People just did not understand what—honestly, they lacked confidence that it was worth the investment. And so there was this kind of friction there during the initial years.

I think the concern primarily was can they deliver? Can they really come together to do this thing? Can we get dentists in the community interested in joining? Will they even come if they build it, right?

And so I think over time we saw that it could happen. It has been very successful. It continues to be supported until today. But I think there were some growing pains in really getting the practicing community to understand what this was about and to really join the effort in being part of formulating the questions and the projects that were to be done.

KD: At some point, I think it was under Dr. Somerman, the whole PBRN was shaken up and given a new name, the National PBRN. Was that part of this adjustment process?

IG: The PBRNs initially were separate-but-related entities. So I think what it evolved into was the notion of having a central coordinating center and then you have these nodes. So I think that was the biggest change that occurred, and I think that was for very, very good reasons and it's proven to be a good decision.

KD: What kind of practitioners got involved?

IG: I can tell you from what I know in my state now that these are mostly general dentists, though I think that has evolved as well. But I think the initial impetus was engagement with general dentists in the community to understand what are the things that you're facing? What are the questions that you would want to see resolved through this project? Things like that. I don't really know the current composition today, but I would say that it's primarily driven by general dentists in the community.

KD: Anything else on PBRN that we should talk about?

IG: No. But if I can talk very briefly about another opportunity that Larry afforded me. This is early in my tenure as Deputy Director. The Public Health Service launched this really big initiative where they deployed a hospital ship, a Navy hospital ship called the *Comfort,* for a four-month or so humanitarian mission to Latin America and the Caribbean. Here I am, I've been Deputy for

less than two years, and they ask me to get deployed to go to this thing for the Public Health Service to try to set up the mission for the hospital ship that was coming.

Larry graciously agreed, and I was gone for, I think it was about nine weeks or so (it seemed like longer) but it was yet again another opportunity to, in this case, it was really about providing dentistry to highly underserved communities. I was one of two dentists who were on the team with physicians, nurses, pharmacists, and others—civil engineers, surgeons—and I traveled to seven different countries. This was a joint mission of the U.S. Southern Command, the Public Health Service, the Navy, USAID, and a number of NGOs.

And it was another huge eye-opening experience traveling to those countries. To be clear, I was traveling ahead of the ship to determine where we could work. Was it safe to provide the care onshore or on the ship? All of the logistics. And of course I speak Spanish, so I had to learn all of the names and things about boats and ships and docking in Spanish. I had no idea. But again, it goes back to the interdisciplinary thing that we've been talking about. I was taking part of the dental part, but I was the only dentist on the team that was making these arrangements with the local communities.

And so this was really life-changing in some ways. I grew up in a low-income socialist country, communist country, but I had never seen really, really austere living conditions like I did when we traveled. I went to Belize, Guatemala, El Salvador, Haiti, which was one of the toughest places to visit. So anyway, I just wanted to briefly acknowledge that because that also ties into what had been my early interest in global health, and here I had an opportunity to live that.

KD: At some point you take the title Coordinator for Global Health. Is that part of this effort?

IG: No. Actually, I had done that much earlier, in earlier years before I had become Deputy. I carried that for a number of years. And when we talk about global health and NIDCR, I have to mention Dr. Lois Cohen, who really was the architect and the foundation of what was established in terms of global health engagement in the 1980s. She and Dr. David Barmes really, I think, were pivotal in laying the groundwork for a lot of work that then followed with the Fogarty International Center, etc. They were separate issues, but they tied nicely together for me and my interest in global health.

KD: What are the specific global health issues, as opposed to the health issues that we deal with in the United States, that NIDCR was dealing with here?

IG: I think if you look at the distribution of dental disease/oral health problems in the US and around the world, there are a lot of commonalities. Obviously, the access to care issue is a very serious one for many low- and middle-income countries. Interestingly, the health disparities and the inequalities exist in all of the countries—low-, middle-, and high-income. But there are some disease entities like Noma, which is a permanent oral infection that happens in the face as a result of malnutrition that is very unique to some settings in Africa. So there was attention paid to that.

