Pioneer Perfusionist Interview: Guy Prater

Mark Kurusz: Today is January 20th, 2012. We're at the home of Guy Prater. Guy is a retired perfusionist, and he's graciously agreed today to be interviewed. My name is Mark Kurusz, and it's a delight to be here in Dallas to see Guy again. It's good to see you.

Guy Prater: It's good to see you, Mark.

Mark Kurusz: As you know, we're going around the country and interviewing some perfusion pioneers. We'd like to go over some of the highlights of your career and your long history in the field of perfusion.

Guy Prater: Okay.

Mark Kurusz: As a starting place, I thought that maybe you could tell us a little bit about your background, and what were the circumstances that got you into perfusion, Guy?

Guy Prater: It was like a series of dominoes falling over actually. I was a Hospital Corpsman in the Navy, and when I got out and started looking for a job, I was able to get certified as a Licensed Vocational Nurse, and I worked in the operating rooms. I was going to be going into pre-med at the University of Texas in Austin, and eventually I worked in the operating rooms there at Breckenridge Hospital and at Seton Hospital at various times. And then I decided, whenever I was going to get married, that I really didn't want to be a doctor, which was my ambition at the earlier times. And I was already a Vocational Nurse, I might as well become a Registered Nurse. My future wife, who was already a Registered Nurse. And so, I applied for school in St. Paul Hospital in Dallas here and got accepted. And so, we came to Dallas. From that point, I went through the nurses' training and then went over to Baylor Hospital to do my work and worked there for like six months. And an opportunity became available for me to head the research lab. So, I went into the Surgical Research Department and met Dr. Paul Ellis, who had just finished a program with Dr. Cooley and Dr. DeBakey. And he was very enthusiastic about setting up an open-heart program at Baylor. And fortunately, Baylor was very supportive of that. So, we worked together in the research lab until such time, a short time, I might add, that we did our first case, which was an atrial-femoral bypass for an aneurysm. So, that was the basic story of my getting into the perfusion area. It was a fairly young field at the time, and the real pioneers were people like Drs. Cooley and DeBakey and those who studied with them, the people that studied in Pittsburgh, and all the other places that the famous doctors, as we refer to them now...and they were famous, Dr. Gibbon and all those people were so inventive and so brilliant in their work. And it wasn't just the surgical procedures, but their ideas and their contributions to perfusion itself and the equipment that we use and how we use it, and the parameters that we need to follow through with. All of those things are so vital to the field and have been in the progressive area from that point until presently today.

Mark Kurusz: What year did you start at Baylor, Guy?

Guy Prater: In 1960.

Mark Kurusz: Well, there were very few open-heart programs at that time.

Guy Prater: Correct.

Mark Kurusz: Was Baylor the first in the Dallas area?

Guy Prater: No, I believe the first case done was either at St. Paul Hospital or Parkland. Or maybe Children's. I don't know for sure.

Mark Kurusz: So, you started in the research lab, but then were asked to go into the clinical OR and do your first case. That must have been…

Guy Prater: Traumatic.

Mark Kurusz: ...Concerning. That's not an easy case. A left heart bypass is a real balancing act between the surgeon, the anesthesiologist, and the perfusionist trying to maintain hemodynamics.

Guy Prater: It went well though...

Mark Kurusz: That's great.

Guy Prater: …fortunately.

Mark Kurusz: And how long was it between cases at that time?

Guy Prater: Procedurally, if you're talking about overall cases, we were limited, in that there were only so many…if it was a straight open-heart surgery. At the time, Baylor had purchased disc oxygenators. And so that involved cleaning up those...in a certain procedure, we had to strip off all the silicone and stuff with xylene. And that was just, if you want to know the truth, it was really terrible. The xylene was so bad for your lungs. And we did that down in the research lab. We would take the equipment over there after surgery. We would rinse it off, take it over there, put it in a tub that we had poured xylene on it, and scrub them, and then washed them off really good afterwards and clean them with distilled water, dry them out, re-siliconize them and re-sterilize it. So, it was quite a procedure to get it ready. And, at first, we only had one oxygenator, which was to the point where you could use either different sizes, depending on the patient size. And so frequently, we would have to set up that morning the equipment, depending on the patient size as to how many discs that we needed for the oxygenator. And then they got more of those equipments, and it got to the point where we were getting a little sick, lung problems and things, trying to keep those things cleaned. And so, we got Baylor to send the things back to the factory to be re-siliconized and everything, and that got to be quite expensive to do also. And at that point, I believe it was Abbott that had come out with the first

plastic oxygenator, and they were using that in Houston. And so, we tried it out and started using it at Baylor. And from that point on, we started using disposable oxygenators, and that was such a boon to us.

