



Williams: This is an interview with Dr. Jonathan Sprent for the American Association of Immunologists (AAI)

And my father, he did very well with his career in parasitology, but then in 1952 or

So I heard this lecture, and then I

eggs, and the idea of multiple eggs mixed together, as a four-year-old child, this was amazing to me. [laughs] But other than that, no, I don't have any. I was too young, rea-2(i) Sprha pr7d

Williams: And at that point, did you see a clear path ahead or were you still sort of checking out the field?

Sprent: No, I didn't really see a clear path ahead, except that what I do remember is that

Sprent: Well, actually, thymectomy is quite tricky. You have to remove the thymus, which lies below the bone here in the front of your chest. And in a newborn mouse, the thymus is actually quite large, so you can remove it and then you can put a couple of stitches in, and that's really all there is to it. It looked very simple in the recipe. So I learned how to do this and I thymectomized hundreds of baby mice. I thought I was actually pretty good at it until one day I actually did histology, and I looked at the section of what I had removed under the microscope, and I found to my horror that I hadn't been removing the thymus at all. I'd been removing the salivary glands, which are up here in the neck. [laughs] So I had hundreds of rats that didn't have salivary glands, but eventually I did teach myself how to do this. [laughs]

Then I found, interestingly, that when these neonatally thymectomized baby rats were infested with a parasite. Parasites typically caused the appearance of a particular blood cell called eosinophil, which is a sign of allergy. And, in fact, that these thymectomized animals didn't develop eosinophilia. This was actually a novel finding at the time, but we never wrote it up. In fact, we should have done, because this was really the first evidence that the thymus actually has an effect on this particular type of blood cell.

But this experience with practical immunology stimulated me to actually want to study the immune system. So, as I say, when I did eventually start my Ph.D. work, I sort of really fell in love with it, with science, and I decided, well, this really is my career. So I then had to look around for where am I going to do it. Those days, it was a tradition in Australia that you would do your postdoc in some other country. You wouldn't do it in Australia. And it so happened that my boss, Jacques Miller, for his sabbatical decided to go a new institute in Basel in Switzerland, and this was right about 1972, and this was the Basel Institute for Immunology. So, in short, he said, "Why don't you come along?" and I did. As soon as I finished my thesis, I went to the Basel Institute. So perhaps I could take a few minutes to talk about the Basel Institute.

Williams: Please do.

Sprent: So the Basel Institute was founded by a drug company, Hoffmann-La Roche, and the initial director was Niels Jerne, who ultimately got the Nobel Prize a few years later [Ed. 1984]. And it was an experiment, and the idea was that it was an institute of about fifty or a hundred people, and people would be recruited, whether they were postdocs or whether they were relatively senior people, and each staff member would be given one technician, and that was the size of your group, you and technician. It didn't matter how senior or how junior you were. And that's how it worked.

So I joined there, and it was a tremendously cosmopolitan group of people from Sweden, from Europe, from Australia, from the United States, and it became a







visa after three years, I could apply immediately for a green card, whereas if I'd used my Australian passport, I'd have been forced to go back to Australia for two years and then to apply. So this was a bit of luck. So I got a green card and, in fact, I kept that green card for twenty-five years, and then ultimately I became a citizen.

Williams: Well, what was it that prevented your father from staying at Chicago?

Sprent: Because in those days he would have had to become a U.S. citizen and would have had to give up his British passport.

Williams: So the whole system had changed in the interim.

Sprent: It had changed, yeah. So dual nationality was something that came in much later. But, as I say, for a long time in the States I was there on my British passport. I just had a green card.

Williams: At some point did you acquire a family in these days or is that

Sprent: I did. I was married to somebody I knew in Australia, and she moved with me to Britain, so we had two kids there. And then we moved to Philadelphia, and then, sadly, my marriage sort of fell apart, and the two children with their mother went back to Australia, and they all moved, actually, to Hobart, which is in Tasmania, this island south of Australia, and so that's where they live there.

I was then ultimately sometime later married again, I can briefly mention, to Sue [Susan R.] Webb, who is from Alabama. We met at Penn, and then she moved with me to San Diego. We were married for quite a few years, and we had a very good—well, we had a good marriage and we had a good academic relationship because she's also a scientist, and so it was mutually beneficial for both of us from a scientific point of view.

Williams: Was she also at Scripps?

Sprent: She was also at Scripps, yeah, where she also ultimately rose through the ranks and became a professor there too.

Williams: Interesting. So now give me the portrait of Scripps at the time.

Sprent: Scripps at the time should point out there were two Scripps. There's the Oceanographic place, and there's The Scripps Research Institute, which is where I went to, and it's a private research institute, one of the biggest in the country. People in the USA are fully aware of this, but people outside in other countries are unaware of how a place like Scripps could have arisen from nothing in 1950 to an institute with three thousand people in a period of forty years, and the way that happens is because of indirect costs on grants. So, in other words, Scripps

got started by a man named Frank Dixon, who ultimately became president, moving, I think it was from [University of] Pittsburgh with a group of postdocs, and they all rose through the ranks and they all got their own grants, and each grant brought in overheads. And the overheads at Scripps were 90 percent or so. And with that money from overheads, Scripps was able to rent ~~to~~ ~~use~~ and recruit people, and just grew exponentially. This is the way science has always worked in the U.S., and this is unique. It doesn't happen anywhere else, because overheads on grants are not nearly as generous as they are in the USA. So that's how Scripps was able to go from nothing to this enormous institute in such a brief period of time.

It was a very invigorating place to work, and I made lots of friends there, and work went well and I flourished and thoroughly enjoyed life in San Diego. It didn't have the advantage that Penn had of having access to graduate students, because Scripps was not really a university. So one had to ~~find~~ ~~find~~ postdocs rather than

Also 'round about 2006, and it's not much better now, the [National Institutes of Health]the funding system, the proportion of grants getting funded had dropped to extremely low levels. It was less than 10 percent, and I think it's not much better than that now, and this made science an ordeal to some extent. So scientists, when I first went to the States, you wouldn't spend much time writing grants at all. Ultimately, people spent a huge amount of time writing multiple grants, and this, to some extent, took the fun out of doing science, so I was hoping that the situation would be a little easier in Australia, which it has turned out to be.

Williams: Did your parents come and visit you much in the States while you were here?

Sprent: They did now and again, yes. They made actually multiple trips, firstly to Philadelphia and then to California.

Williams: Did your father express pride in your progress?

Sprent: Yes, I think he did, yes! I actually grew much closer to him as he got older. I suppose this often happens. When he was young, he was a pretty dynamic person. He was dean of the primary school [of the University of Queensland] at the time, so he was always very busy. But as he got older, I became much closer to him. And I think I hadn't mentioned that when the family had moved to Brisbane, that he, I think largely guided by my mother, had decided not to live a suburban life at all, but, in fact, they bought a farm of 120 acres which was just outside Brisbane, to the extent that it was a thirty minute drive for my father to get to work. So it was quite possible to commute from this what was, in effect, an idyllic life in the countryside, this big property where he ran cattle on the river. So I had sort of the best of both worlds, really. So I used to, when I was in California, I would travel several times a year back and spend time on the farm.

Williams: So what was it like being back in Australia then as a professional?

Sprent: You mean when I ultimately returned?

Williams: Right.

Sprent: Well, it took quite a bit of readjustment, actually, because I had become Americanized and I was used to the way science is done in this country, which I admire and had got used to, and it was not quite like that in Australia. There were subtle differences which I ultimately got used to.

Williams: Explain some of those differences.





Williams: Well, I was just thinking I didn't say that that didn't come out quite right.

Sprent: Highlights of my career. Well, I've always considered myself a bit of a dabbler. I don't have any great mission in science. I'm in science and this is influenced by my father—out of a sense of curiosity. So I find myself doing things that catch my fancy, so I'm interested in this and then I move from this to that, purely out of a sense of curiosity.

So I've done many different things in immunology, mostly centering on T cell working on thymus where T cells originate, working along with many other





AAI now has very substantial reserves, financial reserves, in those days it didn't, and we were always sort of on the brink of being broke, I think it was. So there were some difficult times in those days. [AAI Executive Director] Michele Hogan joined round about the same time I did, and she was an enormously important recruit to the AAI, so I much enjoyed my interactions with her.

Williams: So you were president 1998 to '99.

Sprent: Yes, right.

Williams: Talk about the tenor of those years. That was George H.W. [BdsMWilliam J. "Bill" Clinton] . What was funding like at that partial point from NIH? What was it like?

Sprent: Well, you probably missed a spoof that I did the other day. [laughs]

Williams: I didn't.

Sprent: This was for my presentation for the AAI. As I say, when I first joined the University of Pennsylvania, grants were very easy to get, one in two grants were getting funded. Then it dropped to about one in eight grants, and that became very difficult. This caused anguish throughout the whole country. In fact, we've never quite recovered from it. It's just about as bad now as it was then. But soon after I joined the council, there was a big push to increase the size of the NIH budget, and ultimately ended up by being doubled, and that certainly



Friday night you received the AAI Lifetime Achievement Award. How does that make you feel?

Sprent: Oh, I was tremendously ~~chuffed~~ as they say in England, pleased, honored. It's wonderful, I mean totally unexpected. Yes, I was blown away. Yes, ~~wonderf~~

Williams: And going beyond that, what is the importance of the AAI now in the field?

Sprent: In the field of immunology ~~or~~

Williams: Mm-hmm.

Sprent: Well, the AAI, it's indispensable for immunology in this country. It's enormously important. Not only is it the center of immunology, but it organizes a ~~whol~~ series of meetings, and it's the ~~centere~~, and so the ~~count~~ couldn't do without it. Of course every country has its society of immunology ~~or~~ associations, but the AAI has been particularly successful, I think, in its function.

Williams: And I guess ~~The JI~~ is sort of the publication of record for the field. Would that be correct to say?

Sprent: Yes. *The JI* has a terrific history. It goes back to 1913, I think ~~can't quite~~ remember when it was first founded. ~~[First issue was printed in 1916.]~~ It's always been the basic journal. It's not the first journal that you'd send your papers to. Generally, you'd like your papers to go in very ~~profile~~ journals, but very often your chance of getting into those very ~~profile~~ journals is pretty limited because it's so competitive. So, ultimately, you decide to send your paper to *J* and *J* has always been a very ~~solid~~ journal, so there's a sense of pride in publishing papers in *J*. ~~Or~~ sure.

Williams: Right. Some sort of summary matters here. I'm struck by how much you've traveled around the world and been in all these various places and so forth. Is there something you can put your finger on in ~~terms~~ the universality of immunization workplaces? A

fact, I was very good at it. [laughs] It's the only thing in immunology I think that I was good at. I did it for quite a few years, so it's a way of collecting lots of lymphocytes, et cetera. So I collaborated with many people on the properties of thoracic duct lymphocytes, et cetera. And

Sprent: America has been certainly dominant in the field ever since the end of the Second

Sprent: In another lifetime. Yes, I think I probably would, because I can't think of really anything else that I could do that would give me the sense of satisfaction of being