I would say that the biggest takeaway from the global engagement and the work with Fogarty was that it kind of put oral health on the platform for all of this international engagement and collaborations that later followed with oral health being embraced by the FDI world and all federal as integral part of overall health. And that was followed by a lot of work from the World Health Organization that really broadened the definition of oral health, not just as the absence of oral disease, but rather, the ability to function well in society, to speak, to eat, to be without pain

and all of those things. So it's work that continues until today to make sure that oral health is part of the world health agenda.

KD: As Deputy, one of the jobs has been to reach out—I think you mentioned advocacy groups. Legislators? Did you ever testify about NIDCR or anything like that?

IG: Remember that we meet with members when we're invited as part of the Executive Branch, and so I did make a number of visits with Dr. Tabak to meet with legislators. And those were always a really great opportunity. I felt like we tag-teamed together really well during those efforts. I would put on my public-health hat and he would talk about the science that he knows and loves so much.

One comment I will make about how Larry and I worked together. There was something that he really, really hated to do, and that was to travel to an event where he didn't have a meaningful speaking role, meaning a scientific presentation. He absolutely hated, as he described it, to go wave and shake hands. And so I made countless appearances at various organizations and groups on behalf of the Institute, and that was really part of how we shared the duties. I think that was part of the synergy that was there. Because I didn't mind doing those things and I felt like I could represent our Institute well, and he absolutely, I mean, he obviously doesn't shy away from any of those activities today, but it was not his cup of tea and so that was part of how we worked with one another.

KD: Did that relationship between NIDCR and various advocacy groups change over time? Did they become stronger? Did the groups become more insistent? Because there was change during these years.

IG: I would say both. If I'm not mistaken, the Patient Advocate Forum was started by Hal, and then it continued during Larry's tenure. And I remember that the first few meetings with the patient advocates, and it was a pretty large group representing maybe 15, close to 20 different entities, and we had to calibrate to one another. It was the first time you had brought all these advocates to the table together. I would say that they were very eager to collaborate. They were very eager to learn about the work of the Institute. But remember, some of these areas were not very well funded—TMJ, TMJD was an example of those. We had done some early work to support ectodermal dysplasia, but it had not quite matured yet. We had always supported a lot of work on oral cancer, but perhaps not a lot on Sjogren's syndrome. It renewed the engagement with those individuals.

And I think the difference is we were addressing a disease topic; now you're talking to an individual that has either lived or experienced this through a family member, and so it really put a face on the particular group or disease or disorder that we were trying to address. So I think the relationship grew over time. I remember some incredible meetings with the National Foundation for Ectodermal Dysplasias working with individuals affected by TMJ disorders. I think it was Dr. Tabak that started an implant registry, TMJ implant registry, to have a better natural history of what was going on with those individuals or patients with the implants.

One of the most memorable experiences for me was working with the patient advocates. I was invited to a family day that was sponsored by Ectodermal Dysplasia Foundation. And this is where little children up to teenagers and their families came together. I remember doing a presentation on the science and the things that we were doing in the Institute to support the work related to Ectodermal Dysplasias.

Early on in the Institute we had an investigator in the intramural program that did the groundbreaking work that showed that we could actually safely use dental implants on adolescents and children. Prior to that, there was the belief that you needed to wait until you have full growth to be able to intervene, and so there wasn't much that you could do to be able to restore the smiles or the ability to speak and eat in these very young children. And I met them. I met many of them at that family conference. And it was incredibly inspiring to meet those children. We offered free dental exams to the families that were there and I will always be thankful for that opportunity.

KD: Tell me about another opportunity, that of serving as Acting Director. Did things look different when you're on the other side of the desk?

IG: That was a surprise to all of us when Dr. Tabak was asked by then-NIH Director Collins to go to Building 1 to be the Principal Deputy Director. And so it was, of course, an incredible honor for Dr. Tabak and we have seen how that has played out over the years. He's been an amazing leader. But yes, it was quite a shock to the system. He assured me he wouldn't be far away, and that of course I could always count on his counsel and support. And he lived up to his word. It was very reassuring to me to have Larry a step away but really not abandon me or the support for the Institute during those years.

It was a tough year because this was when the ARRA money had to be allotted, the American Reinvestment and Recovery Act. So the ARRA money came and had to be distributed in a crazy amount of time. I believe the Institute received upwards of $101 million over two years, and Larry had the big job as Principal Deputy Director to orchestrate all of that, which I think was an incredible opportunity to support science across many different areas, including our Institute.