Mark Kurusz: Sure.

Guy Prater: So, it really helped. And the fact that some of these medical companies were so involved, not only with the surgeons, as to what they wanted, but they also came to the perfusionist and said, "What do you need? What problems are you having? And how can we rectify that?" And they worked with us also.

Mark Kurusz: So that must have been a real benefit to have disposable oxygenators that probably coincided with an increase in caseload.

Guy Prater: Absolutely.

Mark Kurusz: Yes. I believe Travenol eventually marketed the bag. It may have been Abbott at the start.

Guy Prater: I believe it was Travenol now that you mention it. Yeah.

Mark Kurusz: Yes.

Guy Prater: And the other thing that made the increase in surgeries was the fact that people started doing vein, venous [coronary] bypasses.

Mark Kurusz: Sure. That came in the late 1960s.

Guy Prater: Right.

Mark Kurusz: In the early 1960s, I imagine you were doing a lot of thoracic work and valve work.

Guy Prater: ASDs and valves.

Mark Kurusz: Yes.

Guy Prater: Yeah, things like that.

Mark Kurusz: Yes. And did you continue to work in the research lab when you weren't working clinically?

Guy Prater: Yes. I would set up all of the procedures that they would do down there and get that all ready, if I wasn't going to be there, if I was over clinically involved somewhere. But, I would always set it up. And Baylor only had that small research lab that I was talking about

earlier for probably six months after I started. They also built a research department, a new one, and it was a two-story building and had a beautiful operating room and animal runs. And we maintained it just like a regular operating room with cleanliness. And it had an x-ray machine, everything that we needed. So, it was very well prepared and equipped.

Mark Kurusz: What sort of animals did they work on?

Guy Prater: Virtually, just about anything. They used rats, rabbits. A lot of those. Some dog animals. I think there was a couple of chimps upstairs for a while, a monkey or two. And then I worked with a bunch of monkeys.

Mark Kurusz: Figuratively or literally?

Guy Prater: Yeah. But yeah, there were pigs, since pig's hearts and things were so close to humans.

Mark Kurusz: Yes.

Guy Prater: We did a lot of pig stuff.

Mark Kurusz: Yes. Were there a lot of things you learned in the animal lab that had direct applicability to what you did in the clinical OR?

Guy Prater: The procedures that probably worked better for them were practicing venous bypasses and the heart valve…things with the pigs and things like that. There also was some work done with the clinical idea and mind of using peroxide in animals and humans. And eventually, they did do that. They did use peroxide in some of the cancer procedures.

Mark Kurusz: Oh, for chemotherapy?

Guy Prater: Yes.

Mark Kurusz: Is that right?

Guy Prater: Uh-huh.

Mark Kurusz: So, you started at Baylor in 1960. How long was your career in perfusion, Guy?

Guy Prater: I worked at Baylor for 25 years. I was perfusing then, and I continued to work for Psicor for eight more years and still did the clinical work with them.

Mark Kurusz: And when did you retire?

Guy Prater: In 1993.

Mark Kurusz: Okay. So, a long career.

Guy Prater: It was a long career. It was a very satisfying career. My great boss, Mike Dunaway—just one of the best bosses I could ever have, had been so supportive of just about anything that I would come to him with and would listen. And he was such a visionary, and if he didn't agree with what I was doing, he would guide me a different direction in it. But he allowed me to do so many things after studying it and deciding whether it would work or not. And that gave me such a freedom and ability to do things that I wanted to try to do. And it helped me there. At the same time, whenever I decided it was time, that I would like to retire, he was supportive of that. And I wanted to do some writing, and I painted for years and years, and I wanted to do painting, also. And so, I've been doing that since I retired and enjoying myself a lot.

Mark Kurusz: And you've shown me a lot of your artwork this morning. It's absolutely magnificent.

Guy Prater: Thank you.

Mark Kurusz: I well remember that you actually sculpted a model of the heart that became one of the AmSECT award. I think it was the TMP Award of Excellence, and it's so realistic. It's absolutely incredible.

Guy Prater: Thank you.

