The American Association of Immunologists
Oral History Project

Transcript

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Interview conducted by

So that's my background.

Williams: Where did your parents meet?

Kincade: They met in this small town. My mother got a teaching job, when she graduated from college, in this small town. She got the job as the music teacher, the piano teacher, and that went well until she met my father and they got married. When I say it didn't go well

military school, and I wanted to go to military school. I thought I could get a better education, it would be interesting, maybe I'd get some discipline, which was probably needed as well. But we couldn't afford it, was the bottom line, so that was out for me.

So my education was missing a few things, I would say, relative to other people who went to college, and finances meant that my only option was to go to a state university, where I was admitted deficient in math and probably some other things, academically not prep

always said that doing research made you a better teacher, and vice versa, teaching made you a better researcher, and he's absolutely correct about that.

So his laboratory in immunology, we went into his research laboratory and we used chickens because he was in a poultry science department, and we did physiology experiments, and we immunized chickens and we measured antibodies and things in a real working lab. It was so much different from any other lab I'd ever been involved in because those people were not—I guess they were teachers, but they were pretty boring and they certainly weren't discovering something. They were just teaching you things to memorize. But this was different. This was exciting. The field was exciting. The teacher was exciting. So it was a real pivotal thing for me.

Williams: How do you figure teaching makes for a better researcher?

Kincade: I think it draws out questions from trainees, for one thing. When those hands fly up in the air, you're going to get something interesting. Somebody's going to make you think about things just a little different. You're going to get outside your immediate field, so it's going to broaden your scope a little bit. Teaching makes you think about what's new in a different way than from writing a grant. It's different, and I think it enriches in both directions.

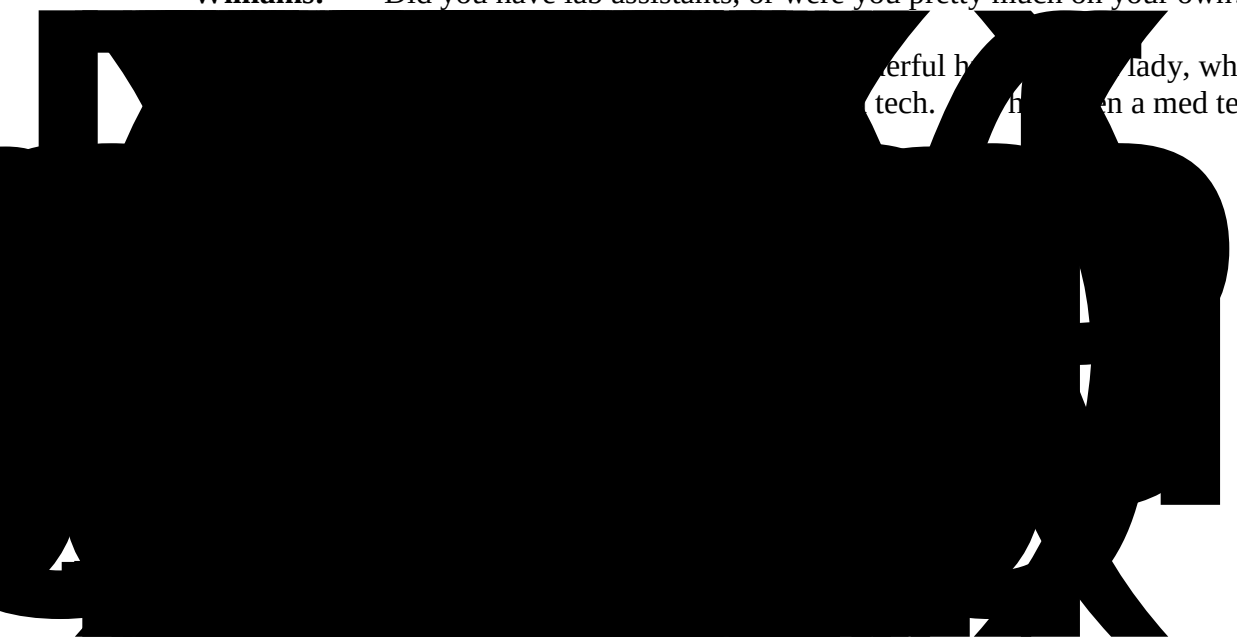
Williams: When you came into Glick's lab, had he already made the bursa discovery?

Kincade: Yes, he had. He, in fact, made that when he was a graduate student, but he made other discoveries. He was interested in everything. He was interested in vave i3tv1(ha)426.98 -1

had, and I could work in a lab and have my own project. And I jumped at it. So this was my first opportunity to actually do my own experiments, my own projects.