Again, it goes back to being part of a really great team, and I relied on the expertise of everyone around me during that year of transitions.

KD: Any other highlights from that period? You would have been looking at the Intramural Program, maybe for the first time, in a sustained way.

IG: I don't recall any significant changes or shifts during that time intramurally. I think the work was continuing related to a lot of the gene transfer technology, tissue engineering was continuing to blossom. The bone biology-involved research, I think, was also a highlight of that time. I don't particularly recall any earthshaking changes that would have been around 2010 and leading into 2011 when Dr. Somerman joined.

KD: And I would think that part of your job is to see that there aren't any earthshaking changes as Acting Director.

IG: At that point, we had a new strategic plan, the 2009-2013 strategic plan. I think the direction was pretty clear. There was a lot of focus on the research pipeline. It was one of the main strategic goals of that plan. A lot of focus on fostering more clinical research as well. Both Martha and Larry were very, very supportive and did a lot of things to enhance the research pipeline. And then health disparities continued to remain a pivotal area of support as well.

KD: When you moved back into the Deputy role, did you have some new responsibilities by virtue of Martha Somerman having her own set of interests?

IG: I would preface by saying I became a lot fitter physically when Martha joined us and took over. Martha was unable to walk; she ran everywhere. And so that wasn't one of my duties and responsibilities, but I told her I could no longer walk with her to meetings on the NIH campus because she could outwalk me any time of the day. It was almost a full trot going anywhere. But

when Martha arrived, again, in a few years' time it was time for another strategic plan. That didn't come until around 2014, but we started to work two years later after she arrived on a new strategic plan and a new direction for her.

Martha, like Larry, came from an academic setting, so once again it's sort of the learning the ABCs and the acronyms and all of the nuances of federal service, and the partners, both within and outside NIH. And I hope that I was helpful in part of that orientation for Martha. I would say Martha and I understood each other well and I really loved her insights and her energy. And she, too, I think, was very, very kind to me and very supportive in my career and understood that I was doing my job in assisting her at the beginning with hers.

It was a lot to carry, but again, it was a matter of time before we calibrated very well to one another. Martha had a very, very keen interest and understanding of integrating the whole team, being able to—again, she supported health inequity and advancing public health initiatives. She had a particular interest in craniofacial tissue regeneration, which was something that was not within my expertise, but I assisted her in trying to get more basic research results to move more quickly into treatments.

She was a really great research integration and synergy person. She brought many groups together to try to get the integration that she thought was really pivotal to our success. She did a lot of things related to our training programs. Eventually I think she formed some fellowships (this was after I was already gone) to enhance diversity in the dental workforce as well. So I wouldn't say that things changed so dramatically, but obviously she had some unique directions that she wanted to pursue scientifically, and that's pretty clear when you look at the strategic plan that came during that period of time. This is when you begin to have the influence of genomics

and proteomics, tissue regeneration and all of that. And that becomes pretty obvious when you look at the strategic plan at that time.

KD: You served under three directors, one acting director, and you were acting director over about a 15-year period.

IG: 19 years.

KD: How did the NIDCR change over those years, just big picture? Was there a change in its ability to get things done? The focus? What would you say about that?

IG: Looking back to the early years, the mid-1990s, I wonder how we were able to accomplish so much. because we weren't even using email that much. There was really no internet to speak of. There was, but it was just very rudimentary. We didn't start hosting our work or archiving things in the way that we do now. And in fact, if you start looking for some of those old documents, I have a hard copy of the Health Disparities Strategic Plan. I'm not sure I can find it online these days.

So it was just a different way of working where we had to see each other, we had to meet to get our work done. We had to get on the Metro and travel downtown for every meeting or drive up to Rockville for other meetings up that way. I don't know that it was more or less efficient; it was just different because that was the level of engagement that was required.

We, of course, began with all of the internet capabilities, the era of Big Data arrived, then we began to recognize the power of all this incredible technology and how we can apply it to oral, dental, and craniofacial portfolios. And so that was a big change in the portfolio of the Institute and what we were supporting. But in terms of how we got our work done, I don't think it

changed over time because it was always about a team; it was always about collaboration; and I think particularly today you cannot succeed without that being a central premise of your work.