Mark Kurusz: How long did it take you to sculpt that heart? And tell me, how did you get the anatomy and the features so correct?

Guy Prater: Well, actually, I used an animal's heart. They had finished with the animal, and I took the heart from the animal and studied that and the wax modeling. And I took photographs of it. And then I brought the wax here and started modeling it and using my little iron that I use to melt the wax and things like that and made it. It was a solid piece of wax. And then Russ Sharp was supportive of AmSECT his whole career, as far as I know. He was out of Houston. And Russ said he would pay for this to be cast, to be the first award. And so, he did, and it came out pretty nice. I liked doing it, and I was pleased that AmSECT liked it. And I think Charlie Reed got the first one.

Mark Kurusz: Is that right?

Guy Prater: Yes.

Mark Kurusz: Well, you've talked about Mike Dunaway and some of the other people that you interacted with. Who were some of the surgeons that you worked with over your career at Baylor and afterwards, Guy?

Guy Prater: The longest time I worked with any surgeon was with Dr. Hal Urschel, and his brilliance is just unsurpassed. He is just a great surgeon.

Guy Prater: He's not retired yet. He's semi-retired and is in charge of some program at Baylor, I believe it's in the transplant area with a stem cell study and is still working there. He's written so many articles over the years and has been the president of so many medical societies, it's unbelievable. And he's also been an AmSECT supporter over the years. Very much so.

Mark Kurusz: Yes.

Guy Prater: And then...Let's see. I worked with Dr. Richard Wood, Dr. Paul Ellis, Dr. Maruf Razouk. There's just so many doctors at Baylor that...For instance, Dr. Ben Mitchell may have had a case come in, and J.B. [Denman] may have been out of town or tied up somewhere else, and I would go over and run the pump for them. So, I would do procedures for many different surgeons that were on staff at Baylor that may or may not have had their own perfusionist.

Mark Kurusz: Is it fair to say that, in the early days and really for much of your career, the relationship between the surgeon and the perfusionist was a very tight collaborative one? More so than, say, perfusion and anesthesia, for instance?

Guy Prater: I would say probably yes. And I was thinking about that whenever you'd called about this interview, that there had to be such a close relationship to the surgeon…close in the idea that our minds had to click together in a lot of ways, automatically almost, to know what they would want and how they would want it. I relate it to being in surgery in the operating room. I used to be an operating room nurse and did a lot of thoracic surgery. You would stand there and watch what the surgeon was doing, and it gets to the point where you know them so well and know what they're doing that when they would stick their hand out for a clamp, you would know exactly which one to give them and how to give it and how they wanted it given. Well, the same thing applied to the procedure that we were doing. We would look in as close as we could to see what the surgeon was doing or hear what they were doing. Because frequently we couldn't see it, but we would know that, at this stage of the procedure, they were doing this, and we had to do that. So, yes, there has to be a lot of procedural likeness in that.

Mark Kurusz: This is a very technical, simplistic question, but did you operate on the same side as the primary surgeon with the heart-lung machine, or were you opposite the surgeon?

Guy Prater: Same side.

Mark Kurusz: Same side. So quite often, it was perhaps difficult to hear…

Guy Prater: Absolutely.

Mark Kurusz: ...what they wanted, and you had to be really tuned in.

Guy Prater: Usually there were two things. You needed to click with anesthesia also. And I did always look back and forth from the pump to the anesthesiologist and keep my ear turned. And I've got big ears, so I could keep it turned to the surgeon. But yeah, because they're talking to the chest.

Mark Kurusz: Yes.

Guy Prater: And they're talking to the assistant, and sometimes they're not talking loud, either.

Mark Kurusz: Yes.

Guy Prater: And so, you needed to try to keep the noise to a minimum in there. When they first got the big pump at Baylor, it was so well-equipped with anything that you wanted, it also had a stereo built into it.

Mark Kurusz: Oh, dear.

Guy Prater: And it got to where we really had to keep that turned off. We could keep it on if we wanted it low when the patient was brought out of the room, or after the heart was fixed and we were off [cardiopulmonary] bypass, we could turn it on, but basically, it got to be the point where the surgeons really didn't like it on much, certainly not during their procedure.

Mark Kurusz: Sure.

Mark Kurusz: Do you remember the…

Mark Kurusz: ...manufacturer of that pump?

Guy Prater: I knew you were going to ask that, and it's an Olsen, I believe.

Mark Kurusz: Olsen.

Guy Prater: Hmm-mmm [affirmative]. And it was a beautiful pump, and we had several of them at Baylor at one point. And then we went into the Sarns.

Mark Kurusz: Yes. Well, over your career, you've seen a lot of technological changes obviously. You mentioned the disc oxygenator when you first started, then you graduated to disposable bubble oxygenators. I wonder if you could tell us what you think were some of the more notable changes in perfusion practice over the course of your career?

Guy Prater: That's some question. First of all, I think, sterility has always been a problem. And if people aren't taught the correct sterile procedures for setting up, like with the disc oxygenator, we had to set that up frequently the morning of the procedure. And so that meant you had to get into the room and put on your gloves and everything and put the parts together, literally,

and get it all set up, and then hope that there were no leaks, run stuff through it, and so forth. But there was a potential there for contamination. With the advent of the plastic oxygenator, the bubblers, you eliminated a lot of that. But unless people used the correct procedures in connecting the different parts, the tubing to the oxygenator and whatever, they could contaminate it. And there's so many potential events that took place that you could do contamination. So, the practice and the knowledge of people learning sterile techniques, and making sure that they were setting out their procedures correctly, was one major thing. There's enough potential for contamination without the oxygenator alone. So that was a big, big thing right there. The different techniques for pumping, the people made a big difference. The vortex pumps were so much less traumatic, and I loved those things. I really liked working with them. And the safety features that they had was better. There are so many things—the fact that the schools teach so many different areas now than we had to begin with, and they're covering so much material now that none of us even thought about to begin with. We were thinking, boy, are we going to get this patient on and off the pump alive? And so, we were given God's gift most of the time in that taking place in gifted hands of the surgeons that we were working with and the fact that they knew as much as at the time as they could possibly know because of all of their research that they did both clinically and did actively. So, they knew what they needed to do and how to do it. And that only advanced over the years.

Mark Kurusz: And how did you get involved with AmSECT? And I guess the more basic question, Guy, would be, here you are up at Baylor, kind of flying by the seat of your pants. Was there any effort to get together with other fledging perfusionists to discuss techniques or learn about the latest technology?

Guy Prater: Actually, we would talk to each other. Back in the early 1960s, there was one or two meetings, I think in San Antonio, one of them with a bunch of us that went there and discussed some of the stuff. And if there was something taking place that we weren't aware of what to do with, or how to set it up, or whatever, we would talk to the other people. But basically if Dr. Urschel said, "I want to perfuse the coronaries." And the first time I heard that was probably an hour before we did the procedure. I said, "Do what?" And fortunately, we had done enough research that I could figure out what he wanted to do and how to do it. And so, that worked well. But without that closeness that you have with the other people, and the openness that you've got, and you could call any of the other perfusionists around, and as they were available they'd come help you, even. So, we were a pretty close-knit group in Dallas.

Mark Kurusz: Wonderful. And you mentioned industry coming up with new equipment. What was your general view of the cardiopulmonary industry over your career? They certainly brought a lot of products to market. And did you have any experiences with them that really stand out as being particularly favorable, or even unfavorable, experiences, say when devices didn't work the way they were supposed to?

Guy Prater: I think I only had one instance when an oxygenator was not doing like I felt it should, and we had to change it out. And that was kind of a traumatic experience. No, we just

reported it, and they corrected whatever the problem was. And I frankly don't even remember what the oxygenator was now, but we jumped from the bubblers to the membranes.

Mark Kurusz: What year was that?

Guy Prater: Oh, I don't remember years. I'm 81 years-old. I can't remember anything.

Mark Kurusz: Well, you're looking good for 81.

Guy Prater: Thank you.

Mark Kurusz: This is going great. This is really going great, Guy. You mentioned earlier that you felt you could call up any of your fellow perfusionists if you had any questions. How were perfusionists brought into the field in those days? Did you personally get involved in mentoring younger folks that came in?

Guy Prater: No, I was not involved in teaching anybody perfusion. I think Stan Fennig taught some people, J.B. [Denman] taught some people, I believe. I would talk to people as they came in and watched us do the procedures. And frequently we had people like Steve Sutton or Lloyd Yancy, at the time were pulmonary technicians, and they would come sit down and watch, and we would go through, and I would explain things to them, but they never operated any pump or anything. They went to school for that. I would talk to them in general terms about what was going on. Before I got into any kind of a teaching area was in the Perfusion Assistant program with Psicor.

Mark Kurusz: I see.

Guy Prater: And then at that point I did go into that.

Mark Kurusz: Yes. Let's move back to AmSECT. I know that you were heavily involved in Region 8, I believe it was, at the time. There were, I believe, 11 different regions in AmSECT, and they would put on regional meetings. And I think that you were heavily involved with that, but you were also involved with some of the first certification exams, reviewing credentials, and that sort of thing. What AmSECT meetings did you attend in the early years, Guy?

Guy Prater: Basically, I think attended just about every one. And yes, I was involved with the certification program in examining people. And I really enjoyed that. I enjoyed it for several reasons. One, not just to see what the knowledge of the people was, but to see their demeanor and how they responded, and to try to make them understand that we're not there to kill them, we're there to help them through the procedure and see what knowledge they've thought about it. And it was amazing how the people responded, and there's some really brilliant people out there.

Mark Kurusz: And you're referring to the oral exam in particular?

Guy Prater: Correct.

Mark Kurusz: Yes. Well, that was a key part of the certification exam for many years. And they now, of course, have gone to two parts that are written. I think that many of us who participated in those oral exams somewhat rue the day that the oral exams went away, because it really was a trial by fire. And I think you could determine in 20 minutes, whether this person really had the experience to have a life entrusted to them, running a heart-lung machine.

Guy Prater: Well, you think about it a second. When the surgeon is operating, and he asks you a question, what's the difference? You better have an answer for him.

Mark Kurusz: That's true.

Guy Prater: And the same thing would apply to the oral examinations. You could ask them the answer to a question the surgeon might ask them. And so, you need to know those answers.

Mark Kurusz: Are there any cases, Guy, that reflecting back, and I know it's a long time since you left the OR, but reflecting back on your entire perfusion experience, any cases in particular that might stand out as being especially memorable? And I leave that to you to say whether it was memorably good or memorably bad—you already mentioned your first clinical case, which was a left-heart bypass, which must have been quite stressful at the time.

Guy Prater: To say the least. Yeah. Long-term ECMO cases—we did a couple where we ran through several shifts of perfusionists, and here again, we helped each other out on those things. J.B. [Denman] and I worked on a couple of them, and I'm trying to think, we did what they called a "domino bypass" because we had three patients going. One, we took the lungs from the patient. The second, we put the lungs in another patient, those lungs in another patient, and the heart of one into the third patient.

Mark Kurusz: My goodness, that must have made the local papers.

Guy Prater: It did. Dr. Peter Alvasados did that. And I think he's gone back to Greece now, but it was the first one in Dallas. And the two patients that received the organs lived, it was quite interesting. I was very involved in setting up the liver transplant program at Baylor.

Mark Kurusz: Is that right?

Guy Prater: With Dr. Goran Clintmom. He trained in Pittsburgh with Dr. Starzl and came down from Sweden—a brilliant young surgeon, and funny. He was so relaxed in his work—that's not to say that he wasn't serious about it. I remember the first time we did a liver transplant, we were on bypass, and they liked to use a pump for the liver transplant. And, of course, there's no heparin, so that if anything happens then you have to stop the pump for a minute. They just have to come off bypass, because it was clot. And we were on bypass, and he was taking out the liver, and he said a little word all of a sudden. And it was a word that really would get your

attention. And he said, “Come off bypass.” And I did. And he said, “Give me another clamp.” And he didn’t move his hand. He never got excited or anything. But what had happened is the clamp had broken. The blade had broken on the clamp, and he very calmly just reached down with his fingers and held it until they gave him another clamp.

Mark Kurusz: Goodness.

Guy Prater: Yeah. So, what we did at that point was recover the blood that was in the pump and run it through the cell saver, clean it up, get rid of anything that might be in it that would not be good. And give it back to the patient.

Mark Kurusz: You were able to use the same circuit.

Guy Prater: The blood did. We didn’t go back on bypass, no.

Mark Kurusz: I see.

Guy Prater: But the patient did very well.

Mark Kurusz: Wonderful. Why don’t you walk us through your approach, your typical day, your approach to perfusion. Let’s say a case is posted for 7:00 AM, whether it’s a valve or a coronary. And this is after the disc oxygenator days, you had a disposable oxygenator. How did you approach cases, Guy? Did you review the patient's chart?

Guy Prater: Usually I would call the division the night before, the evening before, and get patient information from the chart, or go by the division, and get it and have all the paperwork basically set up with what I needed as far as the patient’s parameters. Whenever I got to the operating room, and usually I would get there at 5:45 or 6:00 in the morning, set the pump up because I wanted it all set up before 7:00, before they brought the patient into the room, because there were events where the patient crashed...

Mark Kurusz: Yes.

Guy Prater: …And we had to go and bypass in a hurry. So, everything was always set up if I could do that, and unless it was an emergency thing. And we knew basically where we were standing to begin with, and who we could go from there. And at that point then when they brought the patient in, I would help anesthesia with the patient and just do whatever I could in the room there, and just be available. And again, in case anything happened.

Mark Kurusz: Yes, I hope there was time to get a cup of coffee before you went on pump.

Guy Prater: Sometime that was the wrong thing to do, too. If the procedure happened to be a long one, and I had several of those, and man, that’s miserable.

Mark Kurusz: Yes.

Guy Prater: But yeah, usually I could get a cup of coffee and get back in the room before they put the patient to sleep.

Mark Kurusz: And you, of course, had to take call. What was your call schedule like?

Guy Prater: That is a joke. Basically, I was on call all the time.

Mark Kurusz: Is that right?

Guy Prater: Yeah. Anytime that Dr. Urschel was in town, I was on call.

Mark Kurusz: Oh, boy, did you do much night work?

Guy Prater: Not a whole lot. We did have some emergencies, but we didn't do a whole lot of night work.

Mark Kurusz: Did your duties extend to cell saving on non-cardiac cases?

Guy Prater: Yes, as far as the night work, I did do a lot of night work, but it was not with the hearts. It was with the livers.

Mark Kurusz: I see.

Guy Prater: And, of course, you had to be available there again also anytime. So, I was always on call for that. And since they used the pump all the time, and we had an engineer that was also brilliant, and we set the pump up so that anytime that a bubble went through a sensor that he had, it would shut it off, shut-off the pump. And we used the vortex pump on that. And so that was interesting to get involved with that. And we always used the pump and would have it ready to go at any point. And, of course, I had to stay in the room all the time there, because there was a lot of collection of blood with the liver transplant, and we would immediately go through the cell saver with that, clean it up, give it back to anesthesia.

Mark Kurusz: Yes. So, obviously, teamwork was very important throughout your career. We talked a bit about how the perfusionist worked very closely with the cardiac surgeon. How involved was anesthesia at Baylor with the perfusion team? Was there much interaction during a typical case?

Guy Prater: I would say there's quite a bit, yes. And we have, and still have at Baylor, some of the best anesthesiologists in the world. They're just tremendous. And their brilliance is amazing, and they would help us a lot. If they would see something going on in the procedure, and usually they were standing at the head of the table watching over the drape. They would look over at us and give us a warning about something or tell us that something was going to

happen, and that was going and did, or if something did happen, they would quickly tell us what was going on. And we could maybe anticipate it.

Mark Kurusz: Very good.

Guy Prater: They were also our greatest friends whenever the surgeon would maybe lift up the heart and cut off your blood supply, and they would say something about they're getting ready to lift the heart up.

Mark Kurusz: Wonderful. I'm not sure that happens in all settings today.

Guy Prater: Probably not.

Mark Kurusz: Yeah, I know that we're very fortunate that we're getting your recollections and reminiscences on tape. Are there any other materials that you might have, that you could perhaps share with AmSECT if they wanted to duplicate any early…

Guy Prater: No.

Mark Kurusz: …newsletters, that sort of thing?

Guy Prater: I don't think I've got anything like that anymore. I was the Editor of the newsletter for a while, but I don't think I kept anything.

Mark Kurusz: Okay.

Guy Prater: Maddie [Massengale] might have kept some.

Mark Kurusz: Yes.

Guy Prater: Maddie's brilliant...

Mark Kurusz: Yes.

Guy Prater: …her memory is just unbelievable.

Mark Kurusz: Yes.

Guy Prater: And she still, even though she's retired, she can quote you day and hour of anything that takes place. I've never seen anything like it. It's amazing.

Mark Kurusz: It is amazing. Well, we're moving into the final section of this interview, Guy, which I've titled "Perspectives, Philosophies, and Reflections." As you think back, what do you

think are some of the personal and professional attributes that contribute most to a person being a good perfusionist?

Guy Prater: Being willing to learn, being willing to listen, I guess I should say, would be the first. Not assuming that your ideas are the best, always, best for yourself, best for the patient, best for the doctor. You've got to put yourself in the back and remember that it's not you that's being operated on. It's the patient.

Mark Kurusz: Yes.

Guy Prater: It's not you that's doing the surgery, it's the doctor. It's you, that's keeping them alive by the techniques that you've learned, and how you've learned it, and if you've learned them well. And we're just here on earth, I think, to help each other. And that's the best way that we can do it, by learning and listening, and paying attention, and realizing that none of us are God and that He's taking care of everything, but He's the one that shows us how to do it.

Mark Kurusz: Yes.

Guy Prater: That's basically it, as far as I'm concerned.

Mark Kurusz: That's beautifully expressed. I want to thank you for sharing that.

Guy Prater: You're welcome.

Mark Kurusz: Do you think that, going back to your early medical experience as a Navy corpsman, do you think that offered some advantages as you moved into perfusion?

Guy Prater: Oh, yeah. The nurse that was in charge of the operating room at Bremerton, Washington, was a real hardnosed nurse, and she would not tolerate any break in sterile technique. And when you were learning, she stood behind you. And the minute that you started doing something wrong, and this was not just about a break in sterile technique, it was picking up the wrong instrument to give to the doctor, whatever, you better have a really strong back because she would pinch the living daylights out of you.

Mark Kurusz: Is that right?

Guy Prater: Yeah. So, you learned very quickly, you better watch and see what you were doing and what he was doing and how it should be done.

Mark Kurusz: Sure.

Guy Prater: So, yeah, I learned a lot about sterile technique, and I've pursued that all my career.

Mark Kurusz: Well, these next two questions are somewhat related, Guy, and they're somewhat broad. The first is, what does it mean to you, as we sit here today, looking back to have been a perfusionist? And really the corollary to that is, what were your personal satisfactions and rewards of a career spent in perfusion? What did you enjoy the most?

Guy Prater: I think what I enjoyed more than anything else, was being able to help other people, and to work with the brilliant minds that I did, and to see what they could do and how they could do it. I mean, some of the things were so quickly realized, as an example, on a liver transplant. When they would put that new liver in and open up the clamps, you could almost see the bile draining away from the system, and the patients turn from yellow to pink again. I mean, it's just amazing. And a lot of people aren't given the ability to be able to see these things or to realize it, and the general public don't realize all that perfusionists do and how they do it, and the fact of saving cells, for instance, how much of an advance that is from the early years, and how many advantages they have because of people like Dr. Urschel or Dr. Razouk or Dr. Ben Mitchell, or some of these other great surgeons that are around, Drs. Cooley and DeBakey, Dr. Clintmom, with the liver transplants. Without those people doing these works and their researchers, and I left out anesthesia. You mentioned them before, but without great anesthesiologists, working with these people, they couldn't have accomplished what they did. So, there is so much that people need to be grateful for in the field of medicine and perfusion, in general, that they don't realize it even.

Mark Kurusz: Sure. I've often thought that one of the nice things about, at least for cardiopulmonary bypass was…there always seemed to be a sense of instant gratification. Patient gets weaned off. You know they had a bad condition coming into the operating room, and whether it was replacing a valve, or repairing a valve, or fixing their coronaries, you were a small part of helping the patient through a pretty major operation.

Guy Prater: Absolutely.

Mark Kurusz: Did you ever follow-up with patients and happen to go see any in the post-op period?

Guy Prater: Maybe once or twice, but I generally did not do that. To me, I did my job, and unless they needed me again, then I didn't follow through with it.

Mark Kurusz: One thing I forgot to ask, did you ever get involved in pediatric perfusion, or was your practice limited to adults, Guy?

Guy Prater: My practice was limited to adults, for the most part. I did a couple of pediatrics. I prefer the adults. I did not like pediatrics. And here again, it really takes a special person to do each of these different things. Pediatrics really require special people because things can change so quickly with a child.

Mark Kurusz: Yes.

Guy Prater: And things can either go great or bad very quickly with a child. And you don't have a lot of room to play around either. And so, it's quite traumatic mentally, if you don't have that ability to stand forth and do your work with them.

Mark Kurusz: Are there any other memories of your volunteer work with AmSECT that stand out? I think that you were on the Editorial Board of the "Journal of ExtraCorporeal Technology" for some years. I know we corresponded back and forth, reviewed manuscripts together. Are there any other AmSECT activities that stand out in your mind as particularly memorable, Guy?

Guy Prater: Well, I was on the Board for several years, and I enjoyed that. And the fact that we were formulating the future of the society was satisfactory, of course. And the other fact was that there were so many great people that I was working with, and so many smart people. Perfusion wouldn't be what it is today, I don't think, without those people having been there.

Mark Kurusz: You mentioned Mike Dunaway, you mentioned Maddie Massengale.

Guy Prater: Charlie Reed, Diane Clark. Charlie and Diane's book, for instance, the first one that came out about perfusion. I'm sure there are many more now, but all those things, and all those people were great to know, and to look and listen to, and follow through with, and even to go down somewhere and sit down and have a drink with them and just chat about anything. It was great. And it was a pleasure, and it'll probably never be the same again.

Mark Kurusz: And I'm certain that some of those friendships you made in the early days have persisted to the present.

Guy Prater: Yes.

Mark Kurusz: You mentioned J.B. Denman.

Guy Prater: Right.

Mark Kurusz: Stan Fennig.

Guy Prater: Right.

Mark Kurusz: I think all of you of that era went through some exciting times and obviously the friendships are still there.

Guy Prater: Absolutely. And one that I hadn't mentioned before, and he's still around also, is Cal[vin] Scott.

Mark Kurusz: Oh, sure.

Guy Prater: And Cal[vin] is such a great person, such a gentleman.

Mark Kurusz: Yes.

Guy Prater: And yeah, I've known Cal[vin] for many years now. He's great.

Mark Kurusz: That's wonderful. Well, before we turn off the camera, are there any parting thoughts you wanted to share with the AmSECT audience? What we're hoping to do with these Pioneer Interviews, Guy, is go around and get the thoughts as you've just expressed from your career. And, at some point, I hope this is published or disseminated in some way. We want to thank you very sincerely for spending time this morning…

Guy Prater: You're welcome.

Mark Kurusz: …reviewing some of your memories and…

Guy Prater: What memory I've got left.

Mark Kurusz: But are there any other thoughts? Let's say I was a new perfusionist sitting in the room here, what one or two pieces of advice would you give a young person today?

Guy Prater: Hmm. Well, first of all, pay attention to what your mentors are trying to teach you in every step of the way, because from setting up the pump, to the operation of it, you've got a patient's life in your hands.

Mark Kurusz: Yes.

Guy Prater: And that life could be your mother's, your brother's, your sister's, your wife's—it could be anybody, but it's somebody's, and care for them like you would your own. And so, you must think about that as being somebody that you love, that you're taking care of, and that you want somebody else to take care of them, just like you would. And as example, CSS, the group did surgery on my wife a couple of years ago with an aortic valve procedure.

Mark Kurusz: Is that right?

Guy Prater: And she went through the procedure beautifully, and she had a drug reaction, had some problems, but this was also done at Baylor. And believe me, I had reports from the nurses, from the perfusionists. I mean, anytime I wanted anything or knowledge about anything, they were there to tell me, and to help us through. So, all these things are important.

Mark Kurusz: Sure.

Guy Prater: And I think the other thing is that—I know that most of these perfusionists are not going to be involved with direct patient care or family procedures, but they're concerned, the families are concerned. And so, you need to be concerned, and follow through with the way that you would've want them to be done with you.

Mark Kurusz: Well, I think that's beautifully expressed, Guy. And once again, I want to thank you for spending time this morning. It's been just a wonderful, wonderful time to remember with you.

Guy Prater: Thank you, Mark.

Mark Kurusz: I would tell you that, on the record, Guy, was one of the first perfusionists that welcomed me with open arms when I moved to Texas from Hershey and was heavily involved with the continuing education and Region 8. And it was one of the first friendships I think I made here in Texas, so it's been great to see you again.

Guy Prater: Good seeing you. Do you miss Galveston?

Mark Kurusz: No, I think I've referred to that as putting in my time on a penal colony. Austin, Texas is much better.

Guy Prater: Oh, I love Austin.

Mark Kurusz: Yes. But thanks again, Guy.

Guy Prater: You're more than welcome.

Mark Kurusz: We wish you luck.

Guy Prater: Appreciate it.