ROBERT WILSON JACKSON, OC, MD, FRCS, FRCSC, FRCS(Ed): a conversation with the editor

Robert Jackson (Figure 1) was born in Toronto, Canada, in 1932 and grew up there. He received his medical degree from the University of Toronto in 1956. After a rotating internship, he did a year of research in the orthopaedic surgery department at one of the hospitals connected to the University of Toronto; for his work during that year on the proper management of fractures of the tibia, he received the International Award from the American Association for the Surgery of Trauma. After the year of research, he did 2 years of training in general surgery in Toronto. After another year in orthopaedic research in Boston, he did 18 months of orthopaedic training at the Royal National Orthopaedic Hospital in England and then 12 months of additional training in Bristol. He and his wife then returned to Toronto and the Department of Orthopaedics at the University of Toronto.

Within a year, Dr. Jackson received a Markle Scholarship, which provided the opportunity for him to go to Tokyo, Japan, where he met Dr. Masaki Watanabe, who was beginning work on arthroscopy of the knee joint. He and Dr. Watanabe became good friends, and upon returning to Toronto, Dr. Jackson continued perfecting the arthroscopy techniques that had been introduced to him. It wasn't long before Dr. Jackson was the world's top arthroscopy expert, and that expertise attracted numerous orthopaedic surgeons and patients from around the world to Toronto. From 1976 to 1985, he was chief of orthopaedics at Toronto Western Hospital; in 1982, full professor in the Department of Surgery, University of Toronto; and from 1985 until 1992, chief of staff and chief of surgery at the Orthopaedic and Arthritic Hospital in Toronto. In 1992 he moved to Dallas to be chief of the Department of Orthopaedic Surgery at Baylor University Medical Center. Despite a busy practice, his research endeavors have led to the publication of 132 articles in peerreviewed medical journals and to the publication of 48 chapters in various books.

For his work he has received many awards and honors, including the Lister Prize in Surgery from the University of Toronto; the Award of Merit from the city of Toronto; the Founder's Medal from the Canadian Orthopaedic Research Society; the J. C. Kennedy Award for Research in Sports Medicine; the Award for Excellence in Research from the American Orthopaedic Society for Sports Medicine; the Olympic Order from the International Olympic Committee; the Jackson-Burrows Medal for Meritorious Academic Achievement from the Royal National Orthopaedic Institute in London, where he trained; and the Mr. Sports

Medicine 2001 Award from the American Orthopaedic Society for Sports Medicine. Additionally, Dr. Jackson was the only physician recognized by Sports Illustrated as one of the 40 individuals who have had a significant impact on sports in the last half century; he was chosen for introducing and developing arthroscopic surgery. He and his lovely wife of 40 years are the parents of 5 children. Bob is a wonderful guy and a splendid and innovative surgeon, and he



Figure 1. Robert W. Jackson, MD.

does Baylor honor by being one of its department heads.

William Clifford Roberts, MD (hereafter, WCR): Dr. Jackson, I appreciate your willingness to talk to me and therefore to the readers of BUMC Proceedings. We are in my home on December 19, 2001. Dr. Jackson, could we start by your talking about your early life and what your home, parents, and siblings were like?

Robert Wilson Jackson, MD (hereafter, RWJ): I was the second of 2 children (Figure 2). My sister, now a nurse, is 3 years older than me. My parents were both from the "Old Country." My dad was in World War I as an infantryman in the British Army. He spent 4 years in France and survived. During the war he met a lot of Australians and decided that after the war he would like to live in Australia. He got as far as Toronto and met my mother, who had arrived with her 2 sisters from Jedburgh, Scotland. They had been orphaned. My mother was the oldest of the 3 girls and came to Toronto to look for work. My parents got married and never left Toronto. My mother died at age 47 years from breast cancer when I was 13 years old. Her youngest sister, my aunt, moved in with us and looked after my sister and me for several years, and then she and my dad got married. She became a second mother. My dad did odd jobs at first and then started with a sign company, working his way up to become the office manager. He spent nearly all his adult life in Toronto.

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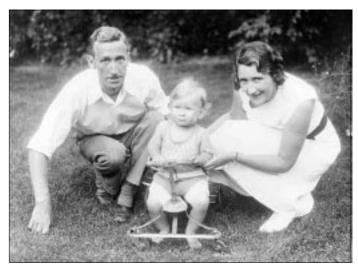


Figure 2. Age 12 months with parents Charles and Peggy.

My parents saved enough money to get my sister and me through school. I went to the University of Toronto Schools (UTS), a boys' private school, which required an examination to get in. I'd never heard of the school before my dad one day said, "Would you like to go to UTS?" I said, "Sure." "You're set up to write the exams on Saturday." I managed to get in. That was the first big break in my life.

WCR: Your parents had to pay to send you there?

RWJ: Yes, but it was subsidized by the University of Toronto because it was a training center for teachers. The fee was \$75 a year. I had tremendous teachers, and the students were all boys, so there were no distractions from young ladies in the classes. (They now have girls at the school.) Classes were from 8:30 AM until 1:30 PM, and the afternoons were for sports, theater, music, or various types of recreation. I was usually involved in the sporting activities.

WCR: In what grade did you enter UTS?

RWJ: Canada's system has 8 grades in public school and 5 years of high school. Then you go to university. I was 13 when I went to UTS and 18 when I left.

WCR: That would be equivalent to ninth grade in the USA?

RWJ: Yes. A high percentage of the class went into medicine. We had a class of 75, and I think 28 went into medicine.

WCR: Did you board at the school or did you live at home?

RWJ: I lived at home. Everyone had to live at home. I rode my bicycle to school and back.

WCR: How far was it from your home?

RWJ: A couple of miles. We lived in the center of the city. **WCR:** You were there in the midst of World War II. Do you remember the depression at all?

RWJ: No. I remember the old streetcars that were open, and in the wintertime they'd have coal stoves in the middle of the car to try to keep people warm. The transportation system was pretty good in Toronto, even in those days.

WCR: What sports did you play in high school?

RWJ: My main sport was American-style football. I also boxed. My father had been a boxer in his division in the army, and he gave me lessons. I fought for several years. My last fight was the only boxing match I lost. Then I realized that boxing was a stupid sport and that it could damage the brain, so I quit.

WCR: What was your boxing weight?

RWJ: I was 6'3" and 136 lb. The lightweight class.

WCR: You had a long reach?

RWJ: Yes.

WCR: What did you play in football?

RWJ: I always played on the line—as middle linebacker on defense and guard or tackle on offense. Back then, one played both offense and defense. I liked being a tackler, not being tackled. My playing weight was about 165 lb. When I went to the university, I ballooned to 190 lb. I just barely made some of the teams at the university.

WCR: What sports did you play at the university?

RWJ: I played basketball for the faculty of medicine. We had a championship team one year. I played box lacrosse in a gymnasium, as opposed to field lacrosse as seen in the USA. I first hurt my knee, a torn anterior cruciate, when playing lacrosse. In football I played on the junior varsity team, but my knee kept giving way. These were my main sports. I never played much hockey. I couldn't skate very well, so I was always made the goalie. However, I was quick enough to avoid some of the harder shots and to stop some of the easy ones.

