Jay L. Grosfeld, MD

Interviewed by
Michael D. Klein, MD

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PREFACE

Oral history has its roots in the sharing of stories which has occurred throughout the centuries. It is a primary source of historical data, gathering information from living individuals via recorded interviews. Outstanding pediatricians and other leaders in child health care are being interviewed as part of the Oral History Project at the Pediatric History Center of the American Academy of Pediatrics. Under the direction of the Historical Archives Advisory Committee, its purpose is to record and preserve the recollections of those who have made important contributions to the advancement of the health care of children through the collection of spoken memories and personal narrations.

This volume is the written record of one oral history interview. The reader is reminded that this is a verbatim transcript of spoken rather than written prose. It is intended to supplement other available sources of information about the individuals, organizations, institutions, and events that are discussed. The use of face-to-face interviews provides a unique opportunity to capture a firsthand, eyewitness account of events in an interactive session. Its importance lies less in the recitation of facts, names, and dates than in the interpretation of these by the speaker.

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ABOUT THE INTERVIEWER

Michael D. Klein, MD

Michael Klein graduated from the University of Chicago and the Case Western Reserve University School of Medicine. He completed a surgical residency at the New England Deaconess Hospital during which he spent a year as a senior resident at the Children's Hospital Boston and a year in the laboratory of M. Judah Folkman, MD. Dr. Klein then went to the Children's Hospital of Michigan, Detroit for a residency in pediatric surgery. He has served on the faculty in the department of surgery at the University of New Mexico and the University of Michigan until going back to the Children's Hospital of Michigan and Wayne State University School of Medicine where he has remained since 1984. Dr. Klein has been Director of the Department of Pediatric Surgery and of the training programs in pediatric surgery and surgical critical care as well as Director of the IV Team, Nutrition Support Team, and ECMO Team. Currently he is the Surgeon-in-Chief and the Arvin I. Phillipart Chair and Professor at Wayne State University. Dr. Klein's research activity has included congenital abdominal wall defects, blood materials interaction, extracorporeal circulation, robotic surgery, and the use of Raman spectroscopy for the detection of malignancy.

Dr. Klein has served the American Academy of Pediatrics on the Committee on Hospital Care, the Executive Committee of the Section on Surgery (of which he has been the Chair), and currently as Chair of the Surgical Advisory Panel. He first visited Dr. Grosfeld in Indianapolis in 1977 and has participated with him in many pediatric surgical activities since then, including serving on the editorial board of the Journal of Pediatric Surgery of which Dr. Grosfeld is the editor.
Interview of Jay L. Grosfeld, MD, FAAP

Editor’s Note: This interview was taped in two parts. Due to a taping problem, this first section was re-taped at a later date than the second section, which begins on page 12.

SECOND INTERVIEW, TAPE ON MAY 31, 2008

DR. Klein I am here today with Jay Grosfeld for the oral history project for the American Academy of Pediatrics. This is May 31, 2008, Saturday. We’re actually at the JW Marriott Desert Ridge [Resort & Spa, Phoenix] at the APSA [American Pediatric Surgical Association] meeting. We are doing this again so we can hear about Jay’s early life and how he got to be the kind of person he is. So let me just ask you, how did it all start? Tell us about your family and growing up.

DR. GROSFELD: I was born in New York City in 1935 and grew up in Brooklyn. We had an intact family and my mom and dad were married for a long time, they had a fifty-year marriage. I had one older sibling, a sister named Claire who is three years older than me. There were just the two of us, and I was the baby of the family and the only boy. I always felt I got kind of special treatment because of that. My sister was always very good to me, always looked after me. We grew up in Brooklyn. I went to the public school system in New York which was of high quality at the time.

It was an interesting time. We never took a bus to school; we always walked to school, rain, sleet or snow, whatever, you just walked to school and at the end of the day you walked home. Fortunately, we only lived about three blocks away and I recall walking around, the Brooklyn College big football field. There was a fence around the football field and I would walk along the fence to get to school. It was Public School 152. That’s where I grew up.

It was kind of interesting experience because my sister was a very gentle person. She was an artist and an excellent student. And all through grade school and later in high school—I went to Midwood High School—I would sometimes have the same teachers that she had had three years earlier. When it was time for my parents to come to open school night and discuss the progress of the children with the teachers, there was always a similar comment made, “Oh, you know we had your daughter as a student and, to be honest with you, Mr. and Mrs. Grosfeld, we really couldn’t believe that Jay was her brother.” I wasn’t a bad student, but I was much more interested in sports activities, and wasn’t an intense student in my early days. I played sports in school both in high school and college.

DR. KLEIN: What sports did you play?
DR. GROSFELD: Basketball was my main sport. I played football, but got a concussion and some broken ribs and my parents didn’t want me to do that anymore. They wouldn’t sign permission and you had to have parental permission to be on sports teams. It was mainly basketball, which I loved, and it was part of growing up in New York City. Lots of kids played basketball. There weren’t large numbers of big fields to play on, and you didn’t need a lot of room to shoot hoops and that’s what a lot of people did. We would play all sorts of sports that kids in cities play that aren’t played in rural areas, like stoop ball, stick ball, punch ball and things like that. Those were unknown sports in nonurban areas.

DR. KLEIN: No organized sports with uniforms and referees.

DR. GROSFELD: Right. There were leagues but no uniforms to speak of but we enjoyed the competition very much. Of course, growing up in Brooklyn, the Brooklyn Dodgers were the professional baseball team that kept a borough of three million people together. There was a common cause, hoping the Dodgers would win the pennant and beat the [New York] Yankees, which rarely happened. If they did get to the World Series, they had trouble winning, and there was always the comment of, “Wait till next year.” The players lived in the neighborhood and were very civic minded. But it was a different era. I can remember when I was 10 years old, World War II ended and there were these wonderful street parties. Everyone was so delighted that the war was over. I won’t forget that, because that was such a wonderful experience to observe even though I was only 10 years old at the time. It was just things like that that made growing up sort of very special. We had a lot of good friends who were basically good kids and drugs weren’t a big deal in those days. Very few people were on drugs. In fact, I can only remember one young man in our neighborhood that was a few years older than I was; he was kind of ostracized because he was a “druggie.” There were the good kids and a few bad kids, and the bad kids weren’t idolized like they are today. You know, being “bad” wasn’t good when I grew up.

DR. KLEIN: [Laughs]

DR. GROSFELD: It was a different era. During the summers, it got hot in the city and you went to the beach, either Brighton Beach or Reis Park near Long Island. That was always fun. Or you want away to camp to play ball at summer camp. That was the kind of life we had. It was rather pleasant. My parents were pretty strict. I didn’t have a lot of sleep-overs. I had a curfew and I had to be home on time. I wasn’t allowed to drive until I was 18 years old because that was the law in the state, in New York, at the time when I grew up. I think it still is. You couldn’t go to a bar in those days.
unless you were 18. Sometimes kids would try to get some beer and other things earlier, but it really wasn’t looked upon with a lot of positive feeling. People really did what was right most of the time and it was a sound way to grow up. You could define things by what happened to the good guys and the bad guys and you had to be good or else my father would deal with it. So we behaved and for the most part didn’t get in too much trouble growing up, and enjoyed it very much.

Then we went off to school, to college. Initially I went to George Washington University.

**DR. KLEIN:** What did your father do? What kind of work was he in?

**DR. GROSFELD:** He worked with my grandfather. My father went to high school. He played baseball and ran track. I played basketball and football, so we didn’t pursue the same sports. He never went to college. He went into business with his father. My grandfather owned a firm called University Coats and Tailors in the clothing district in New York. During World War II they had government contracts to make uniforms for the armed forces, so they did rather well. After my grandfather passed away, my father really didn’t have much stomach for the business anymore so he stopped doing that. He went into the vending industry and rapidly found out that a lot of that was tied into the underworld. So he contracted with schools, hospitals, and state institutions, the Armed Forces where there were a number of different bases around New York City, Floyd Bennett Field, the Naval [Brooklyn Navy] Yard, Fort Hamilton, places like that. So he had government contracts, school contracts, hospital contracts, that were all very clean. He was quite successful. After I would come home from basketball practice, I’d go out and help him take care of a lot of the machines around these different places in the evenings. Then I’d come home and do my homework. He was always a very hard working disciplined guy in that he made sure you did the right thing and if you didn’t, he’d take care of it. My mother was a very gentle person. She was a housewife; she didn’t work. She raised my sister and I. She was a very warm and loving mom. They were God-fearing people. They taught us what was right and what was wrong and how to behave and be courteous and be respectful to older people.

**DR. KLEIN:** Did they encourage education and going to college?

**DR. GROSFELD:** Yes, they did. My sister went to school in New York. She was an honors student so she went to Hunter [College] and she studied art and education. She worked with an Oriental artist called Dong Kingman, who was a very fine water color expert. She worked with him for a while and then she settled down and had a family of her own. They were adamant about pursuing education.
My father came from a family of five children. His eldest brother was a physician, my uncle. He was a general practitioner. So my father wanted me to be a physician and work with his brother. I didn’t want to be a family practitioner, nor did I want to work with my uncle. But it was a good stimulus.

I went to Washington, DC, to go to George Washington University and play basketball. So I didn’t do much with schooling in the two years I was there. They were a very good team in those days. I started on the freshman team and then sat my second year, I got red-shirted. So I was going to spend a lot more time in college than I thought I was. So I decided to go home after two years, back to New York. I transferred to Washington Square College at New York University. In those days, the main campus for New York University was in the Bronx. They had a branch campus in Washington Square for the school of commerce and a very small liberal arts school called the Washington Square College of New York and that’s where I went, down in Greenwich Village, and that was fun. We caught up with our college credits that we didn’t have in Washington [DC] because we weren’t there that much. We were always on the road.

The teams at GW were really good those two years I was there; they were ranked fifth and seventh in the country. It was a little above my head. I should have gone to an Ivy League school to play. Most kids growing up in New York wanted to play for the [New York] Knicks and play in Madison Square Garden some day, things like that. Very few were good enough to do that. When we went to George Washington, they were in the Southern Conference; there was no ACC [Atlantic Coast Conference] at the time. Integration hadn’t occurred yet, so all the schools in the Southern Conference just had Caucasian players. I rapidly found out I was just an average white jump shooter.

DR. Klein: [Chuckles]

DR. GROSFELD: When I went back to New York. Washington Square College was like a Division III team, so we did play and we only had practice a couple of times a week and you played the small schools (what would be mid majors) and That was fun, because I could concentrate more on my studies and went ahead and fulfilled all the requirements to go to medical school, which I had decided to pursue with vigor. And it worked out all right. I was an honor student for the last couple of years as an undergrad. I had to go to summer school to catch up with enough credits to graduate on time. I continued with sports, but it was at a much different level. It was 1955 and we kind of turned our academic life around a little bit. I had a very good Italian history professor and majored in biology and history. I liked history a lot and if I didn’t go to medical school he was going to help me
pursue a career in the Foreign Service, which my parents weren’t happy about, so I went to medical school instead.

We stayed on in New York and I went to New York University School of Medicine, which is a great school. We had really some marvelous basic scientists, a few Nobel Prize winners. Severo Ochoa in biochemistry, (the fellow who discovered glucose 6-kinase. People like [William] Vanderkloot who was a pharmacologist and Otto Loewi who discovered acetylcholine, he was one of my professors. Also, Baruj Benacerraf who subsequently went to Harvard [University], but he was there as a member of the faculty; he too was a Nobel Prize winner Homer Smith, the famous renal physiologist, Chandler Stetson in Pathology It was a remarkable group of basic scientists. Clinical surgery was even more exciting.

Our first couple of years in medical school was somewhat disappointing in that it a like a continuation of undergraduate school with basic sciences. I thought we were going to start dealing with patients right away and it wasn’t that way. Things really started to improve toward the end of the second year when we started to have clinical correlation courses that sort of enforced how basic science fit into your clinical practice and then things seemed to gel. The last two years of medical school the clinical clerkships and all that were great.

DR. KLEIN: Was there ever any question about you going into surgery?

DR. GROSFELD: Yes. As a junior student, of course I wasn’t quite sure what I wanted to do. Every course seemed exciting because it was new. I thought I would be an obstetrician at first because I liked kids. In those days, at Bellevue Hospital, the junior students worked together in the OB [obstetrics] unit and were supervised by a resident. One student would give nitrous and oxygen anesthesia to the ladies and the other student would deliver the babies and do the episiotomies as junior students. I must have delivered 40 children during my rotation, and thought I was pretty good at it. Then, we also had to do ambulance runs, emergency runs. One day, we were on an emergency run, came back and in the emergency area where the ambulance had pulled in there was a taxi cab. There was a policeman leaning in the back seat of the taxi cab. So we sort of looked over and wondered what was going on and whether he needed help or anything. He said, “No, we’re doing fine. This lady just couldn’t get in there quick enough, so I was delivering her baby.”

DR. KLEIN: [Laughs]

DR. GROSFELD: Well, that kind of shot down being an obstetrician in those days. I said, “Well, maybe I’ll get interested in pediatrics, because I like kids.” When I was on the pediatric services there were no NICUs
[neonatal intensive care units] in those days. All the premies [premature infants] died, they just didn’t survive; most of the kids who had tumors did not survive. Leukemics, for instance, would all die. A lot of the pediatric care at that time was taking care of well babies, kids with measles and mumps and preparing formulas, learning how to deal with formulas and infectious diseases. It just was a bit of a disappointment. The kids weren’t, but the practice of pediatrics in those days was.

Then I went on the surgery rotation and I turned on. That was a great experience. When I was a senior student I took an elective in pediatric surgery and it was at the time of the Berlin Wall crisis and the residents and interns were drafted right out of their training into the army because we thought we were going to war with Russia. So as a senior student on an elective I was suddenly told that, “You’re staying on this service; you’re the intern for the next few months.” So I had a chief resident and a surgery faculty person and I took care of this children’s ward. We took care of all the fractures, burns and everything else. As it wound up, they were very kind to me and I wound up doing about 50 operations as a senior student, being the “intern” and I also covered an adult female ward at night every other night.

So I had about five months of this sort of intense preparation for an internship later on, and it was then during that time of being with the children that I recognized that was the direction I would take. I was going to be a baby surgeon. And it worked out that way. We stayed on in New York and trained in general surgery. John [H.] Mulholland was the chairman when I started. Frank C. Spencer was the chair when I finished. Frank Spencer was an outstanding professor, great teacher. We spent a lot of time listening to him and learning from him. He was a gifted teacher and he turned things around in that program quite a bit. I thought he was a very, very fine educator and a good surgeon and brought a lot of new cardiac surgery ideas to New York City. He was an absolutely superb teacher. He would have M & M [Morbidity and Mortality Conference] and that was always an experience. You had to really know what was going on. He was very tough on the residents in Morbidity and Mortality Conference.

My family was always happy about my progress in doing what I was doing. They had given me, the things that I needed to succeed, about learning to be kind to people and being sensitive. My father provided me with the concept of a good work ethic, how important that was in life, and being honest and taking care of what you had to. He used to tell me, “You go to work every day and do the best job you can do and things will work out for you.” And it was true. That’s exactly what happened. So that was kind of how I grew up.

DR. KLEIN: Did you start doing research during residency?
DR. GROSFELD: Yes, we did some research. There wasn’t a lot of time off in those years to do research, so you did it on weekends or at night. There were no defined working hours (the 80 hour week) in those days. You were there all the time. We worked every other night, every other weekend. But you had to be there if your patient was sick, even if you were off and it was just the way it was. Whenever you had time you would get to the lab. Most of that was at night or on the weekend or whenever you could do it. It seemed to work out. Things got done. Although I must admit, my academic productivity during general surgical training was not at the same level it was later on. We published about four or five papers as a general surgery resident, then went into military service at the time of the Vietnam War for a couple of years.

DR. KLEIN: Was that after your residency?

DR. GROSFELD: After the general surgery residency. I was in the Berry Plan. Margie and I got married right after the internship.

DR. KLEIN: Where did you meet her?

DR. GROSFELD: I met Margie at Bellevue Hospital. She was a nurse and had graduated from the University of Virginia. In those days, the airlines liked to have nurses as airline hostesses. In fact, at one time you had to be a nurse to be a hostess. At the time, she was flying for TWA, which no longer exists now. She flew out of New York; she was based there after she graduated U.Va. [University of Virginia] in Charlottesville. You could only fly a certain numbers of hours per month, so in-between flights she’d come to work at the hospital. She was a surgery nurse. She was rolling up the bed on one of the wards I was on as a young house officer and I saw this wonderful looking woman with these beautiful eyes and I said, “Who is that?” So we met, and fell in love and eloped about six weeks later. And that seemed to work out OK; that was 46 years ago. So that is how we met. We met in the hospital on a ward, sort of a romantic kind of thing. She was working two jobs at the time.

DR. KLEIN: You both had the right work ethic.

DR. GROSFELD: I think so.

DR. KLEIN: So what did you do during the Vietnam War then?

DR. GROSFELD: Actually, we went to Texas for our basic training, just like everybody else in those days. I went in as an officer, because in the Berry Plan you could complete your training prior to induction. Actually I had permission initially to complete pediatric surgery training too. I had applied for a position for that when I was a second year resident. Dr. Donald [A.] Davis was a pediatric surgeon at New York University; he was a
friend of Dr. [C. Everett] Koop. He drove me down to Philadelphia for an interview with Dr. Koop. It seemed like that was where I would go when I completed my general surgery training. There was no pediatric surgery match in those days. I hadn’t heard from Dr. Koop by the time I was a senior resident, so I called him and wanted to know when I was supposed to come to Philadelphia. He said, “Well, gee, I was going to call you. Dr. [Isador Schwaner] Ravdin (the Professor of Surgery at Penn) told me we had to take someone from the Penn program [University of Pennsylvania], so I can’t take you.” I had to start looking for a job. We went to Chicago [Children’s Memorial Hospital], Detroit [Children’s Hospital of Michigan] and Columbus [Children’s Hospital]. Dr. [Clifford D.] Benson in Detroit was very nice. Dr. [Orvar] Swenson in Chicago was kind of busy when I was there and I hardly spoke to him. Then I went to Columbus [Columbus Children’s Hospital] and I met with Dr. [H. William] Clatworthy [Jr.] and we clicked. Dr. Clatworthy offered me a position, the next day. So I was pretty happy with that and then the government said that I couldn’t take the position. So I had to call Dr. Clatworthy back and tell him, “I can’t come; I have to go into service.” He was very understanding and told me I would just come after I got out of the service.

It was at the time of the Vietnam War and things were not going well and they needed physicians. We went to Texas for our basic training at Fort Sam Houston and then got stationed at Fort Jackson in Columbia, South Carolina, anticipating that the second year I would be going to Vietnam. We went there with all the kids. By then we had three children (all girls; Lisa, Dalia and Janice), my son Jeff was born in South Carolina. My son Mark was born in Columbus, Ohio after we moved there, and that was our fifth child.

The Army was sort of interesting because I still played ball. I was on the basketball team that first year and then became the coach of the base team. We had a very good team; had all these guys who had played basketball in college. We were winning all these games and tournaments. Margie was trying to plan on moving to Hawaii with the kids so that if I went to Vietnam I could get there quickly for R & R so that I could see the children. But it never happened. We were declared “essential.” So we spent the second year of service time also at Fort Jackson, South Carolina. So I never actually went to Vietnam.

DR. KLEIN: You were essential for basketball or for surgery?

DR. GROSFELD: Well, that was one of the reasons, I believe. There was only one other surgeon there, also. A Major named Jack Major was a regular army guy, and wanted to become a colonel. He had to go to Nam to get promoted. He subsequently wound up being a general, and was really nice guy. But he left. And then another fellow who was with us got sent to...
Korea for some reason. So it was just myself, one other fellow and a colonel who was not terribly adept at surgery. We spent both service years in South Carolina and then went off to Columbus to be with Dr. Clatworthy.

DR. KLEIN: Dr. Clatworthy saved your place?

DR. GROSFELD: He did. He said, “Don’t worry about doing that. I was in the service. You’ve got to go serve your country and when you finish you’ll come back here.” And that’s what happened.

We were in the service for two years and then I went to Columbus in 1968. That was probably two of the best years of my life. They had a very good faculty: Tom [E. Thomas] Boles [Jr.], Bill Clatworthy, Tom [Thomas S.] Morse, Blanca Smith. She was a smart lady from Argentina and was sort of interesting. Jim [James A.] O’Neill [Jr.] was my senior resident, so we were residents together and that started a friendship that has lasted all these years. We’ve continued to be very close for over 40 years now.

That decade of the 1960’s and the beginning of the 1970’s, Dr. Clatworthy probably trained more professors of pediatric surgery than anybody else in pediatric surgery. Biemann Othersen, Peter [K.] Kottmeier, Rick [Eric W.] Fonkalsrud, Dick Ellis, Al [Alfred A.] delLorimier, Marc [I.] Rowe, Arnold Leonard, Neil [R.] Feins, Jim O’Neill, and myself. It was quite a group of people. It was quite an interesting time. Of course, Dr. [Robert M.] Zollinger was the chairman at Ohio State University Children’s Hospital wasn’t on the university campus; it was a few miles away. We had to go to the university campus for Dr. Zollinger’s grand rounds and for other conferences. It was a good experience, he was quite a character.

DR. KLEIN: I think we should continue because I don’t think that is in what is printed yet. I think we have to go until you arrive in Indiana.

DR. GROSFELD: Well, Dr. Clatworthy was a brilliant clinician and also an extremely gifted teacher. He really stimulated you to pursue greatness. He would always ask questions for which there were often no answers. If there was a condition that nobody knew anything about he would ask you, “Why?” and, “What are you going to do about that?” If there were things to look at, he would always make you look at conditions where children weren’t doing well. At the time, it was the beginning of treating Wilms’ tumors with chemotherapy and the development of the CCG and cooperative studies. Kids with Wilms’ tumors suddenly started doing pretty well. But the kids with neuroblastoma were doing terrible. And the kids with rhabdomyosarcomas weren’t doing well. So those latter areas is where he wanted you to focus because you could make a bigger impact trying to help children who weren’t doing well than children who were doing well and really didn’t need you that much. It was his way of thinking. He would
constantly ask you, “What happened to the baby?” You would make rounds
and if he disagreed with the treatment program that was selected for an
infant, he would ask you, “Well, who told you to do it that way?” And if it
was one of the other attending surgeons, you would say, “Well, it was Dr. So
and So’s patient.” He said, “But, who is the resident on this service?” And
you would say, “Well, I am.” He’d say, “Well, why did you do it that way?”

DR. KLEIN: [Laughs]

DR. GROSFELD: He would question things and if he was really upset
about things he would just look at you and say, “What this baby really
needed was a doctor.” He would make rounds and he would come out with
things like, “You know, you don’t want to let anybody ever hurt the baby, so
you have to watch everybody. Don’t trust anybody. You have to watch what
the anesthesiologists are doing. You have to watch the baby in the x-ray
department, because they will let it get cold. You have got to sometimes
watch some of the nurses.”

You had to know everything about every baby in the hospital when you made
rounds. He’d make rounds on your own patients, and you obviously knew
those well. But there would be babies or older children on other services in
beds nearby and he’d say, “What’s that baby got?” And you’d say, “Well,
I’m not quite sure.” He’d say, “Isn’t that baby in your hospital?” And
you’d say, “Yes.” And he said, “Well, look at that baby. Don’t you think
there is something wrong with that baby?” “Yes.” And he’d say, “That
baby shouldn’t be on that service. It should be on our service. That baby
has Hirschsprung’s disease. Look at that belly.”

He was just a remarkable clinician and a brilliant man; really a very
thoughtful teacher. He taught me how to write and how to produce
abstracts; he was great at doing that. It was sort of interesting, you’d bring
an abstract to his office and it would come out with all these red marks on
it—it would look like a blood bath. And he’d say, “Well, you know, I’d like
to see the next rendition of that.” He said, “Bring it back when it is cleaned
up.” I said, “OK.” He said, “Bring it back this afternoon.” Stuff like that.

He’d catch you and say, “Do you have any things that we can submit to the
Central Surgical [Association] or to the AAP [American Academy of
Pediatrics]?” or whatever. I would say, “Well, when is the abstract due?”
And he would say, “Well, within two days.” So you’d have to run to the
record room and start thinking of things to put together; be up all night
going through hundreds of charts, sometimes with one of the other residents.
You’d get something on a piece of paper and bring it to him. His secretary
would cringe when you walked in the door, because they didn’t have any
word processors in those days. She knew that no matter what you brought it
was going to be changed and if she typed it up it would have to be retyped
completely every time. The word processing system saved lives of hundreds of secretaries everywhere.

But he was a very special man and he was a good friend. We remained pretty close all through the years. He died when he was 83. He was always a good friend, a great advisor, and a marvelous teacher. So I was blessed with two individuals who were truly gifted teachers, Frank Spencer and Bill Clatworthy.

DR. KLEIN: Where did you go from Columbus?

DR. GROSFELD: Well, Dr. Spencer said I had to come back to New York. He was the professor, and those days you did what the boss told you—so you said, “Yes, sir.” And we went back to New York. My wife liked New York, even though she grew up in the south. We started with a salary of $15,000/year in New York in 1970.

DR. KLEIN: Even in 1970, that wasn’t a lot of money to live in New York.

DR. GROSFELD: Right. Dr. Spencer was good to us. He made sure that we had an office and a secretary. He was very liberal in regard to letting you maintain a practice within the system. But it was different from being in a children’s hospital. We ran around a lot. We worked at St. Vincent’s Hospital in Greenwich Village, the New York Foundling home because that was a Catholic institution affiliated with St. Vincent’s, the Women’s and Children’s Infirmary [New York Infirmary for Women and Children] in Gramercy Park, as well as New York University and at Bellevue. And my lab was in the VA Hospital [Manhattan]. It seemed to work out. Although we ran around a lot.

We had five kids then, and couldn’t live in the city. We lived up in Mamaroneck which was in Westchester along Long Island Sound, about 18 miles from the city. It was lovely; we lived a block from the beach. It was great for the kids and my wife, except they never saw me. I would go in about 5:00 am and get home about 10 pm at night. Working in New York, the rush hour is an extended thing that may last for a few hours so we would go in before and come home after. By that time, I could make rounds around the city driving from one hospital to the other to see all the patients. So it was very different than being at the children’s hospital when we were in Columbus.

We did that for a couple of years and then went out to Indiana. Dr. [John E.] Jesseph was the Chairman of Surgery in Indiana and he had been Zollinger’s vice chair at Ohio State University so I had met him when we were in Columbus. He invited me out to look at the position at Indiana University.
Of course, Indiana was a pioneering adventure that was terrific; it was a great decision to go to Indianapolis in 1972 and we have been there ever since.

END OF SECOND INTERVIEW

FIRST INTERVIEW ON SEPTEMBER 12, 2006

DR. KLEIN: So you did this clinical study on appendicitis.

DR. GROSFELD: In the service.

DR. KLEIN: In the service.

DR. GROSFELD: Yes. I kind of enjoyed that. We had some very good results in perforated appendicitis among recruits using delayed wound closures. We had a much lower wound infection rate that was clinically significant, and it got approved by the Army. You couldn’t publish anything in the service unless it got approved, so I figured it was a pretty good study, and it did get accepted and published by the *Annals of Surgery*, which pleased me.

And then when I went to Columbus after the service, Dr. Clatworthy was a great stimulation. He was a great clinical analyst, and he would say, “Well, why do you think that went wrong? Why do you think that occurs?” He would often ask you questions for which there were no answers, just to stimulate you, to make you pursue things. He said, “You know, we have a fund for a lab. If you have some time, maybe you ought to go over there and study this or that topic.” So that’s how it started. We did some fetal work on distribution of maternal aspirin in fetuses and what affect that had. We did some work on transplanted tumors in animal models,—

DR. KLEIN: Who was in the lab to do the work?

DR. GROSFELD: A lab technician and I did all the work. We’d run over there late in the afternoon and put in an hour in the lab until rounds, and then we’d get paged and run back. It was kind of haphazard, but we were able to get some work accomplished. And studies completed. We did some short bowel experiments on puppies, because that was an area of his [Dr. Clatworthy’s] interest. We ran out of money to house them, so they had to be kept up on the roof. One of the puppies fell off the roof. It was a terrible thing.

DR. KLEIN: Oh!
DR. GROSFELD: Yes. We got in a little trouble for that, but he was very understanding. And then one day he asked, “Is the appendix worth anything?” And I said, “Well, you know, it gets infected and people take it out. When you’re very old it sometimes fibroses.” He said, “Yeah, but look at all the lymphatic tissue in there. Is that worth anything?” He’d go into this talk about the bursa fabricius in birds. He was just so bright. Then he said, “You know, I wonder if you could use that tube [the appendix] for anything. It’s a tubular structure. I wonder if you could use it to replace things.” He said, “Why don’t you think about that?” So I did, and I went to the lab, and I replaced the bile duct with the vascularized appendix, and it worked. And then we put it in the urinary tract and [brought it out as a urinary stoma], replaced the ureter. We did it all with animals, and it all worked. We published it in the JPS [Journal of Pediatric Surgery], and the ACS Surgical Forum, which was published as an annual book in those days. That was a number of years before [Paul] Mitrofanoff published his work using the appendix as an appendicostomy for urinary diversion. When we left Columbus we never followed up on it because we didn’t have support to continue the work. But we had the idea a long time before it became popular clinically.

Now, we did two clinical cases, replacing the bile duct, one in a child with a choledochal cyst and one in a baby with biliary atresia. The biliary atresia case got cholangitis. Dr. Boles was so concerned, he made us take it down and do a jejunal loop.

DR. KLEIN: Oh, wow.

DR. GROSFELD: Which we probably shouldn’t have done that and just given the baby steroids.

Mike [Michael R.] Harrison’s group reported using the appendix in the biliary tract in the 1980s as an original idea, so we wrote him a little letter,—

DR. KLEIN: [Laughs]

DR. GROSFELD: —just to indicate that it was done before and it would be good to have his young people check the literature before making comments like that. He was very apologetic. It was a pretty unique idea. Dr. Clatworthy’s inquisitiveness stimulated the development of it. He never did come to the lab to see it. He said, “You’ve done that already?” And I said, “Yes, I did it yesterday.” He said, “Oh.”

DR. KLEIN: [laughs] Oh, that’s great.

DR. GROSFELD: Yes. So that kind of turned me on and then when I went back to New York—I got lab space at the VA Hospital. By that time, I
really got interested in cancer and did a lot of work with cancer research in animals, with liver tumors and neuroblastoma, because the results in patients with those tumors were so bad. One of the things that Bill [Clatworthy] had stressed was that a lot of people get concerned about things that affect children that are doing well and involve things you can take care of. He said, “You should get interested in conditions in which children are doing poorly, and that’s where you can really make a contribution.” It was just little things like that. Every day he’d have something of value to teach you. It’s so rare to have gifted teachers like that.

DR. KLEIN: It really is.

DR. GROSFELD: Yes. He was a remarkable man. He really had a true gift for teaching.

DR. KLEIN: You said that during your pediatric surgery residency, during your two years in Columbus, you wrote about forty papers.

DR. GROSFELD: Right. I’d do that at night.

DR. GROSFELD: Okay. Where did you get this facility with writing? Or let’s start with this: How long does it take you to write a paper? Is it one draft and it’s done?

DR. GROSFELD: No, you have to work on it. Actually, at the beginning Dr. Clatworthy would say, “Gee, the Central Surgical abstract deadline is coming up. What do you have?”

DR. KLEIN: [Laughs]

DR. GROSFELD: He said, “Why don’t you look up the rhabdos? We’ve been doing some pretty good work with the combined therapy in rhabdos.” Which was true. We had one of the earliest studies demonstrating combined therapy was beneficial. And I said, “Okay. When is the abstract due?” He said, “Two days.”

DR. KLEIN: [Chuckles].

DR. GROSFELD: So I called the lady in the record room to get out the charts. We worked all night, and we got all the data on forty-two patients, and brought him an abstract the next day. He looked at the abstract. He’d shake his head, and he’d just shake his head again, and out would come this red pen. It looked like a bloodbath by the time he got through with it, and then he’d say, “Here. Let me see the next version of it later today.”

DR. KLEIN: [Laughs]
DR. GROSFELD: I said, “I have cases scheduled.” He said, “Well, I’m leaving at three.” “Okay.”

DR. KLEIN: [Laughs]

DR. GROSFELD: And somehow I would get it done. He was a master of abstract writing, and he taught me. It looked like a bloodbath on paper, but I learned. He really taught me. Learning to write and understanding the English language is another thing. I was not a good writer as an undergraduate. I wrote my thesis in history, and I did okay with that, but it was a challenge. Over time, I learned to write in a way that made it easy for people to read and understand. When I left Columbus and went back to New York, Dr. Frank Spencer was my boss—he had a Texas drawl, that sometimes was hard to understand, and he’d tell you, “Tell ‘em what the problem is. Tell ‘em what you’re gonna tell ‘em. Tell ‘em, and then tell ‘em what you told ‘em.” I said, “Okay. I can understand that.” The simple methodology just seemed to make so much sense, and sort of carrying that in a slightly more sophisticated way with the pen, that worked out pretty well. Dr. Clatworthy’s secretary, Dee Britt, who was with him for many years, shuddered every time I walked through the door because it meant she had to revise another full manuscript. There were no computers or word processors in those days, so if you made changes, you had to type the entire manuscript over again. Every time I would come in to his office, he would make changes, and she’d say, “Dr. Grosfeld, what are you doing to me?” I said, “Dee, it’s not me. He’s making the changes.”

DR. KLEIN: [Laughs]

DR. GROSFELD: So the computer was a great asset to secretaries.

DR. KLEIN: I’ll never forget when I was in [M. Judah] Folkman’s lab in 1976, Mary Jo had a mag [magnetic] card machine, which was just before the computer word processor, which we all thanked God for, because we could just do something like that.

DR. GROSFELD: When I got home, I would stay up all night, writing. My wife Margie would stay up with me. She was reading and doing her studies because she taught Bible study. She’s taught that for thirty-five years here, in Indiana; so we would stay up together, doing our work.

DR. KLEIN: You told me once that you also had this wonderful facility or biological gift of not needing much sleep.

DR. GROSFELD: I used to sleep about three hours a night when I was home. At the hospital I almost never slept. I always worried something was
going wrong with one of the babies, and I’d always go back and look again and examine him or her and make extra rounds. It just worked out that way. I think being a baby doctor, you don’t have the luxury of talking to your patient, so you have to be a very astute observer, and you have to constantly observe the baby and get all the information you possibly can from the nurses, the mother, the grandmother, who’s ever been around the baby while you were in the OR [operating room] and couldn’t observe him. You had to read the nurses’ notes, and read the baby—you know, look at the baby and be able to tell if a baby looks good or is sick. Even today I tell the residents if a nurse on the newborn unit calls you and says, “I’m not sure what’s going on, but Baby so-and-so just doesn’t look right,” don’t give her a hard time; just go up to the NICU right away because something’s wrong with the baby. Go see that baby right away.” It’s just something adult physicians don’t understand because they can visit their patient and say, “Hello, Mrs. Smith, how are you today? Does anything hurt? Are you okay?” We just don’t have that luxury. Our babies don’t talk to us, so we really have to be astute observers.

DR. KLEIN: I had two great quotes I use in teaching. One is from Zachary Cope’s *Acute Abdomen in Rhyme*. “more harm was done because you did not look, than from not knowing what was in the book.” And then there was [Kenneth L.] Jones, who has become very famous. He took over David [W.] Smith’s genetics business in Seattle, and discovered fetal alcohol syndrome. He was my chief resident on pediatrics when I was a pediatric surgery intern in Seattle. He said, “You’re an intern? Your job is to just stay up and be there and look at the patient and when it doesn’t look right, call someone. You don’t have to know what to do. Just be there.” “Okay. I got it.”

Okay, so at any rate, so now we’re caught back up, and you’ve arrived in Indianapolis. How did you go about that whole process of starting pediatric surgery, a laboratory, and a residency? There are an enormous number of things to do, for which you didn’t have any experience.

DR. GROSFELD: That’s true. Yes, it was a pioneering adventure. It was different from Columbus and some of the other places, like Cincinnati, where you had established children’s hospital systems and everybody in the city knew about the children’s hospital, and sent all the children there. When I began working in Indianapolis, the only children that ever came to Riley Hospital [for Children] were the crippled children nobody else wanted to take care of, and all the good stuff sort of stayed in every little hospital, where people took care of them. The results weren’t great, obviously. What we did for the next three decades was try to build a referral system for the seriously ill and injured child. Conceptually, what we had to show was that we could do it better, that the patients did better, that the parents liked it better. The outcomes were better. We believed there were bad outcomes thirty years ago and tried to set up a system where we could provide quality
care to infants and children that they couldn’t get elsewhere in the state. Conceptually, that wasn’t always accepted well by a lot of people in general surgery and even in pediatrics, just to think that a surgeon would want to take care of a baby. It was a battle at times, but by just doing what’s right and working hard and coming to work every day, doing the best job you can do, things seemed to work out. People recognized that the major concern was for the patient, and the patients were doing well. We were trained well and knew what we were talking about. We made good diagnoses and got people out of trouble.

Ninety percent of my work the first year was re-dos, patients that had been treated inappropriately elsewhere for whatever reason. Ninety percent of the patients came from outside the city of Indianapolis, from rural towns and small areas around the state. I recognized that we had to get out there to let people know what was going on, so usually late Thursday afternoons I would travel the back roads of Indiana to small towns and visit hospitals that had ten or eleven doctors in them and talk about what we did, and take these little side roads back home and learn about the state quite a bit. It’s a lovely state. Within a week or two, some physician from one of those hospitals would send me a patient, and we did that for almost five years.

DR. KLEIN: At the time, Riley was a complete children’s hospital?

DR. GROSFELD: It wasn’t contemporary at the time. It was lightly staffed. There were eight operating rooms, but only three were open. There were about a hundred pediatric surgery cases done the year before I got there. The first year, I did 400 cases; in the second year, we got it up to about 800 cases; then after that it just kept going.

DR. KLEIN: How many cases a year were you doing before you had your first associate?

DR. GROSFELD: About 1,000 to 1,500 cases, somewhere in there.

DR. KLEIN: And you had one resident.

DR. GROSFELD: A second-year resident, who really was happy to get off the service when he did.

DR. KLEIN: [Laughs] I can imagine.

DR. GROSFELD: Don [Donald R.] Cooney was my first second-year resident.

DR. KLEIN: Oh, really?
DR. GROSFELD: Yes, and he obviously went into pediatric surgery and had a pretty good career. He helped me get the lab started. I got some lab space, and I needed refrigerator, and a centrifuge—but I didn’t have a lot of funding for it. We cleaned the lab up ourselves. Don was interested in research, so we cleaned the lab up and got an old OR table and a light and some other things, and then got some money from the Riley [Children’s] Foundation for instruments, and got some grant money from the American Cancer Society and the Riley Foundation to get started. I’d say, “We need a refrigerator,” and the next day Cooney would have a refrigerator.

DR. KLEIN: [Laughs]


DR. KLEIN: [Laughs]

DR. GROSFELD: Things like refrigerators, centrifuges, and all sorts of equipment would just show up. We started doing projects on short bowel syndrome and tumors and developed a tumor colony with neuroblastoma and hepatoma, and did some studies on the fat rat years ago before obesity surgery became popular. When they started doing jejunooideal bypass, we did some research that showed you really shouldn’t do a bypass procedure in young subjects because it interfered with growth. Those were pretty good studies that were presented at the Society of University Surgeons. Then we got involved with projects to study necrotizing enterocolitis in the laboratory, trying to sort out, ischemia/reperfusion and a variety of other factors. Surgery residents started coming to the lab and got interested in both research and in the field of pediatric surgery. We got a little ventilator in the lab, an incubator and started an animal tumor colony. We also did some experimental work on splenic salvage, partial splenectomy and postsplenectomy sepsis. It just built up. We started getting external funds from some foundations and pharmaceutical companies. We didn’t get a lot of NIH [National Institutes of Health] money. But it worked out. The lab was pretty busy and productive for about thirty years.

DR. KLEIN: Yes, I’ll say, I’ll say. Did you have allies in your early years?

DR. GROSFELD: There were a few of the pediatricians who were allies. Dr. Green, Morrie [Morris] Green, who was the head of pediatrics—he was an ally. He had the same vision I had. He was a wonderful man, very soft-spoken and gentle. He took care of children who were troubled. Troubled children were often sent to Dr. Green rather than to a psychiatrist, and he would handle them beautifully. He was a good doctor, too, and was very
supportive. Joe [Joseph F.] Fitzgerald, the head of pediatric gastroenterology was also an ally—great clinician and dear friend.

DR. KLEIN: Now, was this hospital a community hospital?

DR. GROSFELD: No.

DR. KLEIN: A university hospital?

DR. GROSFELD: Just a university hospital. It wasn’t a community hospital. It was a closed staff.

DR. KLEIN: Okay.

DR. GROSFELD: At first the neonatologist, Ed [Edward L.] Gresham was sort of anti-surgery. Many of the early neonatologists were trained in Denver with Dr. [Frederick C.] Battaglia, whose byline was, “Never let a surgeon touch the patient.”

DR. KLEIN: [Chuckles]

DR. GROSFELD: So we had to win the neonatologists over. And we did that, because we made diagnoses quickly, because we’d seen the surgical problems that baby’s had before. We’d walk through the newborn unit and spot babies that were in trouble and offer assistance.

DR. KLEIN: [Laughs]

DR. GROSFELD: And they would respond, “How did you know that?” Over time, we would travel to hospitals around the state together with the neonatologist like a horse-and-pony show. We would go visit these little hospitals in small towns, give some talks and the patients would come. Ed Gresham was the first neonatologist in the state. Over time we became good friends. He was a decent guy. Unfortunately he developed a viral myocarditis and died of an arrhythmia. And Bob [Robert L.] Baehner came from Boston as the hematologist-oncologist. He and I were very good friends and built up a very good childhood cancer program. We had good endocrinologists.

It was sort of interesting that I had to win over some of the adult surgeons, too. I remember in the early seventies having a real battle about employing non-operative management for abdominal trauma. We were watching injured spleens, and they were going crazy. Of course, it worked out that we were way ahead of the curve in that regard. Pediatric surgery was also way ahead of the curve in instituting and participating in multidisciplinary
cancer care. Similarly, early on, we initially were much more comfortable using TPN [total parenteral nutrition] than other specialists.

It was fun but challenging. You had to take people on without aggravating them, because you couldn’t get to the point where you made people you so angry at you that you couldn’t get things done. We had to learn how to deal effectively with a lot of people who questioned what we were doing, at the beginning especially. Of course, in a small farm state in the Midwest, coming from the East Coast, people are suspicious of you. At the beginning, when I’d go to these little towns and hospitals and they’d say, “Well, where are you from, sir?” And I would say, “Well, I’m just from a little town on the East Coast trying to make good in Indiana.”

DR. KLEIN: [Laughs]

DR. GROSFELD: And that’s how it worked out. The folks here are wonderful people. They are salt-of-the-earth people, hard working, very thoughtful and thankful for what you do for them.

DR. KLEIN: How was your practice organized? Again, was this a university salaried position or were you fee for service?

DR. GROSFELD: At the time, Dr. [John E.]. Jesseph, the department chair at IU [Indiana University], sort of ran an open department. There was no departmental practice plan. I got a small baseline salary from the university, and then I was responsible for running my own section. Pediatric surgery became a section in the department (with one faculty member for five years—me).

DR. KLEIN: [Chuckles]

DR. GROSFELD: We had to pay for everything out of our section, so that’s what we did.

DR. KLEIN: You were responsible for separately organizing, billing.

DR. GROSFELD: Oh, yes. We just took care of it.

DR. KLEIN: There was no practice plan from the university or something.

DR. GROSFELD: No, we did it all ourselves. We had to structure it; we had to get the personnel to do it. We didn’t have a big budget. I did get secretarial support. We were funded in the laboratory. We had a baseline fund each year in the lab to hire a technician, (Lucy Clanton – who stayed with us for 30 years) so we were able to continue that flow. In the fifth year
at Riley, Tad [Thomas V. N.] Ballantine came out here from Boston Children’s [Children’s Hospital Boston]. He joined me as my first associate. He stayed four years and then became chief at Hershey [Penn State Milton S. Hershey Medical Center]. Then Tom [Thomas R.] Weber came out for four years and then became chief in St. Louis [St. Louis University School of Medicine]. Following her residency at IU and Riley, Karen West joined me, and then Dennis Vane joined me, and then he became chief of pediatric surgery at Vermont [University of Vermont College of Medicine].

DR. KLEIN: Vermont, right.

DR. GROSFELD: Yes- Then Fred [Frederick J.] Rescorla joined the faculty. He was also trained by me in general and pediatric surgery. Then we added four more people, including some who had been here in general surgery and trained in pediatric surgery elsewhere like Deb [Deborah] Billmire and Tres [L. R.] Scherer [III].

DR. KLEIN: So when you finished, how many pediatric surgeons—

DR. GROSFELD: We have eight.

DR. KLEIN: There were eight pediatric surgeons.

DR. GROSFELD: Eight on the faculty.

DR. KLEIN: This is also interesting to me. Does that mean that you guys were doing 8,000 cases a year?

DR. GROSFELD: No, the hospital does around 14,000 cases a year but we (the pediatric surgery section) were doing about 3,500 cases a year, but it allowed people to do certain things. My modus operandi was to give each individual an area where they could be successful and get recognition and grow, so I put Karen West in charge of the ECMO [extracorporeal membrane oxygenation] Unit. I’ll tell you a funny story how ECMO started.

DR. KLEIN: Okay.

DR. GROSFELD: Tres Scherer came back from Hopkins and trained in general surgery here. I put him in charge of trauma. I took care of the cancer and the children’s oncology area for twenty-five years. Then I let Fred take that over, so he became in charge of that. Scott Engum joined us after training here as well. He was given the responsibility of developing new educational programs and ran the departmental student clerkship. And [Alan P.] Ladd was given the responsibility of running the senior student electives and the obesity program. And Tom [Thomas] Rouse, who joined our group from the practice community, was our outreach person to some of
the other hospitals and was also involved in trauma at Methodist Hospital [of Indiana]. Deb Billmire came back to Riley after training in Buffalo and working in Philadelphia. She got involved in cancer and ECMO. So they each had kind of their own area, where they could be recognized as a leader and learn, be given responsibility and grow. It seemed to work out. Of course, Fred eventually wound up as my successor.

DR. KLEIN: Oh, that’s good. But things are changing. I know there were changes in Indianapolis, some of which are frankly almost frightening, in terms of what’s going on at the other hospitals, such as in Cincinnati. It was happening at a lot of places.

DR. GROSFELD: Yes. Pediatric surgeons in the Midwest have always had a very warm, congenial, mutually supportive relationship. They respected each other’s turf, shared experiences, shared information, shared techniques. You know, it’s a small group, closely related people, with common goals and the like. And then, of course, in surgery, just like other areas of academic medicine became corporate, and they became influenced by programmatic change; administrative change; and by a lot of factors: including global and local economic change. Basically they didn’t have total control over their destiny because of these factors. It became kind of a different ballgame, whereby people were more excited about expanding power and financial opportunities than taking care of babies, doing the right thing and doing the best job they could do in their own back yard.

On the East Coast, people got angry at the Philadelphia group, with their fetal program trying to expand into everybody else’s turf. They’re still not happy with that. And in Cincinnati—as you know, they have two pediatric surgeons at St. Vincent’s [St. Vincent Indianapolis Hospital] here in Indianapolis that were recruited from the Denver program. They sort of raided the Denver system and took two faculty members out of another program to work here in a community hospital that has no significant volume of major cases. We just opened up a new hospital on the north side about a mile from where these people work, with another seventy pediatric beds, Riley North, and I don’t think they’ll be overly successful. But just the thought of former colleagues doing that makes you think about what we are becoming. Is this sort of an intentional game plan? Or will people in our profession still have respect for each other? The bottom line is power and money are more important to some. They may be influenced by administrative desires in their own institution, personal goals or just greed. I guess you have to take all these things in stride and just do a better job than other institutions. After all, competition is the American way!—

END OF TAPE SIDE
DR. GROSFELD: Let me tell you a funny story about ECMO.

DR. KLEIN: Oh, yes, please.

DR. GROSFELD: It was in the early days, (1980s) when Kathy [Kathryn D.] Anderson had presented some of her work about ECMO and Bob [Robert H.] Bartlett had been a pioneer in establishing the system. I kept telling our neonatologists that, “We need an ECMO program here at Riley Hospital.” Neither they nor the administration were terribly supportive. A number of years ago, I operated on Mrs. Mari Hulman-George’s grandson. Mrs. Hulman-George’s family owns the Indianapolis 500 track [Indianapolis Motor Speedway]. She was very grateful and had been a great supporter of the lab and funded things for liver transplant and small bowel transplant program, and a couple of professorships at IU. She’s been a really good lady, supportive of the community and very civic minded. Anyhow, I went to her, and I said, “I want to start this ECMO program, but I need money for the equipment. I can’t get it from the hospital.” So she gave us a grant, and we bought all the equipment, and started doing ECMO in the lab. Once we had all the equipment and they (the pediatric staff) recognized we were going to do it anyhow, without them, they got interested. It was good because it was the right thing to do and they had the manpower, and we didn’t. They helped us, and we helped them, and that’s how ECMO got started as a joint effort. We have done almost 550 cases.

DR. KLEIN: [Laughs]

DR. GROSFELD: It was very interesting.

DR. KLEIN: That was great.

DR. GROSFELD: The same thing happened with the small bowel transplant program. It started in the lab. We had to set some standards about doing studies, doing research, feasibilities, and before you know it, we had a small bowel transplant program, but you couldn’t get the administration to do anything about it until we got that off the ground. Same thing with liver transplants.

DR. KLEIN: If you build it, they’ll take credit for it, and then it’s theirs and they have to do something about it.

DR. GROSFELD: We were trying to get the liver transplant program going in 1988. Tom [Thomas E.] Starzl had promised us a fellow and then couldn’t come through that year; he had to send him somewhere else. So I went to a BAPS [British Association of Paediatric Surgeons] meeting in London and I called Sir Roy [B.] Calne, and he invited Margie and me up to Cambridge to have lunch with him and Patsy. He introduced me to Peter.
Friend, who was one of his young associates, and I took Peter home with me and started the liver transplant program. Peter stayed eighteen months and got the liver program off the ground, and then we saw it grow substantially from there—currently we do more than 200 livers a year now. It’s a huge program.

DR. KLEIN: Adults and children.

DR. GROSFELD: Only about a dozen children.

DR. KLEIN: Oh, okay. Two hundred a year.

DR. GROSFELD: It’s a huge number. It’s one of the biggest transplant programs in the country.

DR. KLEIN: That’s amazing.

All right, let’s—first of all, do you need a break? I’m supposed to allow you a break.

DR. GROSFELD: What time is it?

DR. KLEIN: It’s eleven o’clock.

DR. GROSFELD: We’ll wait. We’ll break for lunch.

DR. KLEIN: Okay. Sounds great. Tell me about education in your career. I can get a lot more specific, but you’ve won a lot of teaching awards, you talked about having great teachers, and I’d like to know something about—you know, is this just natural? Is it osmosis? There are a lot of people who are very technical, the famous people at Southern Illinois [University] in surgical education. There’s the way surgical education is organized: students, residents.

DR. GROSFELD: Well, I’ve always thought that if you had somebody who could stimulate your intellectual curiosity, it would make you think and pursue new discoveries. And I learned that from Bill [H. William Clatworthy, Jr.]. I think that’s absolutely true. You can interest people in things by being a good role model. You can tell people to do things but unless they see you do it in the trenches it doesn’t have the same impact. A good leader on the battlefield is someone who leads his men up the hill, not someone who stays on the background says, “Go over there and get killed, men.”

DR. KLEIN: [Laughs]
DR. GROSFELD: I tried to teach by example and gave people opportunities, I asked residents and students lots of questions, and gave a lot of conferences and lectures. We used to make rounds and have conferences with the students. Teaching allows you to share knowledge and it has value no matter where it occurs, whether it’s in the clinic, at the bedside, in the operating theater or in a classroom, so you have a lot of different opportunities to teach. In surgery, it’s an ongoing thing. You’re teaching all day long. That’s what makes it exciting, because you make rounds, there’s something to learn there; and you go give a lecture or go to an M & M [mortality and morbidity] conference, there’s something to learn there; you go to clinic (if the resident shows up in clinic), there’s an enormous amount of information to be learned about what happened to the patient and then, of course, the operating theater which I think, is probably the most important laboratory of higher learning for those interested in surgery. That’s where you really learn to be a surgeon.

DR. KLEIN: How has the organization of surgical education changed? Has that been progressive?

DR. GROSFELD: It has. Probably the most important thing is structure; the curriculum is structured in a way that there’s some uniformity in teaching. Many years ago, there were only a few institutions that were known to be great places of education; there were a lot of places where you could learn to do a lot of operations, but you didn’t learn enough. One of the things we became aware of is the wide variation in education, i.e., the knowledge base and skills of a young individual who might have trained somewhere else than your own institution, who then comes under your supervision. Currently, the annual surgery in-service examinations give you some indication as to somebody’s fund of knowledge. It doesn’t tell you if they’re good clinicians, just what their fund of knowledge is. And then there are little tests that you give them just by talking to them, you learn whether they’ve read about a patient’s condition or know anything about a patient. I think you can learn a lot about your residents by just observing them, just like you observe the babies. With just a few questions, you know whether they know anything about the patient or not, and if they don’t, then you’ve got to teach them that they have to learn about that.

I think the organization of teaching is a very important thing. Now, how it’s structured has been a work in progress. It’s gotten better and better all the time, and evidence-based learning and evidence-based medicine, studying outcomes—all these things are part of the learning experience. For years, one would say, “Well, why did you do that way?” “Well, that’s because Dr. So-and-So always did it that way.” “Is that valid?” I think asking those kinds of questions is very important, the prospective, randomized studies that are being done now and evaluating long-term outcomes to see whether what we do in a baby works out in twenty years is very important.
We have this unique opportunity that other surgeons don’t have. They take care of adult patients; often they’re very happy if the patients live two years or five years. We take care of the newborn. We get that opportunity at the very beginning of their lives and what we do has to last during their teens, adult life, and hopefully it’ll be a life that has good quality, and they can live to seventy years-plus, just like the rest of the population. So you actually have the privilege to save lifetimes. That’s what’s so wonderful about being a pediatric surgeon. It’s very different from some of the other specialties.

Now, the teaching varies. Some people are gifted teachers that are natural teachers; others learn how to teach, and they learn by using different techniques including small groups rather than classrooms of a hundred kids where you give a lecture and never talk to any of the students. In smaller groups, you know, you can talk to ten kids, and share things together. One of the good things about teaching is that you share knowledge. I learn a lot from these young people, who’d been taught about the human genome, molecular biology and nanotechnology that I knew little about, that I have to learn about later in life. I can teach them how to take care of a baby. I can teach them how to “read the baby.” I can teach them to be a good observer and operate on childhood disorders. I can share my thoughts about how to be a better doctor and hopefully how to be a better human being as well.

One of the things that is currently a problem is the “connect” between the doctor and the patient and the doctor and the family because of change in how health care is delivered. When we grew up, you had your patient in the hospital for five to seven days after an operation. You got to know them preoperatively because you worked them up in the hospital, and then you operated on them, and you knew the family, and then you had five or six days to connect and really develop a good doctor-patient relationship. Then you saw them again when they came back to the office. Now you see them once. They have an outpatient workup, they come into the system through the ambulatory area have their procedure done, they go home the next day or that same day, and the residents and students have no time to connect with them. They do not have the same opportunity to develop a good bedside manner.

I think it’s harder for residents today. Patients that are in the hospital are often so sick, they can’t talk to them because they’ve got an endotracheal tube in place or they’re in a coma or they’re in shock or something. It is different. I think we have to overcome these obstacles in the teaching process. There will always be a few people who are really good teachers, and you have to take the time to teach. People are so busy now, they don’t have a lot of time. Then you have to have an opportunity to teach, and with the eighty-hour work week, those opportunities are fewer than they used to be because the residents can’t stay around to hear your lecture or make
afternoon rounds because they have to go home, because they were on the night before. They miss educational opportunities and cases, so somehow we have to figure out how to solve the dilemma.

Now, for certain students, you can make it up by having them go to the Web site and hear your lecture on the Web site because it was put on a CD. I don’t think it’s the same. For some it’s okay, and I know there are students who don’t go to class but memorize the syllabus and take the test and pass the test and get the same credit for passing the course, even though they never went to one lecture, or they’ll have some other students take the notes from the lectures and pay them to give them the notes so they can study for the exam. I don’t think that’s a good way to educate people.

DR. KLEIN: Is any of this compression of education going to be valuable in the end? Fortunately there are studies about sleep deprivation for most people, and I appreciate that, but there’s also the rumor out there that no residents finishing now go into practice because they know they’re not quite ready because they haven’t done as much as the residents before, so they’re all doing further training after their residency.

DR. GROSFELD: Yes. I think it’s déjà vu. I don’t know whether you remember, in the early 1970s, they went to a four-year surgery training program, and it failed, and most of those residents went on to a postgraduate fellowship. That’s how the fellowships actually took off, because they weren’t ready. They didn’t think they were ready to practice. And I think it does take time to develop confidence and expertise to be an independent surgeon. The problem with the 80-hour week is once you put a number on all this, it serves as a target.

DR. KLEIN: Yes.

DR. GROSFELD: The social scientists, tree huggers and the do-gooders—they’ll shoot at that 80-hour target. In the future is will be less than 80 hours. Now, I say this with good reason. If you look at the same situation overseas, in the UK they started out with a seventy-hour week. Last year it was fifty-four hours; and now it is a forty-eight hour work week. The E.U. countries—are aiming for a 35 hour work week. But you can’t train a surgeon with a thirty-five-hour week. The right hand won’t know what the left hand is doing, because these young trainees want a shorter length of training so they can get out of debt quicker and they can have more free time, but they won’t be well trained with a thirty-five-hour week to do surgery. It just won’t happen. Instead of training five years, they’ll have to train ten years, so they’ll have to extend the training, and they won’t like that either. While a change in life style plays a role, I think there are a lot of unknowns in this, and a lot of risks. In the countries in which you have a
thirty-five-hour work week, I don’t think there are many really good surgeons in those countries anymore, because they’re not getting trained.

Another risk about training is the fact that administrators and hospital systems have an influence on education. They do this by developing service lines and organ-based programs so the surgeon who wants to be a GI [gastrointestinal] surgeon is going to have to work in the digestive service line, so he’d be working with a gastroenterologist, the GI fellows, the GI surgeons, and digestive surgeons that are limited to that area. For the hospital, it means that the service line is organized they can control it, and they can make more money and market the program. But I don’t think it’s really great for teaching, and I don’t know what experience each of those fellows is going to get and who is in charge of those patients. The basic tenet of surgical training has always been the surgeon has to have primary responsibility for pre-, intraoperative and postoperative care. And that’s being destroyed, or they’re attempting to destroy that concept with intensivists, interventionalists and other people in the service line.

DR. KLEIN: We haven’t come to any answers yet.

There are two things that we do in surgery that I think are the essence of what we do and seem the hardest to teach, and that’s surgical technique and clinical judgment. I have known surgeons who are incredibly bright but who can’t make a diagnosis, and people who are also incredibly bright and have succeeded in surgery for years based on their intelligence, who really can’t operate. After years they can’t recognize tissues; can’t tell one structure from another. Is that just something that’s in you? Is there a way to teach that, select out for it? When do we do something about it?

DR. GROSFELD: I think there are certain people who have natural talent in the operating theater. They are technically gifted. Most surgeons are quite good in the operating room, and over time, with experience and good education, they’ll learn to be safe operating surgeons, and their outcomes will be pretty similar. They may not do it as quickly or as smoothly as the superstar, but the patients will often do just as well. However, there is always going to be a small number of people who are not technically adept and who don’t do as well, or who are technically adept but make bad decisions and do the wrong operations so that their patients don’t do as well. Fortunately, it is a small number of people. In regard to pediatric surgery, most young people that are not adept in the operating room are weeded out before they acquire a very competitive postgraduate residency training position in pediatric surgery. It has been my experience that most of the pediatric surgeons are quite adept surgeons.

DR. KLEIN: It is small.
DR. GROSFELD: Yes. Everything fits under some form of bell-shaped curve. The brilliant technician, super-surgeon is at one end, then most of the other people are in the middle of the bell, and they do just fine, and at the bottom there are a few other people that probably should have gone into anesthesia and not been surgeons, for whatever reason. Some of that, you can sort out during the residency, and there’s about a 20 percent dropout rate for general surgery. That’s pretty standard across the board; about one in five that start out in general surgery drop out. Now, once they get to pediatric surgery, they’re pretty committed by then, and they’re a different breed of cat in that these are fully-trained surgeons that come to us. In a way, we’re very blessed because they’re the cream of the crop, and they’re usually very good technically, and they’re usually very bright and they’ve had wonderful educational backgrounds.

You know, it’s a highly competitive thing to get a fellowship, and yet if you take all of those outstanding residents, with wonderful credentials—they, too, will fit under some form of a bell-shaped curve. There will be those who are absolutely brilliant, that you love to operate with, that you want to keep in your own program as a member of your faculty and that you would let operate on your grandchild. Most of the residents are good and can be proud of them. They will do a good job. They’ll be fine. They will serve the community well. They’ll be good, solid pediatric surgeons, and they can practice in an academic center or in the private setting. And then there will be a rare instance that you won’t want anybody to know the resident trained with you. Most of the graduate trainees are superb. They’re really very good. But even amongst that group, they’ll sort themselves out.

DR. KLEIN: Something else that has happened in general surgery recently is it seems there has been a tremendous increase in its popularity. There was a time when we were concerned about whether there were going to be any more people going into general surgery, and it was filling with international medical graduates, and there seems to have been a big shift. Do you think that’s all the 80-hour work week?

DR. GROSFELD: No. There are probably not enough general surgeons. It looks like we have inadequate numbers. Even though the programs are filling, there are a fair number of international medical graduates in the categorical slots (20%). Also the pipeline is different. For years, most general surgeons were males, white males, and that’s changed because of the demographic change in the medical schools. More than half the medical students are now young women, and for a number of years, we had not done a good job of recruiting women to surgery. Women were attracted to pediatrics, internal medicine, OB/GYN—dermatology and the like, but not a lot went into surgery. Until recently about 20 percent of general surgical residents were women. The past two years however, more women have filled first year categorical slots in general surgery programs; 37% in 2007 and
44% in 2008. Pediatric surgery has done okay with women in that I think there are more than a hundred women in APSA [American Pediatric Surgical Association] out of seven hundred members. While I think those are the numbers, that aren’t bad (14%), it’s probably not high enough. The ladies do quite well. We’ve had some wonderful young women in our general surgery program, as well as our pediatric surgery program. Two of eight of our faculty are women (25%).

Similarly, there probably aren’t enough minority students in pediatric surgery. If you look at the medical student population curve, between 1990 and 2002, I think, the last data I saw, a significant number of the entry people into medical school are from minorities, but the largest numbers are Asian. There are a very small number of African-Americans, a very small number of Native Americans, and the next highest level group is Hispanic, which present maybe 4 percent. Now, 25 percent of Asian medical students go into internal medicine, not that many in surgery. Almost all the minority students go into private practice; less than 4 percent pursue an academic career. I don’t know all the numbers concerning minority residents in pediatric surgery. I know a few African-American pediatric surgeons, but certainly by the numbers, it’s not that many. There are a number of Asian pediatric surgeons and a few Hispanic pediatric surgeons, but not a lot. So we’re going to have to do better job of recruiting minority residents into pediatric surgery.

I think it’s of interest: If you look at the Asian medical students, most of them are less than thirty-four years of age. The number of Caucasian medical students has dropped 14 percent over that time frame, most of them males. So there’s been a definite increase in women, increase in minorities, and a reduction in white males. We still have to try to recruit the best and the brightest out of who’s coming out of the pipeline, and I think it’s going to be a real challenge to attract more women and minorities. Now, the AAMC [Association of American Medical Colleges] is suggesting that, with the increase in our population of over 310 million (plus all the illegal people—I don’t know how many millions; maybe another 10 million)—we won’t have enough doctors by the year 2020. It is anticipated we will have a population of 400 million by 2045. The AAMC is recommending a 15-30% increase in class size in the current medical schools and construction of new schools as well.

DR. KLEIN: Oh, wow.

DR. GROSFELD: How many pediatric surgeons we need, and how do we sort out the distribution of pediatric surgeons in cities and rural areas, among minority areas is under study. How many do we need? I think we have to reassess that based on the changes in the demographics and whom we
need to attract into the field. There is ample evidence to suggest that there is a shortage of pediatric surgeons and more need to be trained.

DR. KLEIN: We have to be more involved in medical school, which is the pipeline, as you said. It’s so easy not to do that, given all the other demands, especially the practice demands that those service lines are placing on them; but that’s where the people come from, and that’s where they get excited.

DR. GROSFELD: Absolutely. We’ve been blessed in Indiana in that we have third-year and fourth-year students rotating on our service, and probably a fourth of each class rotates on the pediatric surgery service. We used to have lots of elective students in their senior year take pediatric surgery as well. We’ve had fewer do that, because it’s a hard service. The hours are longer, even letting the students go home at six o’clock. The typical student has changed quite a bit. Their goals and objectives are not quite the same as our goals and objectives. They want to work fewer hours, have a better personal life-style, more time off, reduce their debt, and finish their training as quickly as they can. That’s what surveys tell us.

DR. KLEIN: Oh, I know. It’s just so hard for me to understand, because I wanted almost all the opposites. I wouldn’t have minded if somebody had taken my debt away, but—

DR. GROSFELD: So we have to adjust how we pursue, recruit and excite young people about a career as a children’s surgeon. Pediatrics has done a pretty good job in that more than 60% of the pediatric doctors are now women, and they attract a certain number of minority people as well. About 11 percent of the pediatric residents are from minorities groups. We don’t do nearly as well. In looking at who’s graduated from the various schools, I noted that Indiana (it’s the second-largest school in the country), graduated more Caucasian medical students in the last fourteen years than any other school in the country.

DR. KLEIN: But that’s because they take people from Indiana.

DR. GROSFELD: Right. But, they haven’t recruited enough minority students to go to school here. Part of that is because if they can get a scholarship to go to Harvard [Medical School] or to Yale [School of Medicine] or to somewhere else on a free ride, they take it, and those scholarships are available now to certain minority individuals. We have to change the way we present ourselves and present our specialty so that we can continue to attract the best and the brightest, whether they’re Hispanic, African-American, Asian, Caucasian or a young woman, but we ought to get the best candidates for pediatric surgery we can get.
DR. KLEIN: So far, as you said, we’ve been blessed. It is such a joy to be in a field that needs you desperately as well as where you can be surrounded by only the best people.

Let’s talk a little bit about organizations. We can start with the American Academy of Pediatrics. You chaired the Section [Section on Surgery] in 1994-1995. You were awarded the [William E.] Ladd Medal in 2002. Tell me about your involvement with the Academy.

DR. GROSFELD: I joined the American Academy of Pediatrics a couple of years after I finished training and have attended almost every meeting since then. I was secretary of the Section on Surgery for three years before becoming the chairman of the section, and I had a good time working with people like Jack [John] Campbell and Brad [Bradley] Rodgers and the like, who preceded me in that position at the Academy. It was interesting: The Academy served as a focus of pediatric surgery until APSA [American Pediatric Surgical Association] was formed. In the beginning, when pediatric surgeons were trying to have some organization recognize them, through the efforts of Herbie [Herbert] Coe from Seattle and a few others, in 1948 the AAP stepped up and developed the Section on Surgery—

END OF TAPE SIDE

DR. KLEIN: Okay. Who are those folks?

DR. GROSFELD: Oh, this is from a lecture I gave, the spring lecture at the American College of Surgeons in 2006.

DR. KLEIN: Oh, okay.

DR. GROSFELD: It was on the heritage of an evolving surgical specialty.

DR. KLEIN: We’ll get to the College. We were just on the Academy.

DR. GROSFELD: Yes. The Academy was really the first one to recognize pediatric surgery as a separate entity, and yet it wasn’t really a surgical organization, it was a pediatric group. We were just part of a big pediatric organization which recognized a lot of different specialties within it. It really wasn’t the voice of pediatric surgery. Pediatric surgeons never got the recognition they needed until APSA [American Pediatric Surgical Association] was formed in 1970 and then subsequently getting their own board from the American Board of Surgery when they were recognized as a specialty, and that didn’t come until 1972. But the Academy was very good, and each year they would have an annual surgery meeting. Initially, some of the papers from the surgery meeting would get into Pediatrics, which was published by the Academy, very few papers, and there was no place for
pediatric surgeons to publish their material until 1966, when the journal *Journal of Pediatric Surgery* came into existence. Surgery had a section on pediatric surgery that was run by Mark [M.] Ravitch, and they published about two articles a month. It was about two articles a month, so it wasn’t really very representative, and it was hard to get pediatric surgical material published at one time.

Now, the Academy has done a really good job of promoting pediatric care in general, and participating in the Academy has been important for pediatric surgery, number one because other specialties do it and it is recognized by the pediatricians. You can at least promote your specialty within the broader field of pediatrics, but it took years and years for the Academy to even permit surgeons to have any type of leadership role in the Academy. It was sort of relegated to the back seat of the bus, if you will. And that changed more recently. In the beginning of this last century is when it changed, the late 1990s, and early part of the 21st century. Until that time, they really didn’t let pediatric surgeons have any deciding role in the Academy. They charged them a lot of money for dues and gave them very little back. But it was a still a place to meet, it was a place to present their material, and once the *Journal of Pediatric Surgery* came into effect, you could publish the transactions of the annual AAP Section on Surgery meeting and get a place to publish other work in the field and that was very important.

The Academy, was the place in which the training programs arose, the Committee on Education of the AAP, Section on Surgery, under Dr. Clatworthy’s direction, was sort of the place that training programs were reviewed early on. Now, that responsibility was turned over to APSA in 1971. There were eleven training programs at the beginning. That changed. When APSA took over, that eleven went to thirty-three eventually, and in 1974, after the first board exam (in Puerto Rico), the ACGME-Surgery RRC [Residency Review Committee] took over the credentialing of training programs. Eventually, there was a matching program for residencies in pediatric surgery, and it stayed pretty much that way until today. The RRC oversees the training, just like it does for other surgical specialties. Early on, the AAP was the one that allowed us to have a home, and for that we’ll always be grateful to the Academy.

DR. KLEIN: What’s the place of the Academy going forward, for the modern pediatric surgeon?

DR. GROSFELD: Well, it probably has a lesser role. The AAP has incorporated pediatric surgeons into the history archives by recognizing people who received the Ladd Medal and the like, and the Section on Surgery still has a place on the annual program. They have an opportunity for pediatric surgeons to at least have access to the leadership of the
Academy, and you could possibly be elected to a leadership position, but that’s highly unlikely. When you have so few pediatric surgeons and so many pediatricians per se, that’s just highly unlikely. I think maintaining a close relationship to the AAP is important, but it certainly isn’t as important as it was in the beginning. Pediatric surgeons have other avenues, where they’re more respected and have their own independent organizations that truly represent the surgeon.

DR. KLEIN: I think that it’s a place where we can advocate for children in general, because we don’t have other venues, and sometimes—it hasn’t happened very often, but sometimes it’s a place where we can stick up for ourselves against our general surgery brethren who may still want to put us in our place.

DR. GROSFELD: That’s true, but I think the College has certainly opened its doors to pediatric surgery, and that’s a respected specialty that’s highly recognized, has its own surgical forum, its own advisory council and a place on the Board of Regents. A pediatric surgeon, Dr. Kathy [Kathryn D.] Anderson has also served as president of the College.

DR. KLEIN: So why don’t we talk about the College now?

DR. GROSFELD: Do you want to talk about the [William E.] Ladd Medal? Because that’s part of the Academy.

DR. KLEIN: That is?

DR. GROSFELD: Yes.

DR. KLEIN: The Academy has carved out its own little niche, which in a lot of ways we have to be grateful to APSA for. It’s the home of the residency, meeting of the resident competition and of the Ladd Medal, which I think are still very important functions.

DR. GROSFELD: I was obviously very fortunate to have been awarded the Ladd Medal, which in America is the highest award a pediatric surgeon can get. Certainly there are others that perhaps have achieved more than I have, but I was absolutely delighted to have been given that honor. It truly is an honor. Dr. Ladd was the grandfather of pediatric surgery in the United States, so having the award named after him is very meaningful. It does recognize someone that’s done something different, something unusual for the specialty. The previous Ladd Medal recipients include a very distinguished list of pediatric surgeons and I’m truly honored to be among them. There are many outstanding individuals on that list, like [M.] Judah Folkman and [W.] Hardy [Hendren III] and Dr. Clatworthy and Dr. [Orvar] Swenson.
DR. KLEIN: I think it’s interesting: Didn’t you win the Denis Browne Medal before you won the Ladd Medal?

DR. GROSFELD: Yes.

DR. KLEIN: Why do you think you were recognized by the British association before the AAP [American Academy of Pediatrics]?

DR. GROSFELD: I’m not sure, but the Denis Browne Medal is also a huge honor, I think probably because of my long standing participation at the international level, aside from being a counselor at BAPS [British Association of Paediatric Surgeons], and this year we were elected an honorary member of BAPS as well. We have also been made an honorary member of the Royal College of Surgeons of London, the Royal College of Physicians and Surgeons in Glasgow, and the Royal College of Surgeons of Ireland. In 1985 we set up the first children’s surgical program for the International Surgical Society International Surgical Week and have continued that for the past 23 years. The International Surgical Week is held every two years by the Société Internationale de Chirurgie, the International Surgical Society, which is an elite European society, similar to the American Surgical Association. They have International Surgical Week Congress (ISW) that’s attended by about 2,000-2500 people every two years. Almost all the surgical disciplines are represented at that event: cardiac, urology, vascular, trauma, burns, breast, general surgery, endocrine, etcetera. There was no pediatric surgical participation, so pediatric surgery couldn’t stand tall among its peers in surgery. So we went to them and suggested that a pediatric surgery program be developed. I was asked to be a visiting lecturer, and an honored lecturer at their meeting, and while we were there, we were able to get approval for inclusion of pediatric surgery at future ISW events.

Now, there was no international pediatric surgical group that could be represented except for the World Federation of [Associations of] Pediatric Surgeons. So we got WOFAPS to be the sponsor, and ever since 1985 through this coming 2009 meeting in Adelaide, there will be a pediatric surgical component in International Surgical Week. So we’ve run it for more than twenty years and been responsible for setting up the program and getting people to speak at this meeting and to come to the meetings, and pediatric surgery stands tall among its surgical peers internationally. I think that was probably a reasonable thing to do.

DR. KLEIN: And how did your international interests start? Was this all from this one invitation to speak?
DR. GROSFELD: When I was a resident with Dr. Clatworthy, in 1968 we put together this material on rhabdomyosarcoma. It was either the first or the second article demonstrating that combined therapy improved survival. Either ours came out before the one from St. Jude’s [St. Jude Children’s Research Hospital] or at least was submitted before the one from St. Jude’s, and Dr. Clatworthy sent me to Dublin to present the paper at the BAPS meeting. That was the first BAPS meeting I ever went to.

DR. KLEIN: And he didn’t go with you.

DR. GROSFELD: He went. My father and mother were kind enough to take care of all of our children and pay for my wife’s trip, and Dr. Clatworthy took care of my expenses, because I was a resident. We presented the paper at the BAPS, and it was very well accepted because it was something new and different. Prior to combined therapy the survival for rhabdomyosarcoma was about 15%. Our report described a 71% survival which is similar to that noted today.

DR. KLEIN: It’s such a horrible disease.

DR. GROSFELD: The outcomes were terrific compared to the 15 percent survival they used to have. And then we got involved with pelvic rhabdomyosarcomas doing radical exenterations at the time with 100 percent survival for all the pelvic cases. Of course, the management of pelvic tumors has changed quite a bit but at the time, that got a fair amount of notoriety, and we spoke overseas on that subject.

And then getting involved with the World Federation of Associations of Pediatric Surgeons (WOFAPS), we were able to improve the recognition of our specialty internationally. I thought that was very good for pediatric surgery. That has persisted over the years and now more than 90 pediatric surgery organizations and associations are member organizations of WOFAPS. Being inducted into BAPS and the fact that every third year BAPS meets in a different country gave us a fair amount of international exposure. We also had a good relationship with pediatric surgeons in Japan and Asia. We were a distinguished visiting professor and speaker in Korea, Hong Kong, Singapore, China, Thailand, and Japan. So I think the Denis Browne Medal was basically for contributions to the field and the work we did at the international level. At least we were recognized for that as well as for other things, but I think that stimulated it.

DR. KLEIN: How important is it in general for American students to be a part of the international scene in pediatric surgery?

DR. GROSFELD: I think it’s essential, because we’re in a global situation now: educationally and economically. There’s a lot of competition between
America, Europe and Asia now that wasn’t as obvious before. We’re still recognized as the focal point for some of the best care in the world, and people are always going to try to emulate what we do and compete with us, and sometimes they’re not always happy because it’s hard to compete with the best. I mean that. And you see it at almost every level, whether it’s political, concerning terrorism, whether it’s the economy. There are places out there that want to be as good as we are, and sometimes that’s hard to do. But we can’t let our guard down, and we have to continue to be a half step ahead. That means in research new discoveries, and the quality of the work we do, the quality of the education that we have, and still try and produce the best and the brightest if we can. But people are always competing. Look at the NBA [National Basketball Association]. We used to be dominant in basketball but now people have competed and now are outdoing us in certain things. Many of the new stars come from other countries and we have lost a number of tournaments internationally. If you don’t maintain your skills and maintain your drive and energy, you won’t be the best. So that’s the message there. Yes, we have to have a strong domestic system but we have to still be involved on the international scene. We can continue to educate others so that good care can be provided to children everywhere, especially in underdeveloped nations. We can’t isolate ourselves, certainly not in this era. And the fact that communication is so improved, with the Web and the Internet, we have to be out there. We have to demonstrate what we’re doing is still the best. We still have to continue to provide leadership internationally and provide the best care for the pediatric surgical patient.

DR. KLEIN: I think you’re right. I think that’s very important, very important.

And tell me about WOFAPS as an organization. There are a lot of pediatric surgeons who don’t know about it at all.

DR. GROSFELD: Yes, the World Federation is kind of a loosely-knit organization that started out with the goal to try to improve the care of children in underdeveloped countries. It was on a shoestring budget, some of the leadership was more talk than action, and it struggled in the early years. I think Pepe Boix-Ochoa from Barcelona became the secretary general and pretty much single-handedly has resurrected WOFAPS so that from a group that had about twenty associations associated with it, now there are more than 90 associations in WOFAPS. They have an international program, which we’ve helped develop a little bit by having at least every two years a WOFAPS program at this international surgical meeting. And WOFAPS has also stimulated higher levels of quality of pediatric surgical care. We had the opportunity to serve as president of WOFAPS for three years, and during that time developed what is referred to as the Declaration of Pediatric Surgery. It’s a different sort of Declaration of Kyoto. It defines pediatric surgery internationally, what we do and what our goals are about.
providing the best possible surgical care to children in all of the countries. And it’s been used as a methodology whereby children’s surgeons in the Balkans, in South America, in Asia and in certain places now have a voice, have a declaration, have pediatricians now recognize that they’re part of this world federation of associations, and I think it tries to give them some status and a leg up.

It also gives them support, particularly educational support. Some people have gone into the countries whose association is a of WOFAPS to help with trauma courses, and it visits, holds meetings and supports groups like the group in Croatia. There was an International Pediatric Surgical Congress supported by WOFAPS in Argentina in 2007. It has been influential in putting together these international congresses. The first one was held in Croatia, the next in Buenos Aires, Argentina and the 3rd International Congress is scheduled in 2010 in New Delhi, India. Those are mainly educational meetings that provide contemporary information to pediatric surgeons from underdeveloped countries. For that reason, it’s been a very useful endeavor.

WOFAPS is trying to take up the cause of pediatric surgeons, for instance, in Denmark. The Danish government is not funding pediatric surgery as a separate specialty anymore; they don’t want any pediatric surgery training programs. There are no training programs for pediatric surgery in Denmark. The urologists in the country have gotten in a powerful position in the health administration, and they don’t think pediatric surgeons should take care of pediatric urologic cases, for instance.

DR. KLEIN: Oh, dear, yes.

DR. GROSFELD: So regarding those kinds of problems WOFAPS has written to the Danish health ministers, tried to influence some of the legislation, but this has unfortunately been unsuccessful at this time.

DR. KLEIN: I’ve heard also pediatric surgery is really practiced—there are large areas in South America where pediatricians can do some operations and the pediatric surgeons—we’ve heard all sorts of different things.

DR. GROSFELD: Trying to influence standards of training also has been important. You’re right; the training of the pediatric surgeon in different parts of the world is quite varied. For instance, in Mexico and South America they don’t need any general surgery training. Often they take six months of pediatrics and then become pediatric surgeons. The educational scheme is very different also in that in many places around the world a youngster who wants to become a surgeon goes from high school to medical school; there are no undergraduate university years.
DR. KLEIN: Right.

DR. GROSFELD: So they go into medical school at 18 or 19 years of age. In many places like Russia, Poland, South America, they go from medical school into pediatric surgery, so there’s no basic surgical training. We believe these educational schemes are quite limited. There are some places in the world where the training is not too dissimilar from ours: for example, South Africa and Australia. They get good basic surgery training in general surgery and then train in pediatric surgery. In Germany it’s different. They go right into pediatric surgery. Now they’re trying to establish a core surgical training so that they’ll get two years of general surgery and then pediatric surgery. Same in England. They’re going to try to do that.

DR. KLEIN: I think their practice is also different around the world. I mean, I don’t think there is any place where pediatric surgeons do as much surgery as we do. Is that true?

DR. GROSFELD: I think that the scope of surgery is different, as you say. They may not do as many things as we do, but certainly in many areas they do all the traumatology, and that includes orthopaedics. And in a few places, they still do some neurosurgery and they do shunt surgery, not brain tumors or anything, but they do shunts and meningomyelocele, which in some countries had disappeared because of prenatal identification of spina bifida and termination of pregnancy. And folic acid administration has also reduced the number of spinal cord defects.

DR. KLEIN: I just remember, growing up in surgery, that England was famous for pediatric surgeons doing neurosurgery, and caring for the patients with myelodysplasia. That’s why they did the urology, because they took care of the myelo patients. Now the last time I was there, just this year, pediatric urology is really becoming separate even there.

DR. GROSFELD: Yes, I agree. The scope of practice is different in different parts of the world. We in this country let pediatric urology kind of slip through our hands. In the era just before we trained, it started happening, in the late sixties. Now, when I trained, I still did some urology. I trained in it and I think you probably did, too, in Boston.

DR. KLEIN: I did, in Boston as a junior resident. The urology resident would come for, like, six months to visit the pediatric surgery service, and he had to do everything so that he could see the urology. But I was an intern in Seattle. All the heart surgery patients were on the service, all the urology patients. I like to tell people that pediatric surgeons invented open heart surgery and pediatric urology, and then they gave it up.
DR. GROSFELD: Well, that’s true. We had all of those rotations during training.

DR. KLEIN: I remember being very proud when I met a nurse in Boston who had her ASD [atrial septal defect] fixed by Robert [E.] Gross using the well technique. She was doing just fine.

Okay, the international. Shall we take a break now?

DR. GROSFELD: Yes.

[Recording interruption.]

DR. GROSFELD: The outcomes and care in some overseas facilities have improved a lot from when we first visited some places. I remember going to Istanbul and Ankara in the 1970s and the neonatal mortality was as high as 40 percent, mainly from infection. But, that has improved significantly since then.

DR. KLEIN: When I was in Cairo, the surgeons seem every bit as sophisticated, and they all have their private practices in nice, private hospitals. But in the large hospitals, where most of the patients are cared for, they still have those issues. As they say, they just can’t do TPN [total parenteral nutrition]. There’s nobody to take care of it. The infections were too great. The patients just have to get better without it.

DR. GROSFELD: Sepsis was the biggest cause of death in Ankara in the seventies, late seventies. In Japan the care has really stepped up. I mean, they do excellent work. They really do. It’s interesting: The mortality rates are pretty good. In China it was awful. But now it’s getting a little better in the bigger facilities in the major cities.

DR. KLEIN: And they went through that whole barefoot doctor period, when all of a sudden the doctors became farmers, and the farmers became doctors.

DR. GROSFELD: That was terrible, yes, during the Cultural Revolution.

DR. KLEIN: Talk about social experiments!

DR. GROSFELD: Yes, but the brand-new children’s hospital in Shanghai is spectacular. So is the “mag-lev”. Have you been on a mag-lev?

DR. KLEIN: No. What is it?
DR. GROSFELD: Magnetic levitation. It’s a train that runs on two magnets.

DR. KLEIN: I’ve heard that it was going to happen at some time, but I didn’t know where. It was supposed to happen in Germany 30 years ago.

DR. GROSFELD: The car is made in Germany. The track is laid by the Chinese, and the idea was from a Brit. It’s such a simple idea. It uses a 110-volt plug going in the wall to set off these two magnets that are separated by a centimeter, and the thing goes 550 kilometers an hour. It’s unbelievable. It’s a seven-minute trip to the airport. No friction. And total stability, because it’s wrapped around the track. Yes, Margie and I took it from downtown Shanghai to the airport in seven minutes.

DR. KLEIN: Wow.

DR. GROSFELD: Yes, forty miles. It’s so fast. We took it as tourists the first time. You don’t realize how fast it is. And then we went from downtown to the airport in a traditional bus, and the thing passed us five times.

DR. KLEIN: [Laughs]

DR. GROSFELD: I mean, you realize how fast it is. It’s unbelievable. We were in Shanghai in 1999, and they had built all these tall buildings, but it was sterile. They were empty. It was a sterile city of 16 million people. It was awful. We were there in 2005, in December. The progress was unbelievable. It will eventually give Hong Kong a run for its money now. It’s very interesting. Very, very interesting, starting to develop a middle class of “Chuppies.”

DR. KLEIN: It’s just so amazing. Each culture and society—well, they’re intermixing with the modern politics.

DR. GROSFELD: China is a formidable foe. Who knows?

DR. KLEIN: They can be either. And the thing that we know, just as in medicine, they’re learning it from us. We have to be better. I know that more than anybody, since I come from Detroit. They learned it from us. They’re just better at it than we are, and that’s really frightening.

DR. GROSFELD: The Japanese certainly know. I mean, Toyota and Honda are blowing us away. Actually blowing us away. I mean, Chrysler is bankrupt, Ford is seven dollars a share; Toyota a hundred seventeen dollars a share. I mean, they’re just blowing us away with good production and
quality. We have to retool all of our facilities and improve our production standards to build as precise cars as they do now.

DR. KLEIN: The thing is, we’re doing what we blamed them for doing in the fifties and sixties; we’re imitating them. All the luxury standards on the Lexus and the Acura and the BMW are what’s being advertised on TV now for American cars. It’s the catch-up game.

DR. GROSFELD: And you had to pay so much money to the unions for fewer hours of work and outrageous retirement funds and health care costs. You can’t use those funds for research and development and build the new factories you need to compete in this century.

DR. KLEIN: That’s right.

DR. GROSFELD: That’s the problem, R&D. You’ve got to have R&D—

END OF TAPE SIDE

DR. KLEIN: Let’s return to talking about the three organizations that are really important and crucial to pediatric surgeons. We talked about the Academy. Then there’s the College, and then APSA [American Pediatric Surgical Association]. But for right now, let’s talk about your involvement with the American College of Surgeons or the American College of Surgeons contributions to pediatric surgery.

DR. GROSFELD: In general, it took a while for the American College of Surgeons to recognize pediatric surgeons, but once we had a Certificate of Special Competence awarded to us by the American Board of Surgery, the College was very receptive to recognizing children’s surgeons as specialists. The development of the Advisory Council [on Pediatric Surgery] at the College was an important step that gave pediatric surgeons equal footing with other surgical specialties that had similar advisory councils, the inclusion of pediatric surgeons on committees, like the program committee and the like. The establishment of postgraduate CME [continuing medical education] courses at the College specifically designed for pediatric surgeons gave the specialty a presence at the annual meetings of the College, and this was very well planned out.

After a while, through the help of Bob [Robert M.] Filler, the College then awarded pediatric surgery a position on the Surgical Forum, which was the place that young people doing research in surgery could present their work to very large audiences. The College hosts anywhere between eight and ten thousand people a year at the meetings, and presenting a paper at the forum was an important thing for young surgical scientists including pediatric surgeons. Having their own forum specifically for pediatric surgical
presentations was a big step forward, and the College really has been very kind to pediatric surgeons.

And finally, concerning leadership roles. It’s taken a long time for the College to recognize that—for instance, there was no Regent at the upper level of the executive of the College that represented pediatric surgery, and that changed in the last year, so pediatric surgery is now represented on the Board of Regents. For the very first time, a pediatric surgeon was president of the American College of Surgeons, Kathryn Anderson, so we had a woman president who happens to be a pediatric surgeon. Both milestones at the College.

My own personal experience with the College has been somewhat extensive. We served on the SESAP [Surgical Self Assessment Program] program for the College. We’ve also been on the program committee and served on the advisory council, for both general surgery as well as pediatric surgery, and were on the Board of Governors and on the liability committee, so we’ve had an opportunity to do a fair number of things for the College. Also this last spring we were honored by giving the Churchill/Excelsior Lecture [Excelsior Surgical Society/Edward D. Churchill Lecture] for the spring meeting in Dallas. So in general, the American College of Surgeons has been quite open and receptive to pediatric surgery once they got established as a specialty. Once we were given board status and we had our own organization, like APSA, representing us, we were recognized as a distinct surgical specialty, and that was very important for American pediatric surgery.

DR. KLEIN: Okay. Why don’t you talk some about APSA?

DR. GROSFELD: The American Pediatric Surgical Association was long in coming to the forefront. It was really the first association that specifically represented pediatric surgeons. Up until that time, the American Academy of Pediatrics was the only place the surgical representation occurred for pediatric surgeons, and yet it wasn’t the advocate for pediatric surgeons; it was the Academy of Pediatrics. We were just part of it. The American Pediatric Surgical Association allowed the specialty to come of age, and it was through the work of Bob [Robert] Izant and Lucian Leape and Tom Boles that promoted the development of APSA in 1970. The first meeting was held in 1971, and appropriately Robert Gross from Boston was the first president.

Since that time, it has really represented the major meeting in American pediatric surgery annually. It now has more than 700 members. Probably 450 are active. It’s recognized as a resource for people to be selected for the American Board of Surgery, for representation to the AMA [American Medical Association], representation to the RRC, etcetera. APSA can promote someone as a candidate for those positions, so it is recognized quite
a bit. And it serves as the advocate for our specialty in America. It’s a very important organization.

We were one of the early members. I had just finished my residency a year or so before it was formed and applied for membership, and I think we were in the early group in 1972 and became a member. We served on a number of committees at APSA and wound up being president of the organization in 1995. I now serve as Chairman of the Board of Directors of the APSA-Foundation.

DR. KLEIN: Central Surgical [Association] was another organization that you were involved in.

DR. GROSFELD: Yes, we became a member of the Central Surgical in 1975. Now, Dr. Jesseph, who was the chairman of surgery at the time here in Indiana, promoted us for that, and he was the president of the organization. We’ve been a member of that organization for more than thirty years. It’s a very solid regional surgical organization, and we use that as a focus of promoting children’s surgery among general surgery within the Midwestern community. Our residents present lots of papers at the meeting. As time went by, we were fortunate enough to serve both as secretary and president of the Central Surgical as well. It’s a good, solid organization. They meet in March, so it’s kind of a macho thing, which city is going to have the worst snowstorm for the meeting.

DR. KLEIN: [Laughs]

DR. GROSFELD: But it’s a fun group of people. The quality of the scientific programs is very good, and it has a nice social climate as well. We enjoyed being a member of the Central Surgical. When I became chairman of the department of surgery at Indiana University, I was the first pediatric surgeon to be a department chair. It was important to represent the department at the regional meetings as well, so it served a dual role for me, personally, and for our department at the university.

We’ve had a good experience with some of the other regional organizations as well. For whatever reason, years ago Indiana was once the western frontier.

DR. GROSFELD: How did you get involved in the Western Surgical Association?

DR. GROSFELD: Indiana was the sixteenth state in the country, and it was on the western frontier at one time. The Western Surgical Association is a very old organization, in fact the second oldest in the country. It’s well over a hundred years old. So that’s how Indiana got involved in the
Association. We have presented children’s surgical material at those meetings and became president of the Western Surgical Association in 1998.

We actually hosted the Central Surgical meeting here in Indiana, as well as the Western, that same year I was president, in 1990. Yes, we hosted both of the meetings here, and that was, I think, a pretty good thing. Having pediatric surgery represented in the broad scope of surgery is important, because it allows our profession to stand tall among the other surgeons. If we’re just isolated and nobody knows much about us, often they say, “Oh, those guys. They just do baby hernias.” They don’t really understand what we do, but presenting our work and promoting our specialty—it’s good for the field. I’ve always felt that was important.

DR. KLEIN: Yes. It also helps us continue to recruit the best candidates out there.

DR. GROSFELD: Absolutely.

DR. KLEIN: I’ve saved the best for last, the American Surgical Association.

DR. GROSFELD: Well, that was a recent occurrence. The American Surgical Association (ASA) is the oldest surgical society in the United States. It was formed in 1880. Samuel [W.] Gross of Philadelphia was the first president. And it’s always served as the elite, austere group in the United States. Only accomplished surgeons who have achieved great things are supposed to be members. I’m not sure that holds true today. But in any event, it is a very important organization. It wields a lot of power nationally. It serves as an advisory group to the College [American College of Surgeons] and to other groups as well. It often is one of the groups that have members on the [American] Board of Surgery, on the RRC. It’s one of the groups that elect candidates for those important positions in American surgery. For that reason, I think it’s an important group.

The ASA scientific meetings have always been at the highest level. Excellent papers presented. It’s a real learning meeting. No exhibits from pharmaceutical firms or industry are ever allowed at the meeting. It’s really sponsored by its members. It’s a unique organization. I was elected first vice president of the American Surgical Association a couple of years ago. Usually that’s a bone. It means you’re not going to be president.

DR. KLEIN: [Laughs]

DR. GROSFELD: And since there had never been a pediatric surgeon who was president, I figured that was the end of the road as far as leadership in the society was concerned. And then in April 2006 in Boston, I was so
pleasantly surprised and honored by actually being elected president. So we were the first baby doctor to be president of the ASA.

DR. KLEIN: Who elects the president? In most surgical organizations, your name doesn’t go on a ballot, and you get elected.

DR. GROSFELD: No, there’s a nominating committee, and the nominating committee is a very secretive thing. Nobody knows who the president is going to be, there’s no president elect, so you have no clue who the president is going to be until the meeting. Since I had thought it had been the end of the road for me, being first vice president, who almost never becomes the president, I had no clue that that would happen. When it did, I must say it was a very pleasant surprise. But I’ll take it.

DR. KLEIN: [Laughs]

DR. GROSFELD: It’s a big job. There’s a lot of work involved. You’re involved in a lot of selections of people to work on the national level. You’re involved in a lot of national decision making regarding recommendations for health care, recommendations for education, nominating people to serve on the various groups that are important to surgery, like the Board of Governors at the College, the American Board of Surgery, the Residency Review Committee for Surgery, committees advising Congress, and a variety of others. I didn’t realize how much work it would be.

DR. KLEIN: Do you have any method for selecting people? You know a whole lot of people, but I suspect you don’t know them all.

DR. GROSFELD: No. I think you have an advisory group. The Advisory Council of the American Surgical Association are three prior presidents who’ve been through the system and are very helpful. You select people based on their productivity and their accomplishments and their ability to get things done. As you say, there are a lot of people out there who are very smart but sometimes don’t get the job done, and there are a lot of people who are very productive in one area but don’t function in other areas, so there has to be a number of skills that people have, including objectivity as well as good communication skills and to be able to deal with others.

DR. KLEIN: That’s true. Plus you have to be able to take the message to Garcia and actually do what you told somebody you would do.

DR. GROSFELD: Right. It’s a very interesting opportunity. And then beyond that, you serve as an adviser for three or four years and then wind up running the foundation. Now, the American Surgical Association Foundation is a very well-to-do foundation that has millions of dollars in its pockets, and they’ve been very generous in sponsoring excellent grants for
research. They fund three two-year, $75,000-per-year research grants for young surgical scientists. That's a very ambitious program. And they also fund lots of other things: studies about changing curriculum; they've given $50,000 a year for three years to the American Board of Surgery to establish the SCORE [Surgical Council on Resident Education] committee to evaluate changes in future curriculum for surgeons, and participate in that, so they do a lot of good things. I'm pretty proud of the opportunity to serve as a leader in that group and particularly as a pediatric surgeon doing something for the first time. I think it's good for our specialty. It also gives us a chance to elevate the importance of our specialty on the national scene.

DR. KLEIN: I think you're absolutely right. Okay, before we go into any other things, I'd like to talk about your role as chairman of the department of surgery and how that came about.

DR. GROSFELD: I certainly didn't anticipate being a chairman. My goal in life was to be a baby surgeon and to be director of a children's surgical training program, surgeon-in-chief of a children's hospital and be in charge of children's surgery, and I achieved all those things, actually, by the time I was thirty-seven. I was vice chairman of the department at Indiana University under Dr. Jesseph, who unfortunately succumbed to lung cancer at a young age. Somebody else was appointed by the dean at the time to be the interim chairman. There were problems in finding a new chair, and the department was sort of waffling a little bit at the time. It didn't have good leadership. People were concerned about who was going to come. The dean wasn't about to promote the goals of the department until a new chairman came, so it didn't have a lot of funding or support. The department was at risk.

After two years, the individual who had been the interim chair tried to force the dean to name him chairman, and the dean declined to do that, so that person left.

DR. KLEIN: He went to Beaumont [Hospital], right?

DR. GROSFELD: Yes, and then the dean asked me would I serve as the interim chair until we found a chairman. I told him I would do so only with the understanding that we would be allowed to pursue those things that would allow us to get a good chairman. We needed new operating rooms at the university, we needed lab space, we needed office space, we needed to recruit faculty. We only had twenty-two members in the entire surgical faculty.

DR. KLEIN: Oh, wow.
DR. GROSFELD: Certainly inadequate numbers of people to do all the work. I mean, the faculty was working day and night, and there was no respite. So the dean at the time was receptive, and for the next year, the chairman search continued, but in the meantime we built eight new ORs, built a new research laboratory and hired about ten new faculty in that year, so desperately needed for the department. At the end of the year, the dean called me one day and asked me to come visit with him, and I did. It was on a Friday afternoon at about four o’clock, and he said he’d been thinking about what had been going on with the department of surgery at the university, and they still hadn’t come up with a person he thought was qualified for the position as chairman. And in the past year, with some support, it appeared that I had done all the things necessary to get the department on a good footing again, and he would like to appoint me as the chairman.

Well, I told him that I hadn’t anticipated that and that that year had taken a lot of time away from the things I enjoyed doing, like operating and being a baby surgeon. I hadn’t spent much time with my family, even less than I had in the past, and I would need to discuss it with my wife to make sure that it would be okay to do this on a permanent basis. So I told him I would give him an answer the following Monday, that I needed the weekend to think about it. So I went home and I spoke to Margie, and she said that I had devoted at least eleven years of my time here, and I was good for this university and that I ought to do it. I hadn’t realized at the time that I was the first pediatric surgeon to be a department chair at a major university. So I went ahead and took the job for the next twenty years. It worked out okay.

DR. KLEIN: How did you fit that into your other activities? Did you just work fewer days on those?

DR. GROSFELD: No, we just started the day at the chairman’s office every morning so we would get all the paperwork out of the way. We’d come in at five am and between five and eight, before going to the OR, I would be able to do the daily work of the chair in regard to administrative duties, other things. We held all of our meetings at six thirty am when we had morning meetings, except on the teaching day and M & M [Morbidity and Mortality Conferences] and grand rounds, and then I’d go operate and break between cases to go to a dean’s meeting or other things. The dean (Dr. Walter J. Daly) was very good. He would have meetings at seven in the mornings instead of at nine or ten, in the middle of the OR schedule, so I could attend them, or late in the afternoon. He did that for us, actually. He was a good guy. He was very supportive of surgery, which is rare among deans who aren’t surgeons.

DR. KLEIN: Right.
DR. GROSFELD: And this seemed to work out. The department grew. We started a lot of new sections and divisions.

DR. KLEIN: Tell me some of the things that happened during your twenty years as chairman.

DR. GROSFELD: We built up the transplant program to be a very significant program. That went from about two people to about six people, and the numbers of cases more than tripled. We set up a section of vascular surgery, changed leadership at the county hospital [Wishard Memorial Hospital]. We grew pediatric surgery to a great extent as well because of the volume increase. Increased the number of faculty from twenty-two to seventy, and then built more lab space, got more grants, went from about $1 million a year in grants to about $7 million a year in grants. While that isn’t a huge amount, it was better than it was. Fortunately the person who succeeded me as chair (Dr. Keith D. Lillemoe) has raised that considerably and increased faculty to more than a hundred now.

We also went through a merger with Methodist Hospital and absorbed their training program into our training program. We changed the training program here to a six-year program, so everybody had to do a year in the lab, and started hiring PhDs for lab support, planning for a new cancer hospital [Indiana University Melvin and Bren Simon Cancer Center] and a new tower, the [The Riley Hospital for Children] Simon Family Tower. We established a level one trauma program, both in adults and children and just had a lot of growth. It was kind of exciting. Things happened.

DR. KLEIN: How did this fit in with the rest of the community? Where did these patients come from? You increased the faculty enormously and the importance of the university medical center, but was this at the expense of the other private hospitals?

DR. GROSFELD: A lot of the patients at the university come from small cities around the state. They come from outside the city of Indianapolis. When we established Clarian Health Partners, we merged with Methodist Hospital, which is a big private hospital, so faculty did things at Methodist as well. Clarian also built two new peripheral hospitals in the community, one on the west side [Clarian West Medical Center] and one on the north side [Clarian North Medical Center], so the faculty actually worked in the community in these other hospitals, outreach hospitals. The volumes increased because people got busy, and people worked hard. Cancer is a big player at Indiana University [Hospital], and the new cancer building will create an [The University of Texas] M.D. Anderson Cancer Center–like effect for Indiana. The university does probably 20 to 25 percent of cancer in the state now, and I think this addition will be a terrific asset. And, of course, Children’s [Riley Hospital for Children] has continued to grow. We
started a ten-story addition to the Children’s Hospital, which will increase the number of beds to more than 350.

DR. KLEIN: That’s going to be amongst the largest in the nation.

DR. GROSFELD: Yes. Well, actually, I think the largest hospital is in Houston now [Texas Children’s Hospital], more than 500 beds. And Philadelphia [The Children’s Hospital of Philadelphia] is going over 400, so all the children’s hospitals seem to be expanding.

DR. KLEIN: Children’s hospitals are doing well. All the things they told us in the eighties about children’s hospitals was just all wrong.

DR. GROSFELD: Yes, we went through that. In 1986 we opened up our third wing, and we had asked for 350 beds then, and more ORs than we have, asked for twenty ORs then. They gave us fourteen ORs and didn’t expand the beds because the consultants came in and said, “Everything is going to be outpatient; you don’t need inpatient beds.” My comment was, “You don’t understand the nature of our facility.” I said, “It’s a referral hospital, and the kind of patients that come here are all sick and need to be inpatients. This isn’t a hernia hospital.” It fell on deaf ears, so we’re twenty years behind the time in getting the numbers of beds and adequate numbers of ORs we needed. We were able to build a very good outpatient center that opened up in 2002, and that’s a beautiful center, and we did add six ambulatory ORs there for outpatient surgery, but those are separate from the main OR. The new hospital will have twenty-seven ORs.

DR. KLEIN: Are there going to be special ORs? Is there going to be an open magnet MRI [magnetic resonance imaging] room and an endovascular suite?

DR. GROSFELD: I’m not sure about the endovascular suite for the children’s hospital. In the cancer hospital there will be, and for neurosurgery there will be an MR unit in the OR, and the orthopaedic people will have a combined fluoro-MR unit in their room for extremity tumors and things like that. Each room will have ceiling architecture and minimally invasive capability, with multi-screening, with flat screens that will have multimodal activities so that you can see your frozen section, your monitoring of your patient, the CT [computed tomography] scan sent up from X-ray, and the camera over the table with the field up on the screen so everybody can see what you’re doing in the OR. I think the operating room of tomorrow is going to be spectacular. It will have a lot of new technologies in it that we don’t have now. Unfortunately, being retired, I won’t get to use it. But it’ll be a wonderful thing.

DR. KLEIN: And who supports all of this development? Was this the state of Indiana?
DR. GROSFELD: No. Even though it’s a state university, it’s a public and private mix. The hospitals are owned by Clarian Health Partners, [Inc.], which includes the University Hospital, Riley Children’s Hospital, Methodist Hospital, and the peripheral hospitals. It’s also supported by the Riley Children’s Foundation. [James Whitcomb] Riley was an Indiana poet. The hospital was built in 1924 to honor him after he passed away. It got started in 1916, but World War I interfered with the progress. It’s been the major focus of pediatric care in the state since that time. There are a couple of other, smaller “children’s hospitals” that have popped up, forty beds, thirty beds in other cities, but I think that’s more of an insurance hype than a comprehensive pediatric facility. But in any event, the Riley Children’s Foundation has supported the bricks and mortar for new growth to a significant extent, so probably half the funding for the new building will come through them, the other half through the university [Indiana University] and Clarian and bonding.

END OF TAPE SIDE

DR. KLEIN: You’ve had a leadership role in general surgery in addition to the Central Surgical [Association]. Weren’t you president of the program directors in general surgery?

DR. GROSFELD: No. I wasn’t president of the program directors. But I did serve as chairman of the American Board of Surgery.

DR. KLEIN: Oh, yes. Talk about the board. That would be fine.

DR. GROSFELD: I guess I was the only pediatric surgeon who ever served as chair of the board, and that was a unique experience. The relationship of the board and pediatric surgery is an interesting one, in that it took three or and four attempts to get certified by the board. It was the hard work of Harvey [E.] Beardmore, Marc [I.] Rowe and Judd [Judson G.] Randolph that permitted that to occur the fourth time around. Pediatric surgery was turned down quite a number of times. They had to take the exam given by the board, and then they created the new exam for the rest of the members who were eligible to take the board. There was no grandfather clause, so everyone had to pass the exam to become certified. The first exam was given in 1974 at Dorado Beach in Puerto Rico.

DR. KLEIN: I remember that because there were no pediatric surgeons in Boston. There was a urologist covering. They all went to take the exam.

DR. GROSFELD: It was an interesting experience. Pediatric surgeons were the first group to make recertification part of the requisite to train, so you had to pass your boards, and then you had to recertify in ten years. We
were the very first group that had recertification, and that sort of set a new standard, and we were pleased about that. And then the Board also took the responsibility of being creative and developing the in-service examination for pediatric surgeons, which was important for the residents. And then finally, in 2000 or so, the sub-board of pediatric surgery was formed under the auspices of the American Board of Surgery, so there is now a sub-board of pediatric surgery just like there’s a sub-board of vascular surgery.

DR. KLEIN: Did that come in part out of the struggle with the vascular surgeons?

DR. GROSFELD: They say no, but I think it did. What I think they wanted to do is show they weren’t giving any specific preference to vascular surgery, so they made pediatric surgery come along, too.

DR. KLEIN: [Laughs] I’m not sure it was necessary, but they did it. And the interesting thing is that the vascular surgeons are still pressing to be totally separate.

DR. GROSFELD: Absolutely. Well, I like the vascular surgeons. They’re great people at our institution, but they’re hard to satisfy.

DR. KLEIN: [Chuckles] Yes. So how did you get to be chair of the board? Was it because of what you had done as a board member?

DR. GROSFELD: Yes, I was a director on the board, and the pediatric surgeons who were directors of the board had a lot of hard work to do, because we had three general surgery exams to give orally each year. We had to give the pediatric surgery exam every other year, and you’re on the board for a six-year period; and then you were responsible for writing the questions for both the written, which is the qualifying examination, and the oral exam, which is the certifying examination, and for the in-service exam, so you had to write three exams every year almost. There’s quite a bit of work.

DR. KLEIN: That’s a lot of work.

DR. GROSFELD: I guess they thought we’d carried that out fairly well and that our examining capabilities were good and that we had participated in other activities that the board was involved with, so you’re elected to the position of chair. The other surgeons on the board elected me as chair, which was quite nice, actually.

DR. KLEIN: Great. I just have to take a break from the organizational stuff, although we have covered the major portions of it.
DR. GROSFELD: The only one I think we didn’t cover was the RRC [Residency Review Committee, Accreditation Council for Graduate Medical Education].

DR. KLEIN: That’s true. That is true. If that’s the only one, then we can do the RRC before we go to the real pediatric surgery, which I still want to talk about.

DR. GROSFELD: The Residency Review Committee for surgery oversees the accreditation of training programs. The board’s responsibility is to certify individuals as surgeon in a specific field. The College [American College of Surgeons] is responsible for postgraduate education after you’re trained, and the RRC accredits the training program. They make sure that the program is fit to house an educational opportunity for young people. There is an institutional review that occurs as well as a departmental review. They’re very strict in the site visit surveys that are done, evaluated by educational PhDs that come on the campuses and evaluate everything that is part of the criteria of the training, which is very extensive. We were on the RRC for a number of years, and that also requires a fair amount of work. You have to review a certain number of training programs for each meeting. You meet at least three times a year, and you review maybe fifty to sixty programs at each meeting, so it’s a lot of work. It’s very complex. Neither the American Board of Surgery nor the RRC compensates the people who work on these Committees, so this is really doing something for the good of the specialty and the public if you will. You’re really donating a lot of your time for a good cause, making sure that when you examine people at the board that they are safe to go out and care for the public, and make sure that institutions you evaluate are appropriate sites for educational training and the like. I think you really serve the public in those positions.

DR. KLEIN: There’s an enormous amount that American medicine does on its own that is done in other countries by the government.

DR. GROSFELD: Right.

DR. KLEIN: Including the board certification, certification of the residency and even the control of the literature, if you will. It’s all been kept in our hands. I think part of the reason we do it voluntarily is so people don’t think there’s anything in it for us.

DR. GROSFELD: But it’s an amazing system, when you think about it. It really is unique. And there’s something rewarding about serving in public. That’s basically what physicians are all about. You do serve the public.
DR. KLEIN: Can you talk about one or two of the major pediatric surgical problems and how they have changed since you’ve started to do it? I’m amazed that most of what I do today is not done the way I learned to do it.

DR. GROSFELD: There has been a lot of progress in the field, which are related to a number of factors. Generally, if you look at the scope of what we do, a lot of the new things that have impacted on pediatric surgery in general have been the development of high-risk obstetrical centers, prenatal ultrasound, identifying problems before the baby is born, the availability of new technologies, oscillating ventilators, the development of the elucidation of the human genome (so understanding the genetic makeup of certain diseases has impacted in some ways how we treat them), and the sophisticated NICU [neonatal intensive care unit] care that’s available now that wasn’t available when I started. I mean, the neonatologists do a fantastic job. Babies less than 1,000 grams always used to die; now babies that weigh 500 grams at 24-week gestations—50 percent survive. I mean, it’s fantastic, in general, what they’ve done. But it’s also created new problems that we hadn’t experienced before, like NEC [necrotizing enterocolitis] and neuro impairments micro-premie in survivors that we’re just learning about.

With the growth that we’ve had, the emergence of other pediatric specialties has come about as well, such as the RAPs (pediatric radiology, anesthesia and pathology), and we can’t work as well without pediatric specialists in those areas. They’re all very, very good, and if you ever go to an outlying hospital, and you don’t have that kind of pediatric specialty support in radiology or in anesthesia—I mean, you know about it right away. If no one is available to read a frozen section for you, you’re in deep trouble. So I think they have assisted us in improving the way we do things tremendously.

The other thing is the growth of other specialties. Sometimes that’s had a negative effect on us, but in general it’s been good. I’m speaking specifically about pediatric urology and pediatric ENT [otorhinolaryngology] and perhaps some others. Obviously we used to do the open hearts as well; we don’t do that any more. Mainly pediatric cardiovascular surgeons do those. We know Dr. [Robert E.] Gross started it all. I think that’s probably a good idea. Now there are a lot of pediatric plastic surgeons also. So that’s an important change as well. Although we still have a broad scope of practice, we are no longer the man for all seasons.

And then developing systems that have helped the care of the patient has been, an important change globally in pediatric surgery. We’re talking about cancer, multidisciplinary cancer care, pediatric trauma systems with pre-hospital transportation, post-arrival care. I think that’s changed a lot, all for the better. And there may be some others down the line, but specifically you start thinking about multidisciplinary care of patients in different areas. Certainly the myelo clinic, with the neurosurgeon, urologist
and the rehab people mainly involved—we’re not involved that much in those patients, but that collaborative concept of care is a very important one. Specialty clinics, where you have the pediatric surgeon and a hepatologist and a transplant surgeon taking care of patients who have biliary atresia and the like. That kind of continuity of care is a very important and that wasn’t available years ago.

For specific conditions, you’d have to say that Dr. [Morio] Kasai’s operation and liver transplantation has dramatically changed the outcome for babies with biliary atresia. Biliary atresia patients used to die in eighteen months, and [with] the combination of the portoenterostomy procedure and a liver transplant, 85 percent of them live now; so that’s a dramatic change. When we first started out, gastroschisis had a very poor survival rate. Babies used to die from compartment syndrome, respiratory compromise and malnutrition. With the use of temporary silos, close attention to the initial resuscitation, and the advent of TPN [total parenteral nutrition] and the recognition of the fact that you have to support them for a period of time, 90 percent of these babies now survive. About 10 percent have complicated bowel problems and they don’t do as well, but most of them survive. Now, that’s a huge change.

How you treat esophageal atresia has changed also, up to the point of even using different techniques to operate on a patient with minimally invasive surgery, not even opening the chest. Probably 90 percent of these patients now survive which is remarkable.

How we treat diaphragmatic hernias has changed: delayed surgery, ECMO [extracorporeal membrane oxygenation], permissive hypercapnia, oscillators, surfactant, nitric oxide—(whether that helps or not, I don’t know). But certainly if you take very high-risk babies and treat them with these adjuncts that we didn’t have available, you’re probably saving a 30 or 40 percent group of patients that didn’t make it before. Not all of them. There’s still a significant mortality. We haven’t solved the problem of hypoplastic lungs. Fetal surgical repair of the defect and tracheal balloon insertion have not helped.

We’ve created some problems. Like, NEC [necrotizing enterocolitis] didn’t exist before the NICU was established. Mainly (90%) little babies, micro-premies get NEC, and if you look at the overall survival over time, it probably hasn’t changed. Even though we might do things a little differently, like percutaneous drainage versus surgery. I don’t think all the answers are in on that subject as yet. But the overall survival for those patients still leaves much to be desired.
There’s still a subset of patients with CDH [congenital diaphragmatic hernia] who don’t do well, and there are a lot of babies with NEC who don’t do well, and we still don’t know how to prevent it.

DR. KLEIN: If you had to direct a young person doing research in pediatric surgery, what are the clinical problems?

DR. GROSFELD: Neuro impairment would be one. The immature immune system, finding out how to deal with that. We still have babies that die of sepsis commonly and breakdown of immature systems that can’t survive multiple system failure. I think those are things that are a real problem. I think if you look at things like abdominal wall defects, esophageal atresia, bowel atresia, Hirschsprung’s, biliary atresia, the improvements in survival of all of those have been dramatic. Most of those babies live. They haven’t been a real problem, but we still have problems with CDH and we still have problems with immunomodulation. I think neuro morbidity is a big problem, whether that’s all related to hypoxia or whether it’s due to sort of a response to an inflammatory cascade in a premature infant that can’t handle it. We don’t know that yet. But all those are major problems. And whether fetal surgery will be something that will be important in the future, I don’t know. Certainly its application has been quite limited to a few CCAM’s, [congenital cystic adenomatoid malformation] a rare SC-teratoma with fetal hydrops and shunting, and perhaps meningomyelocele. I think persistent problems include neonatal sepsis, which goes along with the fact that so many of the babies are premies and their immune function isn’t very good, and they die of sepsis, even with the best of care. NEC, CDH and giant omphalocoeles are other conditions that need improved care. The patients with intestinal failure due to gastroschisis and major bowel loss, short bowel syndrome from malrotation and midgut volvulus, multiple atresias, total colonic Hirschsprung’s up to the jejunum may require bowel transplantation. Small bowel transplantation is where liver transplantation was fifteen years ago. We can do it. It’s feasible. We’re getting better at it, and it will improve over time. But right now the one-year survival is pretty good, about 80-90 percent. But it falls off to 50% at 5 years.

DR. KLEIN: The one year survival on TPN is also pretty good, but then falls off dramatically. But I’m still referring patients for small-bowel transplants.

DR. GROSFELD: We are also, and I think the results will get better, and multivisceral transplantation is another area that’s been helpful, because a lot of transplant surgeons probably will not do a bowel graft without doing a liver transplant, too. They often get TPN-related liver failure and need both done.

DR. KLEIN: What do you see in the future that’s going to make the difference? I see two competing areas holding the hope for significant
improvements. One is genomic. We’re going to be able to separate out the different classes of patients that we now lump together, with genomics, and treat them differently. And the other is technology: minimally invasive surgery, robotic surgery, the application of computers and technology. What’s going to make a difference in pediatric surgery, if you had to make a guess?

DR. GROSFELD: We have made enormous progress in pediatric cancer care. Remarkably, 80% of all pediatric cancer victims survive. We now have to focus on the 20% that fall through the cracks and do not. Most have advanced disease or metastases. With the elucidation of the human genome you have the potential for preemptive care. We’re doing a little bit of that now. For instance, in a family that has MEN2B [one of the multiple endocrine neoplasias] syndrome, we can diagnose medullary carcinoma before it ever occurs, just by identifying the presence of the ret oncogene gene, and taking out the thyroid before a medullary cancer of the thyroid develops. The thyroid should be removed by the time the infant is one year of age.

That’s a preemptive strike. I think the same thing can be done with things like polyoid diseases of the colon, for instance. We know they are precancerous lesions. If we can find specific genetic traits within a population, we can identify patients that need earlier surgery. They’ve already done that in a sub-group of people who get familial gastric cancers, and then if you take the stomach out in affected family members before they turn thirty, they’ll probably have long life.

In pediatric cancer, you can identify the mutations that lead to malignant transformation, and you can treat individual patients according to which mutation they demonstrate. Individualized care based on genetic alterations, limiting the most intense treatment protocols to specific patients. I’m sure that will occur. We do that somewhat now with some leukemias and also with some of the rhabdomyosarcomas, and some of them have different genetic makeup, you treat them more aggressively, etcetera. Whether you can predict which one will develop a cancer, I’m not sure yet, but that may happen. So I think the elucidation of the human genome has been an enormous step forward; but we are just scratching the surface.

The other thing that will occur is a better understanding of nanotechnology, and the nanotechnology will permit us to study subcellular levels. I mean, we’ll be able to study molecules in a cell.

DR. KLEIN: I have this dream that we’re not going to suture things together anymore, we’re just going to weave the molecules back in order.

DR. GROSFELD: That may be true. I don't know. Maybe not in our time, but down the line, I think molecular biology will become a really
important thing, and nanotechnology will permit that. And you’ll be able to
find out what event occurs in the cell that allows shock to be reversible, and
irreversible. And if you can reverse things, you can save lives and prevent
deaths.

[Recording interruption.]

DR. KLEIN:    Okay. You were talking about the future.

DR. GROSFELD:   One of the things that is interesting—when this all
started out, the pediatric surgeon was kind of a man for all seasons. We were
the oncologist, the urologist, the head and neck surgeon, the trauma and
orthopaedic surgeon, the neurosurgeon sometimes, thoracic and cardiac
surgeon, plastic surgeon, etcetera. That’s changed a little bit. I think while
we train in most of those things still, we focus in different areas, and quite
frankly, I think we’ve had to adapt a little bit to change. Part of it came
from competition from other specialties. But in general I think our
adaptation to what we do in the future, will probably be related to what we
do the best.

I think the future of our specialty will probably continue to be focused on the
things we do better than anybody else, which is neonatal surgery. Pediatric
trauma and pediatric cancer we do better than other people do. So those
three areas we’ll retain. At the same time, we have to maintain our expertise
in the same technology that other surgeons have in different patient groups,
like robotics, MIS [minimally invasive surgery], I think we’ve adapted to
that. I think the younger surgeons particularly do it better, because they’re
learning it as part of their training. And then there are some areas that I
think we’ve been leaders in, that we can continue to keep those areas as
strengths because they affect not only what we do with children but will
affect surgery in general. That includes things like tissue engineering, in
which [Joseph P.] Vacanti and his group are world leaders; in angiogenesis,
and antiangiogenesis, fields that Judah Folkman developed. Unfortunately
Judah passed away and the Nobel Prize is not awarded posthumously.

And then the one area that we haven’t done as much in as perhaps we could,
particularly now that bowel transplant is important, is we haven’t trained
our people enough to be involved with transplantation. The reason that may
become very important is that one of these days; we will understand how to
establish immune tolerance. When that occurs, that changes the whole
ballgame. So between tissue engineering, immune tolerance and the other
fields of research endeavors good things will happen.

Now, because cancer is still the leading disease cause of death, it’s the leading
cause of death between six months and fifteen years—I think we will have to
do some things differently. Although there are some tumors, that we’ve had
dramatically improved survival including Wilms’ tumor, lymphomas, acute lymphocytic leukemia, germ cell tumors—I mean, great results—we still have some bad actors: Ewing’s [sarcoma], neuroblastoma, some rhabdomyosarcomas, brain tumors—I think we’ll have to focus on that. And employ a risk stratification concept, clinical risk management I think will be even more important in the future because we will be able identify each patient according to specific characteristics of their tumor, based on its genetic alterations. So you’re going to have to find combined novel therapies to deal with cancer in children in the future. You can’t keep using more intense therapy because it has bad long term effects on the survivors, and their quality of life. So I think that’s going to have to change. Specific targeted therapies, antiangiogenic treatments, tumor vaccines, immune modifiers, manipulating apoptotic pathways will be the wave of the future.

END OF TAPE SIDE

DR. GROSFELD: We don’t have a vaccine yet for hepatitis C or AIDS [acquired immunodeficiency syndrome], and so we have a long way to go in understanding viruses that mutate, and a lot of the tumors may also be related to viruses affecting the cells. I don’t know. But there will be targeted treatments for all sorts of things, like all the various subsets of ligands and transmitters and all sorts of particles and pathways we used to know nothing about and we’re just learning. But specific, targeted therapies I think will be a very important thing.

And then there will be people who can operate differently than we can. Those who can repair bad genes. We’re going to say, “Uh-oh, that gene has a boo-boo. We have to get rid of it and make it a non-mutant, get it back to a wild type gene.” When I first heard “wild type p53,” I thought it was a rock band.

DR. KLEIN: [Laughs]

DR. GROSFELD: But as I’ve learned more about the human genome, I recognize that’s just normal.

So there’s a lot going on that’s pretty exciting. We’ve learned more information in the last decade than was available to us in all the years before that time, just an explosion of new information. It’s remarkable. And one of these days, when the ethicists and the scientists get it right and we know how to safely use stem cells without ticking people off about their use, that’s going to be good. Eventually that’ll be okay, because we’ll just use our knowledge about tissue engineering and the new stem cells and create healed tissues, new skin for a burn without putting on AlloDerm or something. All those things as I see it are possible in the future. They won’t occur tomorrow or
next week or next month, but eventually those things will happen. It’s a pretty exciting time in medicine.

I guess the only bad thing about retiring is, number one, you mustn’t let it get in the way of your work, and number two, you’re going to miss out on some exciting things down the line because you’re not going to be there to see it.

DR. KLEIN: Yes. What is happening to pediatric surgery? Are we going to have pediatric surgical specialists? You intimated that it’ll be pediatric surgeons who really do trauma or tumors or transplantation?

DR. GROSFELD: I think probably the thing that draws people to pediatric surgery is the broad scope of what we do. I mean, to me, I’m still the man for all seasons. I still do almost everything, or I did. And I loved it. And I did a good job of doing everything. I was a good thoracic surgeon, and I was a real good oncologist, and I would take good care of my trauma patients, and I could care for babies better than most people, and we could do things that other people couldn’t do. We were the men for all seasons. And that’s changed. Especially now that there are a lot of women pediatric surgeons. And we’re more focused. But if we focus in on the things that we really do better, we’ll be fine, and that’s neonates, childhood cancer, and childhood trauma. In those three areas, nobody does it better. I keep thinking of that James Bond movie [sings], “Nobody does it better.” [Transcriber’s note: The theme song for the 1977 film, The Spy Who Loved Me, sung by Carly Simon]

DR. KLEIN: [Laughs]

DR. GROSFELD: And it’s true. I don’t think that’s changed at all.

DR. KLEIN: What about in research? I think this is going to be a serious issue in the future as people spend more time in the practice from the university, for funding from foundations, for whatever reason. Is it the pediatric surgeon who’s going to be in the laboratory, or is it going to be the PhD that’s hired by the department? How do you think that’s going to be able to work?

DR. GROSFELD: I think PhDs are great but I don’t think they’re trained to think clinically. It’s the clinician, the clinician-scientist or the surgeon-scientist that can best focus on a clinical problem, take it to the laboratory and, with the help of the PhD who is there full time, can solve the problem at the bench level and take it to the bedside, where it can be applied clinically. The PhD can’t take those two steps. He doesn’t recognize what the clinical problem is, and he can’t take it from the bench to the bedside, so you have to have a surgeon-scientist that can do that or a clinician-scientist that can do that. It’s requires collaboration a multidisciplinary effort. You have to have
people who understand things like nanotechnology. Very few surgeons are nanotechnologists. You have to have people who are very well-trained researchers who can really focus on technique, methodology and stuff like that—that perhaps surgeons aren’t as good at. But, the thoughts about problems we face on a daily basis, the solving of the clinical problems, I think are best done by a clinical scientist, because they know what’s wrong with the patient. They can recognize what the patient’s problem is, take it to the laboratory and try to solve it at the bench level and then bring it back to the bedside to help the patient. For physicians, it’s all about translational research. That’s where we have something to offer in the laboratory that other people don’t have. We’re not making a drug. We’re not creating Plavix or something like that. You know, a chemist or a pharmacologist does that. I think we just don’t use all of our resources as well as we can. If we used all of our resources, we’d do a better job. And sometimes we just can’t afford those resources.

DR. KLEIN: Let’s talk about another area of your work that we haven’t touched on yet, which is the editorial, not just the journal and seminars but also the textbooks, which are a whole other area of work.

DR. GROSFELD: Got one right there.

DR. KLEIN: [Chuckles]

DR. GROSFELD: Yes, that was a labor of love. I’ve been editor of the journal [Journal of Pediatric Surgery] for 14 years now. I started working as an associate editor in the 1980s, then became editor in 1994 when Stephen [L.] Gans died. I enjoy editing a lot. Number one, you’re privy to all the new information immediately, before it gets published, and it’s a wonderful thing for your mind. It really is. Editing is quite a bit of work, but it’s for a worthy cause. You are disseminating the information to an entire specialty in the major organ for that specialty, and that’s exciting. I really like that concept.

In 1992 we also developed the concept of Seminars in Pediatric Surgery. The reason we did that was it took a long time—(sometimes eight years)—to get the next edition of a textbook on the shelf. In that interim period, new things were happening overnight, particularly in the last decade. It’s just too long to wait for the next textbook without having some vehicle to supply that information to pediatric surgeons. The journal can’t do that, but seminars is published four times a year—and it’s topic focused, and it’s focused in such depth that even textbooks don’t always cover the subject in that depth. And you can present a topic and present eight or nine different articles concerning that topic, and whoever reads that particular issue is going to come away with a great deal of information.
It’s been a very successful periodical. The three major things we’ve done as far as writing and editing are concerned have been the journal, seminars and the “bible”, the two-volume text [*Pediatric Surgery*, published by Mosby, now in its 6th edition]. Now, the two-volume text has always been an excellent textbook. It’s been recognized as the best text in the field, albeit there are a lot of other texts now, and many of them are fairly good, as you know. When we put this together, my coeditors and I sat down and went over what we had to do to make it the best again. What we had to do is revamp it a little bit, give people a little information about the past. Just sort of a refresher of where they came from. And then include new chapters that addressed what’s new, but address it in a different way than people have seen before. I think we did that with biotechnology, tissue engineering, molecular biology, molecular genetics and even with bariatric surgery, which hasn’t been in the textbooks about children before. We also added in pediatric radiation, oncology and things that weren’t in the other books. And then what we wanted to do was take all the chapters that are germane to our specialty and bring it up to date with all new references and new technologies embedded within the chapter, so you didn’t read a chapter on thoracoscopy, you read a chapter on thoracoscopy as it affects tumors or thoracoscopy as it affects pneumothorax or lung disease or whatever. By doing that, we thought it enhanced the book. The book is a 2,000-page, two-volume edition. It took two years to put together. We kept adding newer references all during the editing of the chapters. I’m pretty proud of it. I think it’s a good product.

**DR. KLEIN:** Oh, it’s superb.

**DR. GROSFELD:** And I think it’ll be good for our profession.

**DR. KLEIN:** I’m always amazed that somebody has the time and energy to come out with another textbook on pediatric surgery. I make an exception, of course, when [John G.] Raffensperger came out with his book [*Swenson’s Pediatric Surgery*] because that was just so peculiarly single author opinionated; it was really almost fun to read. But the other textbooks I kind of wonder at.

**DR. GROSFELD:** Just because there’s only so much you can read in a lifetime. Well, it’s all about competition. It’s the American way.

**DR. KLEIN:** That’s right.

**DR. GROSFELD:** Yes, it’s the American way. It’s all about money. The publishing firms compete with each other. Quite frankly, we weren’t competing with anybody. We felt we had the best product and what we wanted to do was make it the best edition that we’ve ever had and bring it up-to-date and make it a contemporary book that would be of value. I hope we’ve accomplished that.
DR. KLEIN: Oh, I think so. But it is nice to know, from a pediatric surgeon’s standpoint, that there are different ways to do things, that there can be more than one textbook.

DR. GROSFELD: Sure.

DR. KLEIN: It’s kind of the way I feel about robotic surgery. We can prove to you that it’s not ready for prime time, because there’s only one robot made by one manufacturer, so it’s not ready yet.

Okay, tell me about all those interesting things that people would like to know about you.

DR. GROSFELD: We talked about the bell-shaped curve.

DR. KLEIN: Yes.

DR. GROSFELD: And we talked about the great guys, most of the good guys, and then the few bad guys. We have bad guys out there sometimes, and you have people who duplicate efforts, and you have people who double dip; you have people who plagiarize. Unfortunately some of them are professionals, and so you have to be very alert, and you have to have a tough stance sometimes on people who abuse the system. We’ve had some really bad characters in different parts of the world who plagiarized things. One of the ones had the nerve of sending an article to me on short bowel syndrome, and as I reviewed the article, I noticed the numbers of cases and the patients looked awfully familiar, and it was one of my articles. It was word for word. It was the entire article, with this individual’s name, from a different hospital and a different country. But it was my patients.

DR. KLEIN: Oh, my Lord!

DR. GROSFELD: Same references. We obviously didn’t publish it in the journal, number one, and number two, we banned that individual from publishing in our journal. The first time, you ban him for two years, and if it ever happens again, it’s a lifelong sentence. But those things happen.

DR. KLEIN: Do you tell other journal editors?

DR. GROSFELD: Yes. We belong to a group, the SJEG, Surgical Journal Editors Group. We meet annually at the [American] College of Surgeons, and it’s composed of editors from all the surgical including some international journals. About thirty people are involved and we discuss common problems facing the editors. One problem concerned the British Journal of Surgery and the BJS. We had the same fellow from Kuwait, who submitted a paper, with the same patients, to both of us, simultaneously.
When we found out about it, we both rejected it, saying he couldn’t publish it, and both sentenced him to a year in purgatory.

So these things happen. And then you deal with the individual who submits a case report with thirteen authors. What do you do with that? There are some really funny types. And then you have the articles of individuals who write a letter to the editor about somebody else’s article, and some of those are very good because they bring up points that the author didn’t or they suggest that perhaps the author’s interpretation of a subject isn’t correct. I personally read all of those and make the decision whether to publish the letter or not. If we publish the letter, I then contact the author in question, send him the letter and say, “You have the opportunity to respond, and if you wish to, we will then publish the letter and your response simultaneously.” Most of them do respond. Occasionally the letters come, and they’re absolute rubbish. I mean, sometimes they’re based on “my personal opinion is . . .” No patient data and I just dismiss the letters and say, “This is really a personal opinion. It has no basis. There’s no data to support your concept. If you wish to discuss this, the e-mail address of the author is in the journal article. You can contact him directly, but we’re not going to publish your letter.” So you learn a lot.

Unfortunately there are still a lot of people out there who just can’t write and don’t follow directions, and some of the manuscripts submitted are poor—sometimes it is understandable because English is not the native language of the individual who sends it. About half of our manuscripts come from overseas; half are from this part of this world.

DR. KLEIN: Do you edit them for English? When I was young, I used to send back articles trying to reconstruct the English. Now I just send it back with a note that it requires editing by a fluent English speaker.

DR. GROSFELD: If it’s a really good paper and I recognize that it’s from a foreign country, I’ll do it. If it’s really good stuff, I’ll do it. And if the reviewers also concur, “This is good stuff, but it needs help,” we’ll help him, because that should be published.

DR. KLEIN: Do you do that?

DR. GROSFELD: I do a lot of it. Particularly if it’s someone I know and it’s really good content, I’ll help them and if it’s someone I have no clue who he or she is, I will say, “It would be best for you to get somebody who is fluent in English to help you with grammar and context to make this publishable.” I’ve found it a very rewarding experience, despite the fact that it does take a lot of time.

DR. KLEIN: Some people edit a journal as a full-time job.
DR. GROSFELD: It’s part time, but we do it fairly expeditiously, and now we’re going to fully electronic, which should help things a little bit. I think it if you don’t stay up on it it could get out of control. I’m reasonably well organized so we have it under control.

DR. KLEIN: I have a friend, Tom [Thomas L.] Slovis, who edits *Pediatric Radiology*. His is on this totally electronic system, which is nice in some ways because it makes it very easy to cut and paste, but I also assume it costs much more than the old way.

DR. GROSFELD: I don’t know. Well, certainly the mailing costs are lower, which is sort of interesting, but I think it’s a neat opportunity to stay abreast of things, certainly, and also that you’re really doing a service for your profession. I think it’s a very worthwhile thing to do, and between the three areas—the journal, the seminars and the textbook—I think we keep our profession pretty well informed and updated. It’s really serving the public in the long run.

DR. KLEIN: The journal is incredible. I remember when I took the boards in 1979, that’s the way I studied. I read the *Journal of Pediatric Surgery*. When did the journal start, in 1966?

DR. GROSFELD: Nineteen Sixty-six.

DR. KLEIN: Then it was only from 1966 to 1979, but it was just such an eye opener in terms of watching the development of some techniques and operations. I realized that some things I thought had been discovered the year before had actually been published earlier. It was an amazing experience.

Do you have any comments about the business of pediatric surgery?

DR. GROSFELD: Yes, but before we go to that, I just want to mention one other thing. We’ve also had a lot of personal publications. While that’s been good, and I think most of them have been worthwhile, and I think over time they get better. One of the nice joys about that is to do what [H. William] Clatworthy [Jr.] did with me—you know, really beat me up good with the abstracts and the manuscripts until I learned how to write. We have tried to do that with our faculty and our residents, and I still review a lot of the abstracts and papers for the residents that’ll come to me to help them publish their material or to review their articles, and we’ll do it because I enjoy it. But it’s amazing how few people can write.

DR. KLEIN: [Laughs]
DR. GROSFELD: People can’t write. Sometimes they can’t spell. I don’t know if it’s a problem in our school system or not.

DR. KLEIN: I know, frequently you tell people, “What did you want to say?” “I just wanted to—” “Then why don’t you say that? That’s what you wanted to say.” What Dr. Spencer told you was just fine. “Tell them what you’re going to say.”

DR. GROSFELD: “Tell them what you told them.”

DR. KLEIN: “Tell them what you told them.”

DR. GROSFELD: Exactly.

DR. KLEIN: I sent you the list of my personal contributions, things that you’ve done that have changed my practice. I really have been impressed by your contributions. I remember Arvin [I. Philippart] and I wrote a paper on Hirschsprung’s disease [Klein MD, Philippart AI. Hirschsprung's disease: three decades' experience at a single institution. J Pediatr Surg. 1993 Oct;28(10):1291-3; discussion 1293-4.] from our institution. It was very nice; we had a lot of cases. And then I read the article on Hirschsprung’s disease from Indianapolis, which was very nice, had a lot of patients, but it did one more thing, and that is it had long-term follow up as well, which I thought was just great. That requires more than just, “Let’s see how many people can review the last 250 charts.”

DR. GROSFELD: One of the privileges I’ve had was being here for a long time, and having commitment to one place has many benefits. One is that you provide a service over many years, but the second is you learn so much from your patients. If you follow them long enough, they will teach you something. The truth about outcomes is only known twenty or thirty years later. I’ve learned that in pediatric surgery, but I wouldn’t have learned it unless I was here for 30 years. So that’s really one of the benefits of long-term commitment to one institution. In academic surgery it doesn’t always work that way, and I recognize that. Certainly this wasn’t my first academic position, either, but that’s been a really wonderful benefit of being here for a long period of time. We’ve learned a lot from our patients. They taught us much.

DR. KLEIN: Absolutely.

What about the business of pediatric surgery in terms of how it’s run: how much money pediatric surgeons make, what they do with their time? That’s certainly changed over time.

DR. GROSFELD: Well, it has. The business of pediatric surgery sort of fits into what we alluded to earlier, that departments have become corporate;
structures. A lot of the time that we focused on education, spending time with the residents, in conferences, spending more time with patients has been consumed with worrying about economics, worrying about whether you can pay your entire faculty, whether they have retirement benefits and whether you can comply with their needs. “No, you can’t have the department pay for your car here. We just don’t have enough money for it.” The economics of practice has been adversely affected by government rules, by administrators and by insurance, (poor reimbursement, downside of Medicaid) and quite frankly by taxes imposed by deans to some extent.

As an example, when I moved to Indiana, part of my contract was that I would have no office overhead. They would provide an office, a secretary, lab space and clinic space and all my needs at no expense to me, so there would be no overhead. There would be a baseline salary and the ability to run the practice and control the income. All those were in place for about ten years, so it was a good start.

DR. KLEIN: [Laughs]

DR. GROSFELD: And then as time went on, new rules came into effect. The hospital couldn’t provide you with your clinic space; you had to pay for it. Medicare rules, you see. And they couldn’t provide you with this because you had to pay for it, just as if you were practicing elsewhere, so suddenly the academic surgeon, who spent so much of his extra time teaching, doing research, doing other things for the hospital and university like caring for an inordinate number of indigent patients, then had the same financial burdens as a private practicing surgeon who spent all his time earning money. You were adversely affected because in the institutions that you worked, your patient groupings were very different, so you had a high-risk group of patients and an adverse economic risk group of patients, so your patient mix was financially unfavorable. That’s the bottom line.

DR. KLEIN: Yes.

DR. GROSFELD: So it became very apparent that you had the same overhead, almost, as the outside physician who was in private practice. Not very much different. Plus you had the burden of society, whereby any pediatric surgeon in any major hospital, in any major city in America has about a 50 percent Medicaid population to deal with. It was nine percent when I started. It’s 52 percent in Indiana now. And every newborn unit in the country is affected this way; it’s not isolated to Los Angeles, New York and Detroit. It’s everywhere.

So that’s a difficult thing to deal with. Now, if you add to that new structural arrangements within departments, within schools, where the dean’s tax is escalated, where the department chair’s tax is escalated, where the cost of
building then becomes escalated because someone else owns it and charges rent and you have no control over it. And when the dean’s tax was one percent and then it’s gone up one percent a year for five years, you have no control over that, so you’re dealing with continuing burdens in running a practice. And when the baseline salaries are almost nonexistent and most of your salary comes from your practice just like the guy practicing in the community I think it makes it very difficult. Add that to the eighty hours work week, where now the faculty has to be in house twenty-four hours a day to run the Level I trauma program, because the residents have to go home. All those years, you were on call at night and your wife tolerated it, and then suddenly you’re fifty or sixty and now you have night call and you’re not at home because you’re on call twenty-four hours in the hospital. To me, there’s something wrong with that.

DR. KLEIN: Yes. [Laughs]

DR. GROSFELD: But it’s part and parcel of current activities. Add into that a global economy that we weren’t always faced with. But we’re in a global economy, so things that go bad in Japan, India and China are going to affect us.

There are a lot of demands on the practicing of pediatric surgeons, particularly in the academic setting, which is the environment that we’ve been experiencing for all these years. One of the things we spent a lot of time trying to create is regionalization of high-risk care, and we’ve been fairly successful in doing that. Now it’s been de-regionalized, again beyond our control, by insurers—for instance, in a relatively medium sized towns like Fort Wayne (175,000 population) or South Bend, (90,000 population), in order to acquire insurance contracts for all their patients, they had to fit under the category of a full-service institution. By doing so, they have to have one of these specialists and one of those specialists, and so they have to have a pediatric surgeon or they need to have a pediatric surgeon to help their neonatal unit function. So they make a lot of money on the neonatal unit, and they hire some youngster just out of training and pay him or her from $300,000-as high as $700,000 to sit there and do a few cases, but it stops the regionalization concept. Academic medical centers can’t compete with those kinds of salaries.

That also has a slight negative effect, as it reduces the referral pattern to some degree, so that an NEC [necrotizing enterocolitis] or a TEF [tracheosophageal fistula] that would normally have come from an hour-plus away will be done locally because we have one of those specialists here and he or she will one or two such cases per year. That’s a little bit of a minor economic problem. I don’t think it reduces the volume excessively at the major center but it certainly has a negative impact at a time when you’re constrained by other factors.
We talked about the impact on payer mix related to the underserved and the uninsured. And then the very adverse reimbursement from Medicaid has had a very negative effect on pediatric surgeons because such a large volume of cases that we do are Medicaid cases. Medicaid pays 1/3 to 1/2 of what Medicare pays. While the government tries to give you extra funding because of the fact that you’re dealing with so many more underserved patients than other institutions, some of that return funding goes to the dean’s office and goes to the chair’s office and never gets back to the practitioner who performs the services. And we’re subject to that in the environment in which we exist.

Unfortunately government intrusion is a problem. We talked a little bit about that. And government compliance is another problem. We waste a lot of time dealing with all these compliance issues, paperwork. Informed consent is very valuable. I have no problems with that, but some of the other factors are a really difficult thing to keep up with.

Unfortunately medical liability continues to have an adverse effect on practices, and even though we have a pretty good malpractice law in Indiana, fees have gone up considerably. I’m not sure of the cause. There doesn’t seem to be a whole lot of law suits; it’s just the rates in the whole insurance industry has gone up, maybe because of Hurricane Katrina and perhaps other things. It may be a spinoff effect. I don’t know. Insurance costs are very high for your home, for other personal insurance, your car insurance, as well as medical liability insurance. Everything’s been increased. The insurance industry took a hit, and now they’re passing that on to the purchaser. There’s no doubt in my mind about that. And we haven’t solved the problem of medical liability in most states. It continues to be a major negative factor in the practice of medicine in the country.

And then there are a number of increased societal and patient demands that were not prevalent before, where everybody doesn’t recognize the potential of a natural disaster or an error or the outcome can’t be perfect or it’s somebody’s fault if something goes wrong with a baby that was born with a defect. Patients and their families demand more time and better communication, and notwithstanding they deserve time and explanations, but it’s terribly time consuming in some instances. Occasionally it’s a joke in that before I stopped my active practice, we had a few mothers that would come into the office, and they’d have their folder under their arm, and they’d say their baby had this problem and they wanted me to fix it this way, with minimally invasive technique. And, I mean, for a hernia, or some other relatively simple problem. They would even quote the literature because they got it off the Web, and they had it in their folder, and they would say, “Well, I want you to do this because Dr. So-and-So in Los Angeles says to do it that way.”
I finally got to the point where I would say, “I know Dr. So-and-So very well. He’s a good friend of mine, and he’s a very good surgeon.” I said, “If you would like me to arrange for you to consult with him out there in Los Angeles, I’ll drive you to the airport.”

DR. KLEIN: [Laughs]

DR. GROSFELD: And that usually stopped it. But occasionally not. I mean, sometimes people were doctor shopping, and I’d always find that a little funny, but that happens. It never used to happen twenty years ago.

DR. KLEIN: No.

DR. GROSFELD: But it happens now. And I think those are adverse factors.

I think the concept of how interested the resident is in really being the best he or she can be is another problem. Now, most of the postgraduate residents in pediatric surgery have already made that decision. They’ve already decided—they’ve been through training in general surgery; they’re doing postgraduate training in pediatric surgery; they want to be the best they can be. But some of the junior people who come on the service aren’t, and getting them to work at the same level is a different matter. Wondering whether the patient’s are being looked after well can be worrisome. That interferes with your practice a little bit. It doesn’t interfere with your finances, but it interferes with your practice.

Competition is another factor that affects economics, where you have too many people trying to do the same thing. That can be a problem. The interventional radiologists come to mind; pediatric urologists—they want to do hernias and tumors; pediatric GI people, who want to put in percutaneous G-tubes [gastrostomy tubes]. And now what will occur with the newer concept of translumenal surgery and NOTES? N-O-T-E-S, Natural orifice [translumenal endoscopic] surgery. So it’s actually doing an intra-abdominal operation without going through the abdominal wall, where you go through the stomach or colon for access using an endoscope. Can you imagine going through the stomach to take out the appendix, going through the rectum to take out the gall bladder. The latter bothers me, but it’s been done, and it’s been done a lot in the lab, and it’s a hot item now. You wonder if it gets to the point where a gastroenterologist will attempt to do those things. It’s like cardiologists. Who does one stop shopping by dilatation? They go through the femoral [artery], do an aortoiliac dilatation, stop at the renals, you know, put a couple of stents in the coronary arteries and then go up to the carotid [arteries]—one-stop shopping.
DR. KLEIN:    That almost happened early on. The gastroenterologists almost got into laparoscopy.

DR. GROSFELD:   But those are things that would have a deleterious effect economically on surgical income, obviously, notwithstanding doing those things that I’ve been training you to do.

But I think there’s one other competitive risk, and that’s the organ-specific surgeons. Included in that, I would say, would be genitourinary doctors, would be part of the organ-specific realm; undescended testes, intersex cases, etcetera. And so are biliary tract surgeons and liver transplant people who may take the position, “Well, if we do the liver transplant, we might as well do the biliary atresia” or the baby gall bladder, or the choledochal cyst. Or “If we’re doing the bowel transplant, why don’t we just take care of the short-gut patient?” I think those are hurdles that are coming down the road that might have an adverse effect on our practice and incomes.

Now, the actual cost of running a department also is impacted by unrealistic expectations in new, young people, who desire immediate partnership, similar incomes to senior associates on day one, excessive vacation time, lots of perks—

DR. KLEIN:    It is amazing, how much they expect.

DR. GROSFELD:   Unrealistic expectations. Early in our discussion I told you I went to New York for my first job, and my salary was $15,000. [Chuckles] Of course, there were some other perks, but I was just happy to have a job, and to be wanted somewhere to practice children’s surgery.

DR. KLEIN:    The thing is, people hear that we can get $350,000 or $500,000 a year to go to Kalamazoo or some other place that needs a pediatric surgeon. Not really. They figure that that’s what the going price is, and that’s what they should get everywhere.

DR. GROSFELD:   That’s what I refer to as the de-regionalization effect. I’m not sure whether the regionalization concept will ever come back the way it was. On the other hand, I’m not sure that I can justify having a bunch of pediatric surgeons in small towns, where their exposure to index cases will be at such a low level that they will lose their expertise and they will perform mainly mundane cases that perhaps a general surgeon could handle.

DR. KLEIN:    The evidence continues to be overwhelming, at least the published evidence, that regionalization is beneficial for patients.

DR. GROSFELD:   The only thing that will perhaps restore it is the concept of volume and outcomes. And certainly in most instances it is true. Centers
that do a lot of something do it better, with rare exceptions, but I think that’ll be true. Pay for performance may also influence re-regionalization.

DR. KLEIN: Yes, I’m still looking forward to seeing [inaudible]. I’ve been reading the editorials.

DR. GROSFELD: It’s unclear, and it’s unclear how they’re going to really get it to happen, but those are problems.

DR. KLEIN: In the business vein, tell me your thoughts about liability. Is there a liability crisis? Is there a way to get out of it?

DR. GROSFELD: Liability has been around for as long as I’ve been in practice, and I think there’s a way to avoid most of it, and that’s: Don’t operate. If you’re going to do a lot of surgery, eventually you’re going to wind up in a lawsuit. It just happens. I had one in my life, my last year of practice. I was exonerated. The case was dismissed. But it’s a terrible experience. I have to tell you, it’s very stressful.

DR. KLEIN: I think I’m in a less protected environment, but I have to tell people that you need to be sued four or five times and then you realize that it’s not you, it’s them. The first time, especially for young people is terrible. People’s careers have been ruined by their first and only lawsuit.

DR. GROSFELD: Right. They take it personally.

DR. KLEIN: Yes.

DR. GROSFELD: Well, when someone’s telling you, “You’re a terrible person,” it is hard to swallow—

DR. KLEIN: I know. And they say it so well.

DR. GROSFELD: But fortunately the jury in this particular instance just threw the case out. I was gratified by that. I mean, it’s the American way, and justice was served, as far as I could see. So it was okay in my instance, but I know there are others that have had terrible times in unjustifiable lawsuits. Hopefully, I think maybe we will get to a “no-fault” type system which might be the best way to go. I don’t know.

DR. KLEIN: I’ve heard a rumor that in Germany the system was based on injury. Any injury that you had or deficiency, it’s society’s job to help you, so if you lost a leg, whether it was an auto accident or a vascular surgery accident, that was worth a certain amount of money, and you got that no matter how you got it.
DR. GROSFELD: Kind of no-fault insurance.

DR. KLEIN: Yes.

DR. GROSFELD: Yes. So I think that’s a possible way to deal with malpractice, but I don’t think the lawyers in this country will buy it. So many legislators start out as lawyers, and I think it warps them.

DR. KLEIN: There is a problem that the politicians are all lawyers—I mean, are mainly lawyers.

Tell me about this: I think there are so many little things. I was impressed that you were elected to AOA [Alpha Omega Alpha, the Medical School Honor Society] as a faculty member. How did that come about? From a medical student’s point of view, the guys with the best grades got into AOA, and that was it. Then they got their key, and it was all over.

DR. GROSFELD: A certain number of faculty members get elected to AOA on the basis of their teaching expertise and their performance and productivity, and I guess that’s what happened. Early on, we won a lot of teaching awards, including the President’s Award for the All-University Teaching Award. We spent a lot of time with the students and residents, and I guess that’s how that occurred.

DR. KLEIN: Okay. Are there any other things? What things have I missed that you need to tell us about?

DR. GROSFELD: I think my career was focused on reaching a goal of providing excellent care for babies and children in the state, providing an environment for that, developing an environment for education and for growth and development of young people in the profession. That’s what we tried to do. I think I have some strengths. I think we have vision. We can see things that at the time, in a sometimes provincial thinking community, others didn’t see. They didn’t see how good they could be. I think we’re twenty years behind the time in some areas. Things that we recommended twenty years ago are finally coming to fruition, but it took so long for it to kick in. That’s occasionally been frustrating.

DR. KLEIN: Maybe. It was a long way to go. Indianapolis is famous for several things. I mean, there is the Speedway, there’s basketball, there’s maybe the Eli Lilly and Company, and then there’s pediatric surgery, not necessarily in that order. I think that it’s made a significant contribution to the university as well.

DR. GROSFELD: We certainly tried. At least we’ve been loyal and hung around a while. We’ve survived.
DR. KLEIN: Did you ever interview for another job?

DR. GROSFELD: Yes, after Dr. Jesseph died and there was another interim chair, and things weren’t going well here, and we looked at the job in Boston and the job in Philadelphia. We won’t go into details, but the reception in the Northeast was not terribly good, and the hospitality particularly in Boston for any outside person at the time was probably sub-par.

DR. KLEIN: Yes. I don’t know what to say. Den of thieves or nest of vipers is the way I would describe it at that time.

DR. GROSFELD: Yes, it was probably sub-par, and it hadn’t quite achieved the vipers’ nest nomenclature, but it was close. Some of the people on the search committee were actually candidates for the job, and it was kind of a joke. Actually, after the first trip, I withdrew from further participation. We also looked at Dr. Koop’s job in Philadelphia, and I excused myself from that, too, because I felt it was better here, that the potential for growth and for doing the things that I wanted to do would be better here, without a lot of obstacles, so we stayed. I didn’t know I was going to be the chairman at the time, but we stayed. And it worked out well.

DR. KLEIN: It worked out very well.

DR. GROSFELD: Yes. We also looked—both as a consultant, and at the job in Chicago. I went there as a consultant and was offered the job. At the time, I thought it was a terrible job.

DR. KLEIN: And it’s proved itself over the years.

DR. GROSFELD: Right.

DR. KLEIN: It continued to be a terrible job.

DR. GROSFELD: Right. So there were some opportunities. There were also opportunities for chairman’s jobs elsewhere, but I never took any of those seriously. I think we established that a children’s surgeon could be a good departmental chair, because following my appointment there were four other pediatric surgeons that were subsequently appointed chairs, and I think this kind of set the stage for that, at least initially.

It worked out all right. Rich [Richard J.] Andrassy became chief in Houston, Texas, and Tom [Thomas M.] Krummel became chair at Hershey and subsequently Stanford. And Jim O’Neill [Jr.] was chairman at Vanderbilt...
I think teaching has been one of my strengths. I’ve enjoyed it. What we’ve tried to establish for the students and the residents is a balance. You walk a tightrope when you teach in a residency program. You’re sort of balancing the educational and service part of residents’ careers and matching that with the ability to supervise them and yet provide them with enough independence they need to gain confidence to be a good surgeon. And the final thing is you have to make them recognize that they have to balance time for career and family. If you could provide the environment and make them aware of those three things, you can help them become successful. We felt that having that type of an environment for resident education was important, and that’s what we strived to accomplish.

DR. KLEIN: You know, there is another experience that I didn’t know that you had, and that is the establishment of the pediatric surgery training program. My impression from the outside is that that also was a first. There was this long set of traditional programs without other programs, and you recognized that we need more pediatric surgeons, and there should be more programs.

DR. GROSFELD: Yes. Well, we took our time doing that. We took ten years to do that. And the reason was we wanted to have a proper environment for education, and it took time to get to that point that we really could provide the proper environment. That would mean additional faculty, enough good cases, a chance for laboratory experience and a bunch of other things that took time to develop. We started working on it about eight years out, and it took a couple of more years to get approved. And from then on, it’s sailed. Yes, it’s been a reasonably good program. We’ve had some very good kids come through here as residents. We’ve kept some of them, and the others are all out there doing good things. We’re proud of their accomplishments.

We also were able to stimulate a lot of young people who were students and residents, who didn’t train here with us but went on to train in general surgery and pediatric surgery elsewhere. There’s Dan [Daniel] Mollitt and [Donald R.]. Cooney and Dennis Vane, Debbie Billmire, Tres Scherer, all of those, Chuck [Charles L.] Snyder, you know?

DR. KLEIN: Yes.

DR. GROSFELD: They were all our students or residents, and I think we influenced their interest. Darrell Hermann, for example, is in pediatric surgery, even though they didn’t train here. Of course, we’ve trained more than twenty pediatric surgeons. They’ve done very well. We also had five people from overseas who had good experience with us. Özden Çakmak was
the first woman pediatric surgeon in Turkey. She spent eighteen months with us many years ago. She is a nice lady. Shmuel Katz, who is in Israel, spent time with us. Tom [C. Thomas] Black spent a year with us as a fellow but wasn’t a formal resident, and then he got a job in Texas and became a pediatric surgery resident. So he was another one that sort of was an outsider. There was another girl named Michelle Cates, who went back to Missouri after one year, and she never trained anymore. We’ve only had one resident that didn’t finish the pediatric surgery program. This is a kid who didn’t work. He lasted a year. He didn’t work and didn’t know his patients.

DR. KLEIN: It’s amazing that that still happens.

DR. GROSFELD: It was the wrong time.

DR. KLEIN: I understand.

DR. GROSFELD: In general surgery there were also a couple of residents that also didn’t finish. One was a former Green Beret who came back from the service and was doing a general surgery rotation in the PICU [pediatric intensive care unit], and the nurse called me about three in the morning and said they couldn’t find this guy, and there were a couple of kids who were very ill and going down the tube and would I please come in. I said, “Absolutely. What do you mean; he’s nowhere to be found?” And so I went in, sort of turned things around a little bit. There were two babies that were pretty sick. I get paged at about four thirty in the morning. It’s this missing resident. He says, “Hey, Dr. Grosfeld, how are you? I just thought I’d give you a follow-up on these kids in the ICU. They were kind of sick, and I think things are going be all right. I’ll take care of everything.” I said, “Well, that’s interesting, because I’m in the ICU and just took care of these kids for the last hour.” I said, “What you need to do is meet me in my office at eight o’clock and bring your luggage with you.”

I fired him. And then we had a chief resident in his last year that I let go.

DR. KLEIN: That’s unusual.

DR. GROSFELD: Yes, very unusual, but we had established a rotation at one of the outlying hospitals for them to learn community surgery in the fourth year. They had to submit a case list and get letters from the attendings that they performed well. It was a six-week rotation. And he submits this long list of cases, and begins his chief year. I got a call from some emergency room, and it was to verify this guy’s employment. I was saying, “Well, yes, he works here. What does he have to do with you?” “Well, he’s been working with us.” I said, “Oh.” I found out he was moonlighting. What happened was, the six weeks he was supposed to be at
the community hospital, he was working in the emergency room, making money to pay off his debts, and the list of cases he provided us was fictitious.

DR. KLEIN: Oh, my Lord.

DR. GROSFELD: So we checked with the community hospital about the patients on his list. They were all made-up names. They didn’t exist. So we just had him come into the office, and I went over the list. I said, “This is a very formidable list. Tell me about Mr. So-and-So.” And he’d go through this made up patients course and procedure in depth. “OK, now tell me about Mrs. So-and-So. These are a lot of good cases. You know what’s interesting about the cases? I’ve discussed it with the faculty at the hospital, and they don’t know these patients. How do you explain that?” He said, “Well, I can’t explain that. It’s their patient.” “And you did the case?” “Oh, yes. And he helped me with it. Yes.” “Do you know this doctor?” It was the name of the head of the ER [emergency room] that had called me to verify his employment at IU. “He said you were employed at his hospital during this same time period you’re supposed to be up at the community hospital.” Meanwhile he was earning extra money in an ER and also collecting his salary from the community hospital. Finally he confessed, and I said, “I can’t finish you.”

DR. KLEIN: How could he do something so stupid?

DR. GROSFELD: Those are the only three kids I’ve ever fired.

DR. KLEIN: Three.

DR. GROSFELD: One in pediatrics, two in general surgery. And it’s a shame, but it happens.

DR. KLEIN: Well, actually, it’s actually pretty good if it’s only three. Out of thirty years, that’s not so bad.

DR. GROSFELD: About every ten years you get a bad one. [Laughter] Not too bad at all.

DR. KLEIN: Okay. Well, are there any other things that we’ve missed about your career in pediatric surgery, especially things that will help people understand what you did, what happened in Indianapolis in terms of the development of the field?

DR. GROSFELD: You know, it all started from scratch. There was very little happening there. They did about a hundred pediatric surgery cases a year before we got here. There was no organization. I think we were able to
pick up the ball and run with it without a lot of obstruction. Dr. Jesseph was helpful in that he didn’t interfere.

DR. KLEIN: Were there any surgeons here who wanted to keep doing the pediatric surgery at Riley?

DR. GROSFELD: Well, not really. The urologists—John Donahue, who was very famous for work on testis tumors, used to do the Wilms’ [tumor] and the neuroblastomas. When we got here, we started doing all of them, and he was happy. He didn’t mind that. He was a good guy. Stan [J. Stanley] Battersby was an old-time thoracic surgeon, who did a lot of TEFs [tracheoesophageal fistula] here over the years, and his results were good because he was a very good surgeon. But he didn’t take care of the patients. It was sort of interesting. After I arrived he continued to do a few cases every now and then. I remember he did a colon interposition and I think a thoracic tumor, and that was about it. After that he didn’t do any more children. He was an excellent surgeon, a good guy, and he had a huge adult practice. He really didn’t have to take the kids.

The rest of the faculty was glad I was here. They didn’t want anything to do with the infants and children. They were happy we got here. The ENT doctors weren’t too happy because we did a lot of bronchoscopy and tracheotomies, and we shut down their bronchoscopy clinic, which was in a hall outside the OR. They had to bring the children into the OR to do their cases.

Restructuring the operating room met with some resistance, but it was short-lived because it proved to be much better and safer. We also started outpatient surgery here. We started the first outpatient surgery site for children in Indiana. That was done on a shoestring. We got about $33,000 donation from the volunteer toy ladies and converted an old recovery room area into an outpatient suite. We started doing outpatient surgery, and it was very successful, obviously, right from the start. And that was a new concept to Indiana. So, you know, we started a number of new things: outpatient surgery, expanded the ORs, opened the surgery clinics, expanded the referral system so that you could come here without having to have a pediatrician refer you. Prior to that time, you usually couldn’t see patients that weren’t referred by other doctors.

We changed the educational objectives, began an M&M [morbidity and mortality conference] for the hospital, and just provided good service. That was the way to overcome obstacles and it worked out pretty well. We’ve enjoyed it. You know, one of the students asked me about all the negative things about American medicine and health care and said, “If you had it all to do over again, would you do it?” And I said, “In the blinking of an eye.”
DR. KLEIN: I appreciate that. I think you’re right. It doesn’t matter what’s going on, you know? When I started, the old guys were saying the same thing.

DR. GROSFELD: Being a pediatric surgeon is the most rewarding career I can think of. I’ve had an unusual experience—it’s been a great privilege—to help children and to serve the university and the state of Indiana, and hopefully I’ve been a good member of the faculty here and provided the kind of service that created a decent system of pediatric surgical care. We’ve enjoyed the teaching, the research, the clinical practice, and the people. You know, there have been a lot of good people. We’ve had some honest differences of opinion with some. I’ve lived through six deans, of which three were okay.

DR. KLEIN: [Laughs] That’s not a bad percentage.

DR. GROSFELD: No, it’s not a bad percentage. I’ve lived through five medicine chairs, and four were okay. There were only two pediatric chairs. I got along well with both of them. We don’t have too many enemies here, which is good, and a lot of friends. So it’s been a wonderful opportunity to work and grow and help develop young people and see the fruits of our labor over more than three decades of being here. I’ve loved it. I think it’s just been great. All the other stuff has been sort of fluff, sort of like whipped cream and cherries on top of the chocolate sundae. I didn’t expect to be a department chair. I didn’t expect to have leadership roles in all these organizations. It just happened.

DR. KLEIN: That’s what happens when you do good work and you’re education oriented. I think you’re right. And your career in pediatric surgery isn’t even over.

DR. GROSFELD: Well, I think we’re still contributing, in a different way. We try to have some influence on the profession, without doing the patient care.

DR. KLEIN: Well, thank you very much for the day.

DR. GROSFELD: I’m glad you came by. I hope you enjoyed your lunch and visit.

DR. KLEIN: The visit was wonderful.

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CURRICULUM VITAE

JAY L. GROSFELD, M.D.

DATE AND PLACE OF BIRTH: May 30, 1935 New York, NY

MARITAL STATUS: Married Margie Faulkner Grosfeld

Children:
Alicia Susan Thorne
Denise Alison Maheu
Janice Lynn Kaefer
Jeffrey Arden Grosfeld
Mark David Grosfeld

EDUCATION:

1949-1953  Midwood High School, Brooklyn, NY
           Academic Degree

1953-1955  George Washington University, Washington, DC
           (Transferred)

1955-1957  New York University (Washington Square College), New York, NY
           A.B. Biology, History (Cum Laude)

1957-1961  New York University School of Medicine, New York, NY
           M.D. Degree

POSTGRADUATE TRAINING:

1961-1962  Internship in Surgery, New York University, Department of Surgery,
           Bellevue and University Hospitals, New York, NY

1962-1966  Residency in Surgery, New York University, Department of Surgery,
           Bellevue and University Hospitals, New York, NY

1964-1965  Fellow, American Cancer Society, Bellevue Hospital Tumor Clinic,
           New York, NY

1968-1970  Residency in Pediatric Surgery, Children's Hospital, Division of Pediatric
           Surgery,
           Ohio State University College of Medicine, Columbus, OH

1968-1969  Fellow, American Cancer Society, Ohio Division, Department Pediatric Surgery,
           Children's Hospital, Columbus, OH

85
1968-1970  Senior Clinical Traineeship, Department of Health, Education and Welfare, Public Health Service, Division of Cancer Control, Children's Hospital, Columbus, Ohio

MEDICAL LICENSURE:

1962  National Board of Medical Examiners  
1962  New York  
1968  Ohio  
1972  Indiana

ACADEMIC APPOINTMENTS:

1965-1966  Clinical Instructor in Surgery, Department of Surgery, New York University, New York, NY  
1968-1970  Instructor in Surgery, Department of Surgery, Ohio State University College of Medicine, Columbus, OH  
1970-1972  Assistant Professor of Surgery and Pediatrics, Division of Pediatric Surgery, New York University, School of Medicine, New York, NY  
1972-2005  Professor & Director of Pediatric Surgery, Indiana University School of Medicine, Surgeon-in-Chief, James Whitcomb Riley Hospital for Children, Indianapolis, IN  
1981-2005  Lafayette F. Page Professor and Director of Pediatric Surgery, Indiana University School of Medicine, Surgeon-in-Chief, James Whitcomb Riley Hospital for Children, Indianapolis, IN  
1984-1985  Professor and Interim Chairman, Department of Surgery, Indiana University School of Medicine, Indianapolis, IN  
1985-2003  Professor and Chairman, Department of Surgery, Indiana University School of Medicine, Indianapolis, IN  
2005-   Lafayette Page Professor of Pediatric Surgery and Chairman Emeritus, Department of Surgery, Indiana University School of Medicine, Indianapolis, IN
ARMED FORCES:

1966-68  Captain, Medical Corps, United States Army
         Assistant Chief, Department of General Surgery, Ft. Jackson,
         South Carolina
         Award: U.S. Army Commendation Medal

MEMBERSHIP ACADEMIC AND PROFESSIONAL SOCIETIES:

Undergraduate:

Washington Square College of New York University
Phi Beta Kappa
Beta Lambda Sigma (National Honor Biologic Society)
Caduceus Society (Honor Premedical Society)
Honorary Historical Society

Graduate:

Alpha Omega Alpha - Faculty Member, Indiana University
American Medical Association
Association for Academic Surgery
New York Cancer Society
American Pediatric Surgery Association
Fellow, American Academy of Pediatrics (Surgical Section)
Society of University Surgeons
Marion County Medical Society
Indiana State Medical Association
Pediatric Surgery Biology Club
Fellow, American College of Surgeons
American Trauma Society
Society for Surgery of the Alimentary Tract
Central Surgical Association
Society of the Sigma Xi - Indiana University Chapter
Western Surgical Association
Societe Internationale de Chirurgie
American Surgical Association
Collegium Internationale Chirurgiae Digestivae
Society of Surgical Chairmen
Society of Surgical Oncology
Halsted Society
Kansas City Surgical Society (Honorary Member)
British Association of Pediatric Surgeons (Honorary member)
South African Association of Pediatric Surgeons (Honorary Member)
Brazilian Society of Pediatric Surgeons (Honorary Member)
Illinois Surgical Society (Honorary Member)
Canadian Association of Pediatric Surgeons (Honorary Member)
Colombian Pediatric Surgery Society (Honorary Member)
Israeli Surgical Society, (Honorary Member)
Israeli Pediatric Surgical Society (Honorary Member)
Fellow, Royal College of Physicians and Surgeons of Glasgow
(Honorary)
Fellow, Royal College of Surgeons of England (Honorary)
Fellow, Royal College of Surgeons of Ireland (Honorary)
Hungarian Association of Pediatric Surgeons (Honorary Member)
Japanese Society of Pediatric Surgeons (Honorary Member)
European Pediatric Surgeons Association (Honorary member)

BOARD CERTIFICATION:

1967 Diplomate, American Board of Surgery
1975 Certificate of Competence in Pediatric Surgery, American Board of Surgery
1982 Recertification in Pediatric Surgery, American Board of Surgery
1989 Recertification in General Surgery, American Board of Surgery
1999 Recertification in Pediatric Surgery, American Board of Surgery

AWARDS:

1958 Josiah Macy Research Scholar, Bermuda Marine Biological Center, St. George's West, Bermuda

1969 Essay Contest Winner, American College of Surgeons, Ohio Chapter


Presented by Teaching Award: Outstanding Professor of Surgery
Class of 1976 Indiana University School of Medicine

Presented by Teaching Award: Outstanding Professor of Surgery
Class of 1977 Indiana University School of Medicine

Presented by Teaching Award: Outstanding Professor in Clinical Sciences
Class of 1980 Indiana University School of Medicine

Presented by Teaching Award: Outstanding Professor in Clinical Sciences
Class of 1981 Indiana University School of Medicine

Presented by Teaching Award: Outstanding Professor in Clinical Sciences
Class of 1983 Indiana University School of Medicine
1984-Present  
Who's Who in America

Presented by  
Teaching Award: Outstanding Professor of Surgery
Class of 1984  
Indiana University School of Medicine

Presented by  
Teaching Award: Outstanding Professor in Clinical Sciences
Class of 1985  
Indiana University School of Medicine

1987  
President's Award for Distinguished Teaching
Indiana University

1991  
Southwestern Pennsylvania Chapter Award for Outstanding Contributions to Surgery, American College of Surgeons

1994  
The Edwin L. Gresham Recognition Award for Advancing the Care of Newborn Infants, Indiana Chapter of American Academy of Pediatrics

1995  
Who's Who in American Medicine and Health Care

1996  
American Health - Best Doctors in America

1996  
Glenn W. Irwin, MD - Distinguished Faculty Award, Indiana University School Of Medicine Alumni Council

1998  
Denis Browne Gold Medal, for Outstanding Contributions to Pediatric Surgery, British Association of Pediatric Surgeons

1998  
National Advisory Board, National Children's Film Festival

2001  
Pediatric Surgeon of the Year-Department of Pediatric Surgery, University of Graz School of Medicine, Graz, Austria

2002  
America’s Top Doctors – The Best in American Medicine: America’s Top Doctors and Hospitals

2002  
William E. Ladd Medal for Outstanding Contributions to Pediatric Surgery, Surgical Section, American Academy of Pediatrics
2002  Sagamore of the Wabash – Presented by the State of Indiana, Frank O’Bannon, Governor - for Outstanding Service to the State

2003  America’s Top Doctors – The Best in American Medicine: America’s Top Doctors Honor

2003  Indiana University Prestigious Award Recipient

2004  America’s Top Doctors- Best Medicine in America:

2005  Who’s Who in Higher Education

2005  Top Doctors in Indianapolis

2005  America’s Top Doctors in Cancer

2005  America’s Top Doctors – The Best in American Medicine

2005  Who’s Who in the World

2005  Who’s Who Administrators and Executives

2006  Who’s Who in American Medicine and Health Care

2007  Top Doctors-The Best in American Medicine

2007  Who’s Who in Science and Engineering

2008  Solomon A. Berson Medical Alumni Achievement Award in Clinical Science, New York University

SPECIAL LECTURESHIPS:

1982  Distinguished Visiting Lecturer, Finnish Cancer Society Tusula, Finland

1982  Distinguished Overseas Visiting Professor, Hebrew University Hadassah Medical Center, Ein Kerem, Jerusalem, Israel

1983  Honored Distinguished Lecturer, Japanese Society of Pediatric Surgeons, Fukuoka, Japan

1983  Michelle Gilbert Lectureship, Miami Pediatric Society Miami Children's Hospital, Miami, Florida

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<td>1986</td>
<td>Stuart Thompson Lecturer, Hospital for Sick Children University of Toronto, Toