



BRIGHAM AND WOMEN'S HOSPITAL

NICHOLAS TILNEY

Interviewed by Peter Tishler, MD, September 2012

I'm Nicholas Tilney and I've been working at Brigham Hospital since the mid-sixties and now I have the exalted and meaningless position of Francis D. Moore Distinguished Professor of Surgery.

That's wonderful. Now I will ask you some questions of a personal nature. You graduated from Cornell Medical School before coming to the Brigham for training in surgery. What motivated you to choose surgery and when did you begin your training?

I had an older brother who was a surgeon and he was a great mentor and role model for me. Also I was very good with my hands. Like I'd build things, and I'd just always did things. Probably like Pooh Bear with very little brain, I just liked doing things instead of thinking about them. And I finished medical school in 1962 so I started internship in '62.

Why did you choose the Brigham?

Well my older brother had actually interned here during World War II and he thought it was wonderful and I always, sort of grew up with the Brigham as a place to go. And I was eventually lucky enough to get in it.

Over the years during your training and subsequently, whom would you call your mentors?

The old Peter Bent Brigham was a remarkable place. It was small, 300 beds, all the faculty both medicine and surgery knew each other, and we had lunch with them every day in the doctors' dining room. The faculty was very interested in the young people and they got us writing papers and they got us doing a little bit of clinical research which was great fun. My main mentors were Francis Moore and Joe Murray.

I am sure that over your many years at the Brigham you had made many close friends and associates. Can you name any of these revered people?

Oh sure. Joe Murray and I are very close friends. Dr. Moore, it took me until 63 before I could call him Franny but we were quite, quite good friends although he was more interested in his boys doing well than he was in friendship I think. Chilton Crane was a friend. Eddie Edwards got me going in writing. So these are the older faculty. Some of the scary ones which turned out to be really close mentors were people like Dwight Harken. I mean he seemed to frighten you to death with all his histrionics – everybody died in those days. But he was a wonderful friend. And then of course my own colleagues Steve Rosenberg of the NIH, Murray Brennan of Memorial Sloan Kettering, Bob Bartlett of the University of Michigan. There were a lot of fancy people there.

What has your wife done professionally?

She was a biologist. She worked first as a lab technician/associate for Frank Austen up at the Robert Breck doing very abstruse complement work I think or complement subgroups, whatever they are. Then she worked for Baruj Benacerraf or quite a number of years. And then I was head of the Surgical Research Lab at Harvard Medical School for a long time and she was - it was difficult at Dr. Benacerraf's – there was some of the staff there that were fairly difficult, and so she moved over to work for us and she was the head of that lab for a long, many many many years. Ran the place, ran the grants, added up all the money correctly, took care of all the fellows, if they didn't speak English we sent them to Brookline High and educated them. She was wonderful. She kept the whole place going. It was quite a successful place.

When was the Surgical Research Laboratory closed?

It had been going since Cushing brought it from Hopkins as you know and we had this very famous course in aseptic technique which many of the medical students loved and went into surgery from. I can't remember but I think it ended in the mid 90's. The costs of dogs, anti-vivisectionists, probably primarily I think.

Let me now ask you some questions about your medical accomplishments during your professional years. What surgical specialties have you taken on and why?

Well the two things I really did were first transplantation of the kidney and secondly some vascular surgery. I was in England for several years and when I got back doing primarily research in transplantation biology and immunology where it was burgeoning there during the 70s. And then I was a registrar in Glasgow for a year and doing a lot of general surgery but when I got back I was asked by Dr. Couch and Dr. Crane if I'd just join their vascular group which I did. I mean there was no training in vascular surgery in those days particularly. But that was

fun. I did quite a lot of it. But what I really got involved with was the transplantation team with Joe Murray. Very very primitive. We only had a couple of drugs that seemed to work modestly. We didn't use them well. Unfortunately a lot of people died. A lot of people were really sick. We had these complications that had never been described before. It was really a charnel house for a while and yet the ones that made it through, made it through beautifully and so that sort of gave everybody impetus to keep going. And they were very heady days. I mean this was pretty exciting stuff because we were right on the edge, and then basically again nobody really knew what they were doing but we just kept plowing on.

Can you provide an overview of your research contributions over the years?

Well I got interested in transplantation biology very early and when I was at Oxford I got to know, well I worked with Jim Gowans who had described the circulation of the lymphocyte. And the lymphocyte itself, until the 1960s nobody knew what it was. It was just an extra white cell and so that whole thing with that whole physiology was burgeoning at that time. And then I got to know Peter Medawar because he used to come up and talk to us and all those principals there. And it was all pretty exciting stuff. The thymus gland got discovered. T-cells got discovered. B-cells got discovered. I mean this was all happening right under my very eyes so I got terribly excited and terribly enthusiastic and just kept going on that score for a long time. So my main research interests over the those years were, first, as we learned about T-cell and B-cell subsets and cytokines and interactions, and examined the whole acute rejection cascade – a very complicated business. Then I got involved with chronic rejection which is a huge problem and we spent a lot of time on the non-immune factors of chronic rejection, like brain death, like ischemia - that kind of thing.

Did you spend much time at the Surgical Research Laboratory here?

Yeah I did. We used rabbits, and transplanted hearts and kidneys. We got pretty good at it. It was quite a successful venture. We published a lot. We had a lot of fellows.

How many publications did you have, do you know?

Oh about 500 or so.

Wow! Let me switch a bit and ask you what has your role been in the education of the surgeons at the Brigham?

Everybody on the staff and faculty were surrounded by students. They scrubbed with us, they made rounds with us, they asked questions, and we tried to answer them. That was quite fun. I did lecture a bit both at the Brigham and at the medical school on my transplantation biology.

But it was mostly sort of a one-on-one apprenticeship thing with the students on a surgical clerkship.

And the resident education?

Oh the residents, yes they were day and night a part of our lives for our whole careers.

So that was a major part of your practice?

Major part. And the research fellows – I mean we had a lot of research fellows from all over the world. A lot of those guys ended up pretty well. I mean they all became professors at various places and it was very gratifying, I would say.

Well you're leading to my next question, which is whom have you mentored?

Well I guess the most obvious one at the moment is a guy called Hans Pratschke, the chief of surgery in Innsbruck, Austria now. And he is quite important. He trained in Berlin in a famous unit. He came to use for a few years was a wonderful research fellow and he's being considered for a highly prestigious chair in Munich. But I guess that's the main one. But another German mentee was Stefan Tullius who is now head of the transplant unit here at the Brigham. There were a few Americans who went into transplantation, not so many. Several Japanese ended up in high positions in Osaka, in Tokyo; and we had a couple of very talented Mexicans and visiting professors on the service.

As an active clinical surgeon at least in the past, what has been your opinion of the Brigham as a bureaucratic institution and its staff? Has it been helpful? Helpful for your patients?

When I first got to the Brigham in the sixties there was one administrator and if you had a problem you'd go to him and he'd fix it. Now there are 50 vice presidents or something, and all their lists of myrmidons beneath them. I personally didn't pay much attention to them or to the bureaucracy - I just sort of went my own way; so I guess that's the best I can answer that.

In terms of patient care, was the hospital something that really espoused patient care and was helpful, or was it obstructionist?

I think it always espoused patient care. it's a wonderful institution. I mean it has its own culture, very different from our partner across the city. But everybody you know has concerns, everybody is interested. I think the patient care is really very nice. In the same breath it's a research institution and when you think of all the things in surgery that happen - neurosurgery, heart surgery, transplantation, orthopedics - I mean a lot of people were sacrificed at their own volition actually but you know on the one hand you wanted to do your best for your patient but you wanted to try new things too. So it's a little bit of a balancing act. The administrators really

left us alone. The human subjects later on got a little oppressive but in the main I thought it was a pretty wonderful atmosphere.

Nice to hear. I'm going to ask you some questions about your non-medical accomplishments now. You are a premier author of books on the history of medicine. Why have you dedicated yourself to writing?

I don't know - I always liked it. I started when I was in high school. I had a teacher who loved writing and he got me involved with writing. My father always liked writing and he made us as kids write essays all the time to discuss.

Where was this? Where did you grow up?

I grew up in New Jersey. In Far Hills. And then I went away. I was sent away to boarding school at age 12 like the young Oliver. There was a lot of emphasis on reading and writing there, and I just always liked it and I always did it. And then once I got involved in the academic part of surgery, I did a lot of writing, chapters and all that sort of thing, books. And then the three books I did on the histories of transplantation and surgery, and so on. I don't know why I did it. I just did it. I was always interested in those histories. I had a drawer full of stuff that I'd cut out of journals and newspapers, and then I just sort of began to put them together at the end.

Were there any other topics that you wrote on in books besides transplantation history?

Oh yeah. I did a little history of the department of surgery of the Peter Bent just because of all the lore – and there was a lot of it - was being lost; and the residents kept asking who are these guys, Homans and Cheever, and who is Dr. Moore, who is Cutler? So I put that together. And then the last book was more ambitious, I guess. It just a history of surgery for the public. The idea was that the public, it seems to me, cheerfully will lie down on a table and have some stranger open them up without knowing who, what, where, or why; and I thought they should jolly well know a little bit about what it's all about. That was quite fun. I enjoy writing books.

Let me ask you a final question which is about the future of medicine. What do you predict for the future of medicine nationally and at the Brigham, particularly in light of the current impetus to control medical costs?

Well if I could answer that I'd be on a pedestal somewhere. I've always been a believer in a single payer system. I don't see how we can avoid it. I'm not sure it should be avoided. I mean every other country has them and they do it rather well and they administer cost. You know \$.30 of the American health dollar is spent on administration, and it's \$.10 of the Canadian dollar, the French dollar. The British dollar is spent on its administration in a single payor system and there's some modest discrepancy there. The future - I don't' know. You look at all

these guys talking down in Washington endlessly and I assume we'll have some sort of National Health Service eventually. I hope we will but at the moment it's very difficult. And the costs - everybody wants a CAT scan or their doctor wants a CAT scan or the lawyer wants a CAT scan, and they're expensive. All this wonderful imaging. You know they've revolutionized medicine but it's costing a fortune. I don't know what you do about that. Rationing? I think we already ration a bit. I'm not sure I can answer that any better.