WCR: Did you undergo a knee operation back then?

RWJ: No. Back then, people didn't know much about knees. I tore my anterior cruciate in classic fashion: as I stopped suddenly to change direction, my knee popped and I went down. Over the next few years, I kept playing and finally tore my medial meniscus so badly that the knee locked and I couldn't play anymore. I must have played on it for 4 or 5 years without surgery. After it locked, I had the meniscus removed surgically. Orthopaedic surgeons didn't know how to repair cruciates or menisci in those days. The operated knee was good for another 30 years until it became arthritic. Since then, I've had 6 operations on my left knee.

WCR: Is it replaced now?

RWJ: No, but that's the next step. It probably will happen in the near future.

WCR: I presume you were a good student in high school and earlier. How did you get interested in medicine? Were there physicians in your family? Did your schoolmates get you interested in being a physician?

RWJ: I don't know where the desire came from. By the time I was age 8 or 10, I wanted to be a doctor (*Figure 3*). I always liked to put bandages on knee scrapes and care for birds that had fallen out of nests. When I went to high school (UTS) my parents got me into Greek, Latin, and biology, figuring these subjects would help me in medicine. I was given violin lessons to improve the dexterity of my hands.

WCR: Did you continue with the violin for a long time?

RWJ: No. One day 2 strings broke at once, and I went out and started playing football. That ended my violin career.

WCR: What was your home life like? Did you have pleasant dinners at night? Was that a big occasion each day?

RWJ: It was pretty constant. My mother cooked well. She often cooked very exotic foods like tongue, stuffed heart, or tripe. In retrospect, it was probably because we didn't have much money, and these were the cheapest cuts of meat available. I enjoyed the strange foods she prepared. The big meal of the week

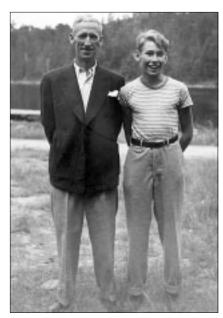


Figure 3. Age 12 years with his father.

was Sunday at noon, and that would be roast beef and mashed potatoes, typical English fare, with rice pudding for dessert.

WCR: Was your family fairly religious?

RWJ: We went to church, but we weren't fanatically religious. I went to Sunday school. I was in the Boy Scouts, which met at the church. I was a pretty good church attendee until I started into surgery and thereafter went infrequently.

WCR: Did you spend a good bit of time with your father? I gather he was very supportive of your sporting activities.

RWJ: He was very supportive, but we didn't play things together. We didn't do things together much.

WCR: Were there many books around the house? Was it a relatively intellectual home?

RWJ: Medium, I guess. We didn't have television or a car until I graduated from medical school. We read newspapers and magazines. Neither my father nor mother had any advanced education, so they didn't read much.

WCR: What was your biological mother like?

RWJ: It's hard to remember. I think of her as fairly big and nice and warm.

WCR: It was a pleasant household. There wasn't much fussing or that kind of thing?

RWJ: We had a strong family.

WCR: What about your new mother after your biological mother died? Was she in the same mold as your mother?

RWJ: Absolutely.

WCR: How did you choose the University of Toronto? Was it because it was there and was less expensive than going off somewhere, or was it because it was the best university in Canada?

RWJ: It was the best medical school in Canada and also convenient. I could live at home and go to university. It was also less expensive, of course, than going away from Toronto.

WCR: University was a 6-year medical school? You didn't go to college per se like it is done in the USA?

RWJ: We did a combined premed and medicine in those 6 years. The first 2 years were considered premed. If you failed either one of those years, you were out completely. You had no

second chance. If you passed your first 2 years, you were in medicine for the next 4 years.

WCR: How many were in your class?

RWJ: 150.

WCR: You started medical school in what year?

RWI: 1950.

WCR: You finished in 1956. How many finished?

RWJ: There were very few dropouts. There were probably 140 at the end.

WCR: You were the president of your class the final year?

RWI: Yes.

WCR: You were elected by those who really knew you by that time. That's much more important than being president of the freshman class.

RWJ: I was the athletic representative for the freshman class.

WCR: What did that mean?

RWJ: I was supposed to tell people what games were coming up and try to recruit people to play volleyball, basketball, or whatever.

WCR: In 1950, how many people lived in Toronto?

RWJ: Probably about 1 million.

WCR: When you went to the University of Toronto, you went into the engineering school, the premed program, or the humanities. How many were in the whole university?

RWJ: About 12,000 in the whole university.

WCR: That included postgraduates?

RWJ: If the postdoctoral students and those people taking evening courses were included, the number was about 30,000.

WCR: Was home fairly close to the university?

RWJ: Yes, about 2 miles away.

WCR: How did premed and medical school hit you? What surprised you when you really started getting into medicine?

RWJ: Having lectures on Saturdays. I had always had a 2-day weekend. Also, you had to study hard. I had sort of drifted through high school fairly easily, and all of a sudden, I had to study.

WCR: Did you have teachers in public school or high school who had a major impact on you?

RWJ: I loved biology, and I guess the teacher was good because I used to get 98% on biology tests.

WCR: This was high school?

RWJ: Yes. I did not like chemistry. I couldn't remember chemical formulas, and I never thought I'd use chemistry, so I didn't pay much attention to it. I didn't like mathematics much either.

WCR: When you got into medical school, you didn't have a choice. You had to come to grips with a subject whether you liked it or not. It sounds like you made your mind up pretty early that you wanted to be in an arena of medicine in which you used your hands. Did you decide fairly early that you wanted to be a surgeon?

RWJ: No. Not until perhaps my intern year.

WCR: You had a rotating internship?

RWJ: Yes. One orthopaedic surgeon during that year really made an impression on me. He was a great person. He did everything and had great teaching methods. I remember him saying, "What 88 things do you think of when you feel the radial pulse?" I could think of only 3. I started studying the pulse. He'd invite us to his house on weekends, and we'd play football in his

backyard. Because of him, I decided to be an orthopaedic surgeon.

WCR: What did you enjoy in medical school, particularly when you got to the clinical years? I gather you had an open mind for medicine, pediatrics, and the whole picture until the internship.

RWJ: I really enjoyed every subject in medical school and every clinical service I encountered. When going on each new service, I would say to myself, "This is really what I want to do." Then during the next service, I'd change my mind: "This is what I really, really want to do." It wasn't until I got into the rotating internship that I decided that surgery was for me.

WCR: Were there other medical school professors who made an impact on you in university or during your internship?

RWJ: A couple of the internists impressed me very much. We had an awful lot of internal medicine and relatively little surgery in medical school. We had a terrific faculty. In physiology, there was Dr. Best, of Banting and Best fame, who was a Nobel laureate for the discovery of insulin. Best was very impressive. Dr. Arthur Ham of histology fame was there, and Dr. J. C. Boileau Grant of *Grant's Anatomy* fame was there. Dr. William Gallie was the professor of surgery when I started. He started the first surgical training program in North America in which those who started the program finished the program. The residents were all known as "Gallie slaves."

WCR: Did you have fun in medical school?