My mentor for that halfway through my program got a job in a big pharmaceutical company and left, so I was left to complete my project on my own. So it again gave me an opportunity to be very independent and invent things. When I arrived in the lab, there were boxes with germ-free isolators in the boxes purchased, but nobody knew how to put them together or how to use them, and I assembled them and taught myself how to raise chickens germ-free and tested the precise pathological processes associated with mycoplasma, *Mycoplasma gallisepticum*, which was a big pathogen for poultry, but it was always complicated with secondary infections. So I had an opportunity to study this pathogen in germ-free chickens where there was no other organism, and had great fun doing it. It was just like playing around, and it was a good experience for me.

Williams: Did you have lab assistants, or were you pretty much on your own?



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The core of my lab wanted to move there, and we did. The second week we were there, we had cultures in the incubator growing. I think Sloan-Kettering might have tried to get rid of me, or wanted to get rid of me, because they said I could take everything except a typewriter. All of my equipment, my laminar flow hoods and microscopes and everything I just took, and cells and biologicals. There was no signing away your rights to your discoveries. So cell lines that we'd made and antibodies and things that we'd purified, we just took everything, and it was painless. And I've never been sorry.

Williams: What was the impact on your wife's career with this move?

Kincade: Difficult, but it was difficult to get a job in New York too. So with someone with a Ph.D. in education and two master's degrees, you might think there'd be a lot of job prospects, but there weren't. At that time, this was '82, New York was broke, Boston was broke. A thousand people a week were moving into the Oklahoma, Texas, Louisiana area. The oil boom was on. There was a lot of money there. You could go to a dinner party in Oklahoma and ask who's from Oklahoma, and maybe nobody would put their hand up. Just it was a lot of people moving in.

Financially, New York was difficult. We couldn't afford a second car, we couldn't afford much furniture, and we had credit card debt in New York, and we certainly didn't have that in Oklahoma. She managed to get a job, but—

Williams: Did you have kids?

Kincade: We had one daughter, who had two years left to finishing high school, and it was probably difficult for her, particularly difficult for her, but we got her into an expensive private school that's like a small college—it's a very, very good school—that gave her poor career advice about where to go to college. That's a long story. But in the end, she did well. She's a full professor, tenured professor at Indiana State and teaches Eng(l)-23(t)-2(nok)3(f)3(i)[tha-14(o)-4rMr(d pr)36(')A-2(e)4(a)4d

autoantibodies. So we went at the same time, so he was building a program that specialized in autoimmunity, and that program is, by the way, one of our most

Kincade: Well, it's a different role to play than being investigator, of course. Scientists—I don't know how to put this—don't necessarily hold administrators in the highest regard. You tend to respect experimentalists, people like you who are doing the same kind of things, who are writing grants like you, and you may or may not have the highest regard for people who send you memos about what kind of procedures you have to follow to get rid of your radioactive waste or how you handle your animals or how you report this. Bureaucracy is not something you're fond of.

But there are administrators who are absolutely required to keep an institution running topnotch, and we have excellent supporting administrators of all kinds, from human resource to purchasing, you name it. We have excellent people. But the Vice President of Research job, which I kind of wrote my own job description for, is about trying to make it easier for scientists to do what they need to do, give them support that they need, make sure they have the space and the equipment that they need, and making sure that their work is held to high standards.

So we've instituted a rigorous annual performance review for all of the scientists, coupled that to an award system and a reward system for channeling institutional resources to somebody who earns it. Someone might be in trouble, may have lost their grant or had trouble getting started with grants, and I have some resources, I can give them money for some period of time. And I just love it when it works out, when somebody takes fire and gets an NIH grant, and we can worry about somebody else. So that's what the job is.

Williams: So does that take you entirely away from working with postdocs and whatnot?

Kincade: Yes, and I made the deliberate decision to do that, to phase that out. Started making that decision maybe five years ago. I first started looking for a replacement to head the program that I started thirty years ago, and it took five years to find somebody I really was satisfied with, and he's fantastic. He's been on the job for most of a year now, and he's just fantastic.

Williams: So in very broad terms, describe what that program was, is, and has become.

Kincade: The Immunobiology and Cancer Program. It was called Immunobiology, which was one of our favorite terms in immunology you'll hear a lot, which sort of encompasses clinical and basic and everything else. We like that term. There's one of the review groups at the NIH was called the Immunobiology Study Section. Charlie Janeway's famous textbook series is called "Immunobiology." So that was my preferred term when I was told to start my own program.

But the president of OMRF, still the same guy who hired me, said, "We need something with the word 'cancer' in it," so we call it "Immunobiology and Cancer." Helps with fundraising a little bit, I suppose. But all the people that I

hired, and they were all wonderful people and good colleagues, great success, worked on things related to how the immune system is built, which was my life's work, and also relationships between the normal process and cancer, immunodeficiency diseases as well, but cancer. So we use a lot of models that are cancer cells, and we study a sequence of events that happens in normal cells also happens in cancer cells. So briefly, that's what the goal was.

Williams: Just before we leave OMRF, I was impressed that you have five hundred patents, I read somewhere.

Kincade: A good number, yes.

Williams: And have produced eleven biotech companies.

Kincade: Yes.

Williams: That's a good record, isn't it?

Kincade: Yes, it's pretty good. I've never wanted to do it, but we have the wherewithal to help people to do it. We have a research park that's about a mile away that's full of spiffy buildings, and companies can be started there, can be launched. We have a new system in place to help somebody when you have no clue as to how to start a company, they can do it for you and handle all the administrative aspects of it and business plan and things like that that you have to do. I've never really been interested in doing it, for a number of reasons, but a lot of my colleagues have, and some of them have been very successful at it.

Williams: We don't have time to get every detail of your scientific career, but I do want to ask you what the highlights of that career have been.

Kincade: Well, the highlights of the career, aside f0 Td 8(t)-2(a, f)3(ob)3(f)-1(t)-6(hE[(K)4()4(s)-1( )]-4(

In my presidential address for AAI, I tried to draw parallels between this assembly line for making blood and building the immune system and the assembly line for making scientists, because that was another passion of mine. But we were lucky on many occasions. We have always had a small lab, and with my limited background in a number of areas and deficiencies in areas, I had to depend on really top-quality students and postdoctoral fellows who came into our lab, and they were given a lot of independence like I did, and they made some spectacular discoveries. And lab managers that I work with have made spectacular discoveries, and we've gone where that led us and just had a lot of fun.

Williams: Major disappointments?

Kincade: I can't really recount one. As I mentioned before, there's something very strange about my career in that I got every NIH grant I applied for, and I just don't understand it. I was trying to study it and understand what accounted for that, besides pure luck, which, of course, was most of it. So that meant I went my whole career without ever being disappointed about getting a grant.

For thirty years, I got the grant the first time for the requested amount, so I didn't even have to revise the grant, and then I had to revise one. I had to revise it twice before I got a perfect score on the third submission. And then they stopped letting you submit three times, and I thought, "Well, I would have been dead." Then the very last grant that I wrote got funded by one point, so I could see it's getting harder. Eventually I'm going to have some disappointments, but so I wasn't disappointed there.

You're always disappointed when a trainee comes to the lab and doesn't thrive, but, fortunately, there were very few of those and made up for it by ones that really, really did well.

Williams: Let's turn to AAI for a bit here. You joined in 1975. What was your motivation?

Kincade: Let me start by saying that AAI was my home. It was my first place. My first

member, first society I wanted to be a member of. I joined a lot of other scientific societies and nonscientific societies as well, but AAI was special in being the first one, and I think you'll find hundreds, if not thousands, of people that would tell you the same thing. It's sort of a stepping stone. It's an introduction into an academic career or another kind of career in immunology. It's been very important.

Williams: I was struck by your sort of fast track into positions of authority and whatnot in the organization, first with the *Journal* [*The Journal of Immunology*], I guess, and then the advanced course. You were teaching that after just a few years.

Kincade: Yes, I taught that.

Williams: Then you were a member of the Trainee Affairs Committee for a while, and I know that was an important—

Kincade: Yes, I was on the Program Committee. That was my most important service to AAI, probably. Yes, I think it's that kind of organization. I hope it always is that kind of organization where anybody who wants to can volunteer. When I was program chair, and later president of AAI, it would always please me that a lot of people would come up to you that know you and say, "What can I do? How can I get involved in this organization? I want to do something. What can I help you do? You need any help anywhere? I'll work on the Program Committee; I'll work in the *Journal*;

the program should be about, what's the theme this year, what's important, what will attract attendance.

Williams: Then you were on the council for a number of years. Were there some big issues you were dealing with there?

Kincade: Every person who serves on the council and goes on to be a president is an amateur as a president and an amateur in this kind of operation. Or at least I think they all are, or most of are, but we all have agendas. We have things we care about. For me, the top thing on my agenda was training issues, trainee issues. I was always disturbed by the fact that I would meet somebody who had a bad training experience, and mine was just spectacular. And I would meet somebody who had an abusive mentor, and it just would go completely through me.

Then I would talk to people who weren't excited about what they were doing, about their projects, or as time got on, there was more concern about people being trained in areas that there were no jobs. People were starting to say, "We've overtrained." And I just thought, "Is this true? Are we really attracting people into a field that has no possibility of them getting the positions they want?"

So that was my top agenda, and I studied up a lot and went on to serve as AAI's representative on the FASEB board and then become FASEB president, where I had at my disposal a lot of policy wonks who could ferret out a lot of information. So I became, for a time, well informed about training issues and career issu en -1.15 TD w 1.56

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So I thought it was an important milestone, and it was, for me anyway, and for the organization.

Williams: Other vivid recollections of your presidency?

Kincade: No. I enjoyed many aspects of it. It's a brief thing, as I told you. You're amateurs, and amateurs that come in bursting with good ideas about what the society should do could wreck it if you started a different agenda every year. If you're lucky, you get one of your agenda items addressed, and, as I said, training was most important for me.

Williams:

women and minorities in science, especially in the beginning when there were very few. Just imagine if you happen to be a black woman Ph.D. and you graduate and you get an academic appointment. You'd think life would be grand, you'd be allowed to do your work and that. But I had quite a number of people tell me that those people just get killed because they get drafted into every committee there is. The committees that want to have balance for male-female and race and all that would insist on them doing that, insist on them being on panels, insist on them doing things way before they would normally do it in their careers, and not leave them any time to develop their careers before they should.

So I had a number of people tell me that, and I thought, "Never thought about that." We need to protect people, not only to attract them to science, but give them a chance to breathe a little bit. And things have gotten better because we have a much better ratio of female scientists now. So it's not as big an issue.

Williams: Let's do some big questions here at the end here. Where do you see immunology going these days? You described it while you were president as unrivaled prosperity in the United States.

Kincade: Yes.

Williams: Is that still the case?

Kincade: I think so, and it's because it's so unfocused or multifocused. It encompasses such a wide range of si0 1 bien</MCID 6(and i)-

Williams: What's your position on recommending the field to students and trainees today, and what areas of the field do you steer them into?

Kincade: Let me tell you broadly what I tell students, because I'm really passionately interested in students and trainees and attracting people to this and sharing the joy that I've experienced. The first thing I ask them is, "Can you do anything else? Is there anything else that you like? Do you know what this is?" and that sort of early discussion. And if they're really interested and persist with an interest in stem cells and hematopoiesis and the things that I know about, then the next question is, "Do you know what the unemployment level is for scientists?" Nobody knows. You can ask anybody, and they can't tell you. But the truth is, it's almost zero. The unemployment for Ph.D. s in the biomedical sciences is almost zero. So there's a job to be had there. So if you get a Ph.D. in the biomedical sciences, you're going to have a job.

And the satisfaction surveys that I've seen carried out five years after people got their degrees, most of them say they're doing what they wanted to do, I think probably more than shoe salesmen would say and more than physicians might say. But it ain't too bad. So the second thing is there's a job here.

So then you have to decide what kind of person you are. Someone told me years ago, you can divide students into two categories broadly. The ones that are interested in what's known, and those do really well on standardized tests, they can learn massive amounts of stuff. Then there's this other category of people who are interested in what's not known, and particularly I'm in that category—people who are interested in what's not known that I could answer. What is something I could address? What intrigues me? So it helps a lot if you're in that second category.

And then you have to decide what kind of career you really want to have and how willing you are to follow somebody else's lead or what level of independence do you need. If nothing else will satisfy you but discovery, I tell students you have to decide if you have a receptor for it. If you have the receptor, the opium is discovery, and all you need to have is just a little whiff of that opium to get you started, and you want to come back for more and more and more, and you'll develop a need that nothing else can satisfy. You have to have your own independent way of doing experiments, you have to have a chance of doing that,

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Aside from all that, your original question, I think, was how does immunology strike your fancy, and I think it depends a lot of times on the teacher. If they had Bruce Glick to teach them, they'd be attracted to immunology. Max Cooper, if that was the professor, they'd be into it. A lot has to do with who introduces you to it.

Williams: What do you do outside of science for fun and recreation and so forth?

Kincade: Well, I've tried a few things. Always like to read. When I was fifty years old, I bought my first Harley-Davidson. When I was sixty years old, I got my private pilot's license. I'm not sure what seventy's going to bring. May2 -0 d -9.4h/( )T-1(37(y(s)-21o f:r(e)-Bm(i)-2(r(g)1Ws(a)2ymI'v