By the time I left at the end of 2014, we were already doing so much more work electronically. We don't do what we're doing now today speaking through Zoom or engaging in this way. But I think at the core of NIDCR is the whole notion of teamwork. And I think that has remained all throughout. But I think the other important aspect here is the goal of making sure that oral health and dental health is well understood and represented across the board from other institutes and centers within NIH, within the Department, within the Public Health Service has always been central to the mission.

You can do the very best work, but if your higherups don't think you're relevant to the organization, then you haven't succeeded, and so I think that has been and continues to be a challenge for all of us in oral health and in dentistry. It's helped a lot by the recognition of oral health as an integral part of the whole body, and of course, we have evolved and matured a lot in embracing that concept.

But I see it as an institute that has grown tremendously over the years. I think there is more interdisciplinary work, as it should be. But it continues to be, I think, a real gem. Again, one of the smaller but oldest institutes at NIH.

KD: And now you're looking at NIDCR from another perspective, from down there in Florida. Talk about the decision to go into academia.

IG: Well, I said no a couple of times before making that decision. And then, you know here again where Martha was such a good mentor and so supportive of me, she said, "You should at least go take a look and see what this is about." And so I had been in the Public Health Service 22 plus

years at that time. I was eligible to retire. I like to tell people here that I flunked retirement and I came to Florida. And the decision was really an opportunity to finish out my career, though I'm in no hurry to go anywhere else, where it started and to try to influence dental education in a way that brings in more of the community perspective, better understanding of public health, and the importance of serving everyone.

Hopefully being able to influence the future of dentistry at least in this state and perhaps elsewhere to embrace this interdisciplinarity that we have been talking about for a bit now. To see themselves as part of a team. Because the challenges in oral health, the access-to-care issues and many of the hurdles that we encounter I believe cannot be solved within dentistry alone. We need help particularly from many, both formal and informal caregivers and health professionals. And here is an opportunity to try to influence that through the curriculum and the work that we do with other colleges where I work now. So that really is what led me south. I grew up in the Caribbean, so maybe I was destined to migrate to the south anyway. And of course Martha was running all the time, but now she had her feet on the ground, and was in a good place. She had at least three years under her belt as the new director and I felt it was a good point for her to choose someone else to be her number two.

KD: This has been a terrific talk. Is there anything that we haven't discussed, any highlights of your career that we haven't touched on?

IG: It's a lot. I'm sure there are some things that I haven't remembered. We haven't talked about tribal health, and if I can just touch on that shortly. Because here too was an activity where Larry allowed me to represent the Institute. This is going back to the late 2000s. HHS Secretary Sebelius convened a Secretary's Advisory Committee, Tribal Advisory Committee, that brought together the leaders of the biggest sovereign nations in the country. It was the first time such an

effort had occurred. And so Larry asked me to represent the Institute, and in fact I was representing NIH at that point in the Secretary's Advisory Committee. And that process was, I think, very interesting in that the whole effort was to really give the sovereign nations more access to grant dollars within the federal government. The tribes felt that there wasn't sufficient research done in topics that were highly relevant to them.

And so I would say that that, too, was a learning opportunity and one that required a lot of patience to come to understand one another. Here we have these tribal leaders, some of them very, very senior members of their communities, and I walk in in my PHS uniform, and so there's immediately this cultural divide between the groups. And I won't tell anyone publicly, but I stopped wearing the uniform to go to the meetings so they could relate a little bit more to me. And from that, I think there were some really important accomplishments.

At that point, NIH didn't have a tribal technical advisor committee, and it wasn't until many years later, I believe around 2017 or so, when NIH met for the first time on the NIH campus with many of these tribal leaders from around the nation. And that occurred at the time when Dr. Tabak was the Principle Acting Director at NIH.

So that work has continued, and now NIH has its own technical advisor committee that many other agencies have, but NIH was one of the last to actually form that. So that, too, was one of those developmental opportunities for me that Larry allowed me to represent the Institute and the NIH.

KD: Terrific. Thanks so much for talking today.

IG: Thank you. Yes, it was very interesting, and it was great for me to recount some of these things that I haven't talked about in almost 25 years. Very good. Good luck to you with your project.