RWJ: Yes. I enjoyed it a lot. In the summertime, I would work to raise enough money to pay the tuition fees. Three classmates and I had a house painting company for a while. We'd paint all summer. I also had several years in what would be equivalent to the American Reserve Officer Training Corps, which was the University Naval Training Division. I'd go off in the summers to Halifax, Nova Scotia, or to Victoria, British Columbia, and go to sea. That was fun.

WCR: What do you remember about your internship in Toronto? There are several hospitals attached to the University of Toronto?

RWJ: Yes. There are 8 affiliated hospitals. I went to St. Michael's Hospital primarily because the chief of orthopaedic surgery, who had impressed me, was there.

WCR: You must have been leaning that way before you finished at the university, whether you knew it or not.

RWJ: I guess. Maybe I chose to go there because they had better parties than the other hospitals, and I had met him earlier. I can't remember exactly. St. Michael's was a good rotation in medical school.

WCR: A rotating internship in Canada in 1956 consisted of what? You spent some time in internal medicine, pediatrics, obstetrics/gynecology, surgery?

RWJ: Exactly. And there were 30 interns at St. Michael's. We were on call once a month for the whole hospital as an intern. That wasn't bad at all, except my first night on call I had 5 deaths. That shook me. I remember that night well. They were all medical patients with fatal heart attacks or cancer. I would be called at the last minute to try to save them and then have to pronounce them dead. That was a wake-up call to the considerable responsibility one has as a doctor.

WCR: You had to have a certain amount of general surgery before you could go into orthopaedic surgery. Is that right?

RWJ: Not then. You do now. Then I applied for the surgical training course (the so-called Gallie course) and was accepted. The first year was spent in research. I was assigned to a doctor who was doing lung cancer research, which I didn't enjoy. Rather quickly, I got switched to an orthopaedic researcher named Dr. Ian Macnab, who became another big influence on my life. The work I did with him won a big international surgery prize, a circumstance that enabled me to advance in academics. The only other Canadian who had ever won this prize was the professor of orthopaedics.

WCR: What was your research project?

RWJ: It involved fractures of the tibia. We found that if you preserved the blood supply in the periosteum, bone union occurred in a higher percentage of the cases. At that time, most surgeons stripped the periosteum from the underlying bone, and as a consequence tibial fractures healed poorly.

WCR: Do you suture the periosteum around?

RWJ: No. It's usually all slashed and torn, but you can approximate it and put a plate over the top of the periosteum, instead of stripping it down to bone.

WCR: It grows back together pretty well because it has the blood supply?

RWI: Yes.

WCR: Blood gets into the bone from both the periosteum and the marrow.

RWJ: Yes.

WCR: How does blood get into the marrow?

RWJ: There are vessels that penetrate through the cortex of the bone.

WCR: But they have to come through the periosteum, too, don't they?

RWJ: No. They are branches of the large vessels. For instance, in the tibia you have the major vessels coming down the femoral artery, and then it divides behind the knee. One branch goes through a little hole in the bone into the marrow and down. Further down, the branches come back into the periosteum.

WCR: How did you get on that project?

RWJ: I requested the opportunity to work with Dr. Macnab and got switched. He stimulated my thinking. He asked questions that then had no answers: "What makes a bone start to heal? What is the thing that triggers it to heal after a fracture?" I'd say, "I don't know." Then he'd say, "I don't know, either, but I thought something you would say might trigger something in my mind." He was very stimulating. He always dropped pearls of ideas and nuggets of information. I started looking at the fractured tibias. That became a very big project.

WCR: This was during the year you were in the laboratory?

RWJ: Yes. Toward the end of that year, I moved into the hospital and stayed in the priest's quarters because the hospital was run by Catholics. I stayed there for almost 4 weeks. Nuns would bring me food and leave it outside the door. I'd eat, go over the data, and then write. We used a "punch card" system then, the precursor to the computer. I analyzed this and that, wrote it all up, and won the prize.

WCR: What animals did you use?

RWJ: We used dogs, which I didn't enjoy because I like dogs. We also used rabbits and rats.

WCR: You'd put them to sleep and break the tibias?

RWJ: We broke the tibias in a lot of rats. With the dogs, we broke only the fibula, then repaired it and its blood supply. The fibula, of course, is not a structural bone, so the dogs could still walk around.

WCR: We don't really need the fibula? RWJ: It is not for weight bearing. WCR: What is the fibula for?

RWJ: It anchors some of the muscles that work on the foot. It gives origin to your muscles.

WCR: This was the first research you'd ever done?

RWI: Yes.

WCR: That really tuned you in to what academia was like.

RWJ: Exactly.

WCR: You really enjoyed the research. After that year, you started your clinical work. Was that in orthopaedics?

RWJ: No. I did 2 years of general surgery at that point. It was part of Gallie's program.

WCR: How did you like general surgery? RWJ: It was okay. I could take it or leave it.

WCR: You liked orthopaedics better?

RWJ: Yes. I liked the people in orthopaedics. As far as the others, general surgeons were good guys, plastic surgeons were finicky and precise, and neurosurgeons were always thinking. Orthopaedic surgeons were fun-loving, sports-oriented, good guys who would repair a broken bone, and the patient would get better. It was the sort of thing that became a lifestyle: the work was a reflection of your lifestyle. That fitted me nicely.

WCR: After the 2 years of general surgery, what did you do?

RWJ: I moved away. The chief professor, Dr. Ted Dewar, was like the leader of the orchestra. He encouraged and supported the people around him. He brought Ian MacNab to Toronto. He supported Dr. Bob Salter. He developed an orthopaedic training program that involved all 8 hospitals through which trainees rotated.

WCR: He was head of orthopaedics under Dr. Gallie? The Department of Orthopaedics was under the Department of General Surgery?

RWJ: Yes—it was not a separate department then. During my second year of general surgery, Dr. Dewar asked me if I would like to train elsewhere and then come back on staff to Toronto. I said, "Great." I went to Boston and was going to do all my orthopaedic training there. It was all set up, except again I got interested in research and took another year in the lab there with Dr. Melvin Glimcher, chief of orthopaedic research. Mel was one of the true geniuses I've known. He was absolutely brilliant. Toward the end of the Korean War, he was taken into the Marine Corps. Somehow, they realized he was very bright and, instead of sending him off to fight, they sent him to engineering school at Duke University. While there, he developed an IQ test for the marines, which was later picked up by Harvard. When he later applied to Harvard Medical School at the end of the war, he did the 30-minute test in 8 minutes. He knew all the answers because he'd developed the test! On another occasion, he was invited to Moscow when the Cold War was still on to speak on his collagen research. Four months before going, he learned to speak Russian. He had a Russian professor from Harvard who came over 3 or 4 nights a week, and they spoke Russian together. I got intrigued with Glimcher and spent a year in his lab doing some research on collagen.

WCR: What did you do?

RWJ: I spent more time actually with Dr. William Harris, who was a couple of years older than me. We labeled bone cells using tetracycline, which was incorporated into the calcium of the cells. We then fluoresced it and determined how rapidly the bone grew. Dr. Harris later became famous for his work in hip arthroplasties.

WCR: Did you ever have clinical work at the Massachusetts General Hospital?

RWJ: No. I spent an entire year in the lab. Dr. Joe Barr, the professor of orthopaedics (of Mixter and Barr fame for disk surgery) died shortly after I arrived in Boston. The new chief wanted me to start at the very beginning of their training program, which meant that I would have had to go through another 5 years of training. Through the help of some people in Toronto, it was arranged for me to go to the Royal National Orthopaedic Hospital in London, England, to do clinical work. I did 18 months as a senior houseofficer there and then moved to Bristol and became a registrar under Mr. Kenneth Pridie. There were only 2 registrars, so it was a pretty busy service.

WCR: He was head of orthopaedics at Bristol? When you returned to Toronto, your clinical training as an orthopaedic surgeon had been entirely in England?

RWJ: Yes.

WCR: Since you didn't have a lot of money growing up, I gather that you and your parents didn't take long vacations to various places. You hadn't been very many places?

RWJ: Except in the navy in the summertime when I went to Pearl Harbor 1 year and to England and France another year.

WCR: How did England strike you?

RWJ: I loved it, particularly London. It's our second home now. We still go back when we can. Bristol was nice, but it was country. London was a vibrant big city. My wife went with me. We lived in London for about 18 months, and I applied for a registrar job in London but didn't get it; I then applied in Bristol and got it. We moved to Bristol and lived there a year.

WCR: "Registrar" meant that you were the chief of orthopaedics as a fellow or trainee? You were the senior housestaff person in orthopaedic surgery? You got to do whatever you wanted to do?

RWJ: I did almost everything.

WCR: Was most of your training in acute trauma (broken bones)?

RWJ: Yes, primarily fractures. My chief, Kenneth Pridie, had pretty severe heart disease. He was a big man who had not been able to get into the war because of his cardiac condition. By the time I joined him, he was failing rapidly. He'd start a list of 8 or 10 operations, and after the first or second case, he'd say, "Bob, would you mind continuing? I think I'll just go lie down, and I'm there if you need me."

WCR: So you did them all?

RWJ: I "matured" as a surgeon very quickly. It was a great experience.

WCR: Did you do much hand work?

RWJ: Not much.

WCR: At that time most orthopaedic surgeons did everything. There wasn't specialization in hands or joints as there is today.

RWJ: I did elbows, shoulders, knees, ankles, some spinal fusions—everything.

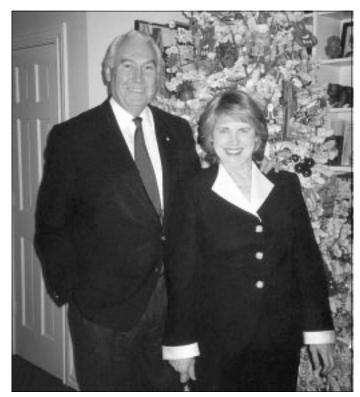


Figure 4. With Marilyn, his wife of 40 years.

WCR: What type of operations did you like the most? If you were doing 15 different operations, there must have been one or two that you enjoyed more than the rest of them.

RWJ: I had an affinity for the knee because I'd had problems with my own knee. Pridie was well known for his knee surgery. He was the first to try to resurface arthritic knees, by a method subsequently known as the "Pridie procedure." He would make multiple drill holes in the arthritic surface and allow fibrous cartilage to grow out to recover the surface. I did an awful lot of those with him. As I was completing the year in Bristol, Ted Dewar called and said, "We want you back here in Toronto in June or July." I had to leave. Pridie had just died, and I was thinking of staying on in Bristol permanently until I got that phone call. The new registrar, Dr. John Insall, and I overlapped for a month so he could learn what was going on in the service. In 1968, he wrote up the Pridie procedure and became very famous for the review. Then he went to the Hospital for Specialty Surgery in New York, a purely orthopaedic hospital, and eventually became the head of the knee service there. He died last year. He became a famous orthopaedist (the Insall procedure and Insall knees).

WCR: You had done most of the operations before he came to Bristol.

RWJ: I was doing what the boss would have done.

WCR: That was an honor, your being asked to stay in Bristol.

RWJ: Yes. I seriously thought about it, but then all our family was still in Toronto, so we went back.

WCR: By this time it was 1963. You got married in 1961 (Figure 4). How did you and Marilyn meet?

RWJ: On a blind date. A nurse friend of hers set it up.

WCR: That was when you were in Toronto?

RWJ: Yes, about 6 months before going to Boston.

WCR: Was Marilyn also from Toronto?



Figure 5. Studying under Professor Watanabe. (Note: This was Bob's last cigarette.)

RWJ: Yes. She was a graduate student at the Ontario College of Music and taught piano before becoming a flight attendant for Air Canada. She was a good athlete and snow skied competitively. She trained with the Canadian National Ski Team for part of a season but never represented Canada internationally. In the summertime, she was in a professional water-skiing show in the cottage country just north of Toronto. She was a great find for me—a pretty girl, intelligent, and very athletic.

WCR: What is the difference in age between you and Marilyn? **RWJ:** Four years.

WCR: What happened in Toronto after you returned from England?

RWJ: After returning to Toronto from England and being there 1 year, I got another scholarship, a Markle Scholarship, that allowed me to go anywhere in the world. Most recipients went to the USA or to England, but it was 1964 and the Olympics were going to be in Tokyo, and I always wanted to go to the Far East. I arranged to do tissue culture work for a year at the University of Tokyo. I also became the team doctor for the Canadian Olympic team. Marilyn was with me there.

WCR: That was before you had children, so you really had fun. RWJ: We were married 5 years before having kids. We had a chance to get to know each other and play and enjoy the places.

WCR: In Tokyo you met the Japanese man who was working on arthroscopy. You must have known what he was doing before going to Tokyo?

RWJ: Not really. Ian Macnab had vaguely heard of Dr. Masaki Watanabe, who was looking inside knee joints. Macnab suggested that I seek out Watanabe in Tokyo. When beginning work at the Tokyo University, I asked about Dr. Watanabe, who was essentially unknown in his own country. Finally, one of the residents rotating through knew him. The resident told me that Dr. Watanabe was at the Tokyo Teishin Hospital, which was the hospital where all the post office workers and their families were cared for. It was a fairly big operation. Although very skeptical, one day I visited Dr. Watanabe and found that with his little scope, one could really see inside the knee joint. Then, I started visiting him 2 or 3 times a week. He apparently enjoyed my visits because they gave him an opportunity to learn to speak English. That was the trade-off. After doing several arthroscopies, we'd go up to his office and eat the Japanese equivalent of pizza, such as fried eel and rice, and drink beer. While doing this, he'd read to me from Grant's Anatomy or the newspaper to practice



Figure 6. Teaching arthroscopic surgical techniques on cadavers in a bioskills laboratory.

his English. He taught me all the tricks of doing arthroscopy (*Figure 5*).

WCR: Had he published anything on arthroscopy then?

RWJ: Yes, but only in Japanese publications; nothing in English.

WCR: What was his apparatus like? Was he just looking in the joint? Was he doing any therapeutic procedures at that time or just diagnosis?

RWJ: He was just getting into therapy. In 1962, he did the first meniscus resection with little scissors that he had developed.

WCR: You were there in 1964. Was his scope connected to a television setup at that time?

RWJ: No, he didn't have television. When I arrived, he had only one viewing apparatus. Together, we developed sidebars (beam splitters), so both of us could look into the joint simultaneously. A little later we devised flexible teaching attachments so the surgeon could have 70% of the light, and those trainees viewing through a fiber optic cable could have 30% of the light. It was a very crude apparatus at that time.

WCR: You knew your way around in the knee joint pretty well by that time. When you first started looking through that scope, were you at home with it right away?

RWJ: With the anatomy, yes.

WCR: You could see pretty quickly what was wrong?

RWJ: The challenge came with the technology itself, because the light source was an electrical tungsten bulb that would occasionally short circuit or break inside the joint. Then, the little glass fragments would be lodged in the joint. You had to have a backup arthroscope so you could go in and retrieve the broken bulb.

WCR: You had to have some tweezers that could get through the tube and that would open up at the end and come back together?

RWJ: Yes, but the technique and the technology at that time left a lot to be desired. We were just beginning to take pictures of the joint. When I left Tokyo, Dr. Watanabe gave me a scope to bring back to Toronto.

WCR: You must have taught him a lot of English?

RWJ: He was a better teacher than I was. His English never got to be very good. He gave me credit for making him a hero in

his own country. He had not been recognized before. When I started talking about and writing about his scope, he then became famous.

WCR: You always gave him credit for starting arthroscopy. What you did was make it a practical reality. Is that fair?

RWJ: I helped to make it a practical reality.

WCR: When you left Japan, the only one in the world doing arthroscopy was Dr. Watanabe?

RWJ: There were also some rheumatologists—2 in Mexico, 1 in England, and 1 in Germany—supposedly looking inside the knee joint for diagnostic purposes only, but there were no other orthopaedic surgeons.

WCR: How big was the scope that Dr. Watanabe was using? How long was it?

RWJ: It was about 6" long and 6 mm thick.

WCR: You had to be right on top of the knee. How long is the tube that you use now?

RWJ: It's not much longer, but now we sit back and hook it up to a closed-circuit television and watch and work from the screen.

WCR: Like robotics?

RWJ: You learn the necessary 3-dimensional movements. You have to develop that 3-dimensional skill from the 2-dimensional images seen on the screen.

WCR: When you came back to Toronto after 6 months in Tokyo, I guess you were like George W. Bush, who found his purpose in the presidency when the September 11 terrorism occurred. You focused on developing the scope as a practical reality. Is that fair?

RWJ: Exactly. But we didn't come straight back to Toronto. We went to Boston again, and I spent another 6 months in tissue culture work and electron microscopy. We returned to Toronto in July 1965, and I started practice. Then when I started to do arthroscopies, I realized I had forgotten some of the techniques. I used to go to the morgue and practice on cadavers (Figure 6). The morgue attendant one day asked me if he could borrow the scope. I asked, "Why?" He said, "In my other life, I'm a private investigator. If I could put this through a keyhole and take pictures inside a room, it would be great." The scope didn't get a lot of respect in those early days. The next year I had a research fellow from Japan named Dr. Isao Abe (pronounced ahbay) come to work with me. At the time I did about 50% practice and 50% research. Fortunately, Abe had spent some time with Watanabe. When I got into trouble with a case, he would say, "Ah so. Just a moment." I'd be getting frustrated, and he would calm me down and clear the field so we could see through the scope again. Abe had a lot to do with my success. I might have quit if he hadn't joined me at that point.

I began to realize that this scope was something special, and I started getting invitations to speak about it at various meetings. My first presentation was in 1967 at the inaugural meeting of the Association for Academic Surgeons. It took off from there. I started giving instructional courses to members of the academy.

Other surgeons started using the scope. Many came to Toronto to learn the technique from me. Pretty soon, there was a network of orthopaedic surgeons who would compare notes and make suggestions for improvements. I didn't develop things all alone, that's for sure. I had help from a lot of people.

WCR: When did you connect the scope to a television set?

RWJ: We did our first television, black and white, in 1968. The University of Toronto didn't consider arthroscopy something it should fund. Consequently, I didn't have a color television for my operating room until probably 1974. Television was available in several centers in the USA and elsewhere before we had it in Canada.

WCR: How long did it take before arthroscopy changed from entirely a diagnostic tool to a therapeutic tool?

RWJ: A torn cartilage in the knee was the first abnormality we treated. We learned that bringing another instrument through a second portal was much better than going through the hole you were looking through. That second portal gave a little more freedom. We got an instrument company to make little scissors and graspers. Then it became a contest of who could do a meniscectomy the quickest. My record was 6 minutes to cut the front and the back, excise the torn meniscus fragment, and close it up. Initially, however, it was a 60- to 90-minute operation. The encouraging results of those early stages in the mid 1970s led the industry to develop the instruments we needed. As mentioned, the early instruments occasionally broke, and the broken glass or broken metal would dislodge into the knee joint. We'd have to go in and pluck out the broken bits. When these problems were overcome, the procedure then moved fairly quickly from just a diagnostic procedure to a therapeutic procedure.

WCR: What can you do now via arthroscopy in just the knee from a therapeutic standpoint?

RWJ: Now virtually all meniscal surgery is done that way. We use shavers to remove abnormal synovium, the lining of the joint. We use little trephines and plugs to resurface arthritic areas via drill holes. You can take a plug of bone from a good area and put it into a bad area through small incisions. We can reconstruct the anterior cruciate ligament. We can treat osteoarthritic knees by smoothing off articular cartilage fragments. Apart from doing total joint replacement, there is very little that cannot be done arthroscopically. Broken knee joints and the tibial crush fractures can be elevated and the bone grafted under arthroscopic control through a little incision. I estimate that 80% of knee operations are now done arthroscopically.

WCR: Should almost everybody who has a knee replacement have 1 or more arthroscopic procedures beforehand?

RWJ: No, not if the knee is really bad, i.e., stage 4, the worst stage of arthritis. In the earlier stages, yes, it really makes a big difference. There is so much that can be done. In stages 1 and 2, the early stages, you can almost always get a perfectly normal knee. Stage 3 is where we are focusing now. We're trying to resurface or repair arthritic cartilage rather than replace it. We now have a mantra: "Repair rather than resect."

WCR: You're talking about osteoarthritis. Do you think there's going to be a day when via the scope you will spray some cartilage on the joint's surface?

RWJ: Yes, I do. Someday.

WCR: When did arthroscopy move to the shoulder?



Figure 7. Their 5 children.

RWJ: I started doing shoulders in the mid 1970s; arthroscopy for shoulders became mainline in the mid or late 1980s. In the mid 1970s, I also experimented with elbows and ankles.

WCR: Is arthroscopy really very good for ankles or elbows?

RWJ: Those are developing areas. There are certain things you can do arthroscopically, but not everything.

WCR: But for knees and shoulders, it's good?

RWJ: It's very good. I believe that the success of arthroscopic surgery in the knee is what spurred our general and thoracic surgeons to start laparoscopic surgery. Even brain surgeons are doing endoscopic work now. It is called *minimally invasive surgery*.

WCR: Your arthroscopy work must have led to the referral of many patients to you and brought you a great deal of satisfaction?

RWJ: I had a policy from the beginning that I did not want to be an arthroscopy "technician." If a referring doctor wanted me to provide help with a knee problem, I wanted to be able to provide any operative therapy necessary, including replacement, depending on what was found arthroscopically.

WCR: You became a full professor at the University of Toronto in 1982. You had come back full-time in 1965?

RWJ: That's right.

WCR: Those must have been 15 very busy professional years for you. You also had children coming along every couple of years. You must have had a pretty active life.

RWJ: Yes. My wife, Marilyn, was my secretary when we came back to Canada. The professor of obstetrics phoned one day (Marilyn answered the phone), and he said, "I just delivered twins. Would you like them?" She said yes. He said, "You'd better ask Bob first." Across the desk she said, "We've got a chance to adopt twins. Would you like that?" I said, "Sure." She quit her job with me right then. We went out and started buying stuff for the babies. My study in our little apartment became the nursery. A week later we had twins through a private adoption. In those days it was fairly easy.

WCR: One boy and one girl.

RWJ: Yes. Gorgeous kids. A year or so later, another obstetrician friend phoned and said, "I hear you like kids. Would you like another one?" I said, "Yes. What is it?" He said, "We don't know. It's not due for another 2 or 3 months." Later, one night, we got a call telling us that we had another little girl. We adopted 3 children and then had 2 more of our own (both girls). We had 5 kids in the space of 7 years (*Figure 7*)!

WCR: It's a good thing you had those 5 years to get to know each other earlier.

RWJ: I think that was the key.

WCR: Now you have 8 grandchildren?

RWJ: Yes, and another one on the way. It's a lovely family. They are great kids.

WCR: Everybody gets along well?

RWJ: Yes.

WCR: You were not only busy clinically, but your research work went well. You never gave up the investigative part of your career?

RWJ: That's correct. That's always been very important to me, and I've enjoyed it very much.

WCR: Have you been able to keep 50% clinical and 50% research for much of your career?

RWJ: No. From 1977 to 1985, when I was so busy clinically, I didn't have a lot of time for the research lab. But I always had fellows, and they carried out my ideas.

WCR: Your professional career blossomed nationally and internationally. I'm sure you had offers from a lot of places through the years. How did your offer from Baylor University Medical Center in Dallas to be chief of orthopaedics develop?

RWJ: Dr. Adrian Flatt invited me down to give one of the named lectures for the department.

WCR: Had you and Adrian been friends?

RWJ: I'd never met him before. That was 2 years before I came permanently. I came down and gave the lecture.

WCR: What did you talk about?

RWJ: I guess it was arthroscopy. Shortly after that, I got an invitation to come down as chief because he was going to retire. I said, "No, I'm not really interested in moving." He kept asking me. He was asked to stay on another couple of years until they got a chief in place. They kept going after me. Boone Powell, Jr., invited me to Boulder, Colorado, a beautiful resort. It's a great golf place. I spent a weekend with Boone, just the 2 of us. He asked, "What do you really need? What do you want?" He made notes. I said, "I've got 5 kids, and they need to get through university." He said, "Okay, so you need so many dollars each year for each kid while he or she is going through college." That became the contract. I thought that this was a pretty good offer from Boone.

At the same time, the situation in Canada was steadily deteriorating. As chief of the Orthopaedic Hospital, I had to ration total hips and total knees, telling people they couldn't do any more for this month because we had run out of money. They were closing wards. We didn't have any research funds. We couldn't start any new clinical programs. It was negative, negative, negative, negative, negative. What I was feeling about Texas was that there was a "can-do" attitude. If you had a good idea, you could do it. Boone gave me a good offer. The combination of the deteriorating Canadian health system and the good job offer at Baylor led me to accept. I'm very happy I did.

WCR: You came to Baylor in December 1991. Were there any surprises after you came to Baylor? You had never worked in the American system before. Although you'd been in Boston, you had been doing research only.

RWJ: Correct. I hadn't done clinical work in the USA. The medical malpractice concern surprised me. Everybody was twitchy about it—you can't have a visitor in the operating room

unless that person is preapproved. The culture was different. I didn't quite understand what was going on in the board meetings because I didn't know the background of a lot of issues. There are a lot of things that go on with people who have lived and worked together over the years, and it's hard to break in. It takes a while to really understand what is cooking. As a place to live, Dallas has been great. I've got a nice house. I don't have to commute very far because I live close to Baylor. The opportunity to raise money for research and educational things is always there. Every good thing that I thought should be done, we've been able to do. That's been a breath of fresh air for the final years of my career.

WCR: I presume you are provided a salary but that you can augment it with some private practice. Most members of your department are private practitioners. Their entire income, maybe with 1 or 2 exceptions, comes entirely from private practice. Has that been a problem at all or has it worked out smoothly?

RWJ: Unlike other places where I was chief, here I have the responsibility but no authority. Most university chiefs control salaries and positions. Here I cannot influence incomes or determine salaries. I have to achieve things by setting an example or by coercion or by persuasion or whatever you want to call it if we're trying to get something done as a department. That's different from the Canadian system.

WCR: How many orthopaedic surgeons use Baylor University Medical Center actively?

RWJ: About 35.

WCR: Your arthroscopic procedures are primarily done on an outpatient basis?

RWJ: Right.

WCR: How many of those are done by the department a year?

RWJ: About 1100.

WCR: Most of those are knees, I presume.

RWJ: Knees and shoulders.

WCR: How many hip replacements do you do as a group?

RWJ: We do about 800 hip and knee replacements a year.

WCR: How would that proportion work out?

RWJ: They are probably about equal now. The number of knees has gradually risen to be about equal to hips.

WCR: Are the results of knee replacements as good as the results of hip replacements?

RWI: Yes.

WCR: For hips, do you use mainly cement or the porous shafts?

RWJ: I haven't done hips for a long time, but I think mainly it's porous shafts.

WCR: Do you do knee replacements?

RWJ: Yes. With knees we use a thin layer of cement usually, but mostly it's the shape and pressed fit concept.

WCR: "Pressed fit" means what?

RWJ: It means that the ends of the bones and marrow area are shaped very accurately to accept the implants, and the surfaces are porous metal.

WCR: So bone can theoretically grow in there?

RWJ: Yes.

WCR: *Knees must be harder than hips.*

RWJ: I think they are pretty easy. The knee is more accessible than the hip.



Figure 8. Skiing, which was a family sport.

WCR: You've got 2 bones to get right, rather than just one, correct?

RWJ: Yes, the tibia and the femur.

WCR: How do you get the height right? How do you make sure that the length of the left leg and the length of the right leg are going to be the same when you replace one knee?

RWJ: The soft tissues around the joint, the capsule, and the ligaments are retained when you do the bone cuts to shape the lower end of the femur or the upper end of the tibia. You put the metal implants in on both those sides and then insert spacers to increase the distance between the 2 metal surfaces until you restore the normal length of those ligaments and capsules. It goes up by millimeter increments. If you find an 8-mm space is appropriate, you use an 8-mm insert. If it's loose at that, you go to a 9- or 10-mm insert until everything is tight, and then the leg lengths are equal. It's pretty easy.

WCR: Your research has gone pretty well since you've been here at Baylor. You operate every other day? How do you fit your clinical work into your other activities?

RWJ: On Mondays, I do big operations, like total knees and ligament reconstructions. On Tuesday and Thursday mornings, I do outpatient arthroscopies.

WCR: Wednesday and Friday are nonoperative days with few exceptions?

RWJ: Right. Those are research and administrative days.

WCR: You and your wife have enjoyed Dallas?

RWJ: Very much.

WCR: What do you like about Dallas?

RWJ: I like the people. There's good southern hospitality and good restaurants. A typical night out for us is to go to a nice restaurant. We also belong to the Lakewood Golf and Country Club. Marilyn plays golf once or twice a week. I play about once a month. She beats me now. It's a nice way to live. What we miss is our family in Toronto and in Calgary. We travel a fair bit to visit them, and they come down here a fair bit.

WCR: All of your 5 children are still in Canada?

RWJ: Yes.

WCR: That's tough. How do you work your traveling into your schedule? You're still in demand as a speaker and visiting professor.

RWJ: As long as I feel like I'm doing my job for Baylor, I don't worry about losing time in private practice. I can control the



Figure 9. As president of the international wheelchair sports movement at games in England in 1981 with Prince Charles, the patron of the British Sports Association for the Disabled.

private side of things. If I know I'm going to be at a meeting or traveling to give a lecture somewhere, nothing is booked for the day before and a couple of days after, just in case I get stuck in an airport. I don't have to be responsible to other colleagues in a group practice for generating a certain amount of income to pay expenses. It's very nice to be on my own.

WCR: Do you have any nonmedical hobbies? You mentioned playing golf once a month, but that's not very often.

RWJ: That's about it. I used to ski (*Figure 8*), but now it's work and golf. For many years I was involved with sport for the disabled. That was a big part of my life. In 1964, when I was with the Olympics in Tokyo, the Paraplegic Olympics followed by a couple of weeks. There were no Canadian athletes in those games. I went to see the game organizers. Soon I was talking to Sir Ludwig Guttman, the chairman of the games, who was knighted for this work. He told me Canada was oriented toward the home and work situation for their paraplegics and quadriplegics. Those were good programs, but there was no recreational sport or anything else in Canada. I promised him that we would have a Canadian team for the next Olympics in 1968.

We started in a small way in Toronto with some paraplegics whom I had gotten to know as patients. At that time I was in charge of the acute spinal injuries unit. We started with track and field events. Each week more and more people would come out. Soon it was a pretty active club. We found out that other clubs in other parts of Canada were also sprouting up. Soon we had a weekly ham radio network set up so we could communicate. We developed ideas for our first national games, and we



Figure 10. As team doctor for the Toronto Argonauts professional football team, a role he held for 27 years.

chose athletes from those games to represent Canada at the Paraplegic Olympics in 1968 in Tel Aviv. That was a very exciting time. I was then put on the board of the international movement because I could speak English. Most of the members were from non–English-speaking countries. By 1972, I was vice president of the board.

In 1976 we ran the Paraplegic Olympics in Canada. I had to take almost a year off from work. With the help of the university who let me off, we organized the largest amateur sporting event in the world that year, next to the Olympics. It was fabulous. One day I'd be negotiating menus for 3000 people. The next day I'd be in Ottawa talking to the Russian embassy to try to get them to send disabled athletes to the games. Their response then was, "We don't have any disabled." I said, "What about the amputees?" Their response was that they were all beautifully looked after. I also asked, "What about the blind?" Their response was, "They play chess." They ignored the fact that there was so much more that could be done. It was a great administrative experience to develop these games and to run them.

Four years later, Sir Ludwig Guttman died, and I became president of the international movement (*Figure 9*). I tied that job in with arthroscopy, as I was being asked to travel all over the world on the arthroscopy speaking circuit. If going to Peru, I would make arrangements in advance to meet with their health minister about a team for the Pan Am games. In China, I met Chairman Deng's son, Deng Pufang, who was the health minister and a paraplegic himself. Meeting him was like someone com-

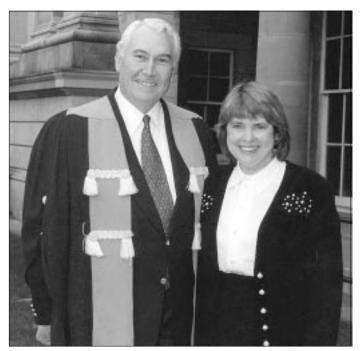


Figure 11. With Marilyn, receiving an honorary degree from the Royal College of Surgeons in England.

ing to the USA and saying, "I want to meet George Bush." Deng was the ultimate leader. His son actually came to the hotel where I was staying with a retinue of 30 people (translators, guards, and secretaries). We arranged for China to enter the international games. It was fascinating work, but then it got so busy that I had to give it up because of growing kids. I had to make some money at home. Also, the Canadian health system was deteriorating, and I had to work harder and harder to make less and less. It was a situation that led to my coming to Baylor.

One other job that I really enjoyed was looking after a professional football team, the Toronto Argonauts of the Canadian Football League. This involved taking care of all the injuries, as well as advising or referring the office staff, the wives of the players, the cheerleaders, the ticket takers, etc., when they had a health problem. I did that for 27 years, so it was a big part of my life (*Figure 10*).

WCR: You have received numerous honors for your work through the years. Of all the honors you have received, which ones do you appreciate the most?

RWJ: I've been given an honorary degree in the Royal College of Surgeons of England, which was very gratifying (*Figure 11*). Also, to be recognized with the Order of Canada after I'd left the country was a great honor (*Figure 12*).

WCR: That was 1998. What does the "Order of Canada" mean? How many receive that a year? What's its magnitude?

RWJ: Out of a population of 30 million, maybe 40 people are recognized annually. It's like knighthood used to be in England, but Canada eliminated the "Sir" business. Another award that was very gratifying was in 1994, when *Sports Illustrated* named me one of the 40 people who had had the biggest impact on sport in the 40 years of their publication. That was because of the introduction of minimally invasive arthroscopic surgery.

WCR: You were only one of 3 nonathletes so elected?

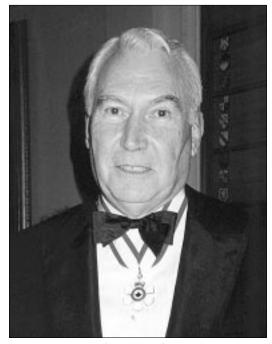


Figure 12. Recipient of the Order of Canada.

RWJ: Of the other 2 nonathletes, one was a lawyer who developed the free agency system for athletes, and the other was the man who invented Astroturf. There also was a horse, Secretariat.

WCR: Certainly your Olympic work with the disabled would be high up there?

RWJ: That's right. Juan Samaranche gave me the Olympic Order in 1997 (*Figure 13*). He was president of the Olympics until just this year. The Olympic Order is their highest honor. This year I got the "Mr. Sports Medicine Award" from my peers, the American Orthopaedic Society for Sports Medicine. That was also nice.

WCR: What do you and Marilyn do at night and on weekends?

RWJ: I don't usually get home until about 8:00 PM. I watch television, eat, and go to bed. I don't do a lot of work at home. I usually get up about 5:00 AM and work in the morning when I'm fresh.

WCR: What time do you come in to Baylor?

RWI: 7:30 AM usually; at 6:30 AM if there's a meeting.

WCR: You work half days—12 or 13 hours!

RWI: Yes.

WCR: *Do you miss the snow, rain, and ice in Toronto?*

RWJ: No. I like Dallas' weather. Our plans are that we will eventually spend the summers in Canada, where it is not so hot, and the winters here, where it's not so cold.

WCR: Do you think you'll ever retire?

RWJ: Yes, eventually. I want to be around for the Baylor centennial in 2003.

WCR: What do your children do? RWI: My son is a firefighter.

WCR: The twins are 35. What does his sister do?

RWJ: She's married with 2 beautiful little girls. She had her own business called "Graduate Dog Training" and met her husband, who was in the pet store business. He's now a real estate agent. They are doing very well.

WCR: They live in Toronto?



Figure 13. Receiving the Olympic Order from President Juan Samaranche.

RWJ: Yes. My son, Wade, left university and went out West to see his cousin, who was a professional mountain guide. Wade stayed in the mountains for 3 years and became a professional skier and avalanche worker. In the Canadian summers, he would go to Australia and do the same thing. When he came back, he got into the Toronto Fire Department, where he can save lives, give first aid, and experience danger. It fits him beautifully. He's a great firefighter. The third was an excellent student and got her master's degree in urban planning at the University of Toronto. She has 2 girls. Her husband has a master's degree in environmental studies and is now in the telecommunications business. The fourth is a fitness instructor and has 3 boys and another coming, and her husband is also a firefighter and has his own construction company. The last one, our baby, is 28 now. She's an associate producer in a TV production company in Toronto, having obtained a degree in multimedia productions from Humber College in Toronto.

WCR: Where does she work?

RWJ: She's with a company that does a lot of animated series that are sold around the world. She runs the office and makes all the arrangements. None of the kids were interested in medicine.

WCR: They never saw you!

RWJ: I think that's right. I was very embarrassed once when one of them told our neighbors that they would have a visitor for dinner on Sunday: "Daddy's coming."

WCR: If you are working from 7:00 AM to 8:00 PM now, what was it like in 1985? What time were you getting home then?

RWJ: About the same. I probably put in more hours now than I did then. The hours in Toronto in 1985 were pretty intense, but I was chief at the Orthopaedic Hospital. It was beautiful. Everybody was professional, and all dealt with orthopaedic problems. The social workers, physiotherapists, and radiologists were geared into it. Everything just clicked. We could do a lot of work quickly and effectively, and that was always a treat.

However, the government, in its "wisdom," decided to close the hospital. It was a small hospital, 200 beds. That is another reason I came here.

WCR: When you were in Canada, were you on salary? Your whole staff was on salary?

RWJ: No. It was always a fee for service. I had a salary from the University of Toronto for several years, but it was only \$200 a year. For the "privilege" of being on the university staff, you attracted more patients into your private practice.

WCR: How did the private practice there differ from the private practice here?

RWJ: There was a minimal malpractice threat in Canada. Every case brought against a doctor was defended by the malpractice insurance company, a national thing. Everybody belonged to the same insurance company. If a case did get to court, the verdict was given by a judge who was knowledgeable in medicine, not by a jury. The loser paid all the costs of the court. Frivolous suits therefore were eliminated. We lived in a nice environment. You did your best. Things sometimes went wrong, but you'd rarely be decimated financially by some aggrieved patient who didn't get the result he or she expected.

WCR: What was your malpractice insurance in Canada?

RWJ: It was around \$500 Canadian a year. Since I left, it's gone up to about \$10,000. The government now pays half of that.

WCR: What is it now in Dallas?

RWJ: Anywhere from \$20,000 to \$60,000 for an orthopaedist.

WCR: Why don't you do hip replacements?

RWJ: I got so busy with knees that I began to lose the skills necessary to do other procedures.

WCR: Orthopaedics is really subdivided now.

RWJ: Yes, it is.

WCR: There are hand people, knee people, hip people, and back people. Do you do any back procedures anymore?

RWJ: No.

WCR: Do most of the orthopaedic surgeons who do backs do mainly backs?

RWJ: Yes. Not much else.

WCR: Who does better back surgery, neurosurgeons or orthopaedic surgeons?

RWJ: If the pain is due to disk pressure on a nerve root, I think an orthopaedist can do as well as a neurosurgeon, and he also has the ability to fuse the spine if it's an unstable segment. Therefore, I'd have to lean toward the orthopaedist. For a spinal tumor, of course, that's the neurosurgeon's realm.

WCR: Do you do any acute trauma work anymore?

RWJ: No. I've been exempted from that for a long time. At the Orthopaedic Hospital in Toronto, there was no trauma. There was no emergency department; it was all purely elective surgery. Now at Baylor, we have a policy that if you are >55 years of age, you are exempt from covering the emergency department. Consequently, for 15 years now, I haven't done trauma.

WCR: You don't miss that?

RWJ: No, I don't miss it. That's a young man's game.

WCR: Is there anything else you'd like to discuss, Robert, that we haven't?

RWJ: It's been a pleasure and an honor to expound and be asked questions about my life. I don't think there's much else. Do you think anybody really reads these interviews?

WCR: People don't come up to me and say, "I think those interviews are terrible. I don't think you ought to do them." They either say something complimentary or don't say anything. I think people like to get to know others better. I interviewed one of my fellows, who was with me for 2 years, 1977 to 1979. We worked closely together during that period. We'd spend all day Saturday working on a paper or in the lab together. He went on and had a beautiful career. Four years ago in 1997, I interviewed him for The American Journal of Cardiology. I thought I knew this fellow extremely well, and then I realized that I had known him only superficially. It was a bit embarrassing for me.

Everybody has a story of their own, and if you don't delve in there and try to find it, you won't really know them. I'll bet that few of your colleagues are aware that you worked with the Olympics for the disabled, that neither your mother nor your father went to college, that you were a pretty good athlete and your wife is an excellent athlete, or that your first 3 children were adopted. I think that says a lot about you. I'll bet that few realize you chose to go to Japan in 1964 and how that trip had such a huge impact on your career.

RWJ: One thing I like about medicine is getting to know the patients. I always ask each patient 3 questions: How old are you? (that is important because physiologically and chronologically they can be very different), What do you do for a living? and What do you do for fun? That stumps a lot of them. They have to think. They'll say that they're big in the church or they collect butterflies. I can then delve into that to get to know them. From then on, it's a much better relationship than just a knee problem.

WCR: They know you are interested in them. They can trust you.

RWJ: Yes. And you're doing the same thing with these interviews. It's fascinating and interesting.

WCR: Have you read any of these interviews? Do you like them? RWJ: I've read the interviews of George Race, Adrian Flatt, and Ron Jones.

WCR: Thanks so much, Bob, for talking to me so openly so that the BUMC Proceedings' readers can know you better.

RWJ: Thank you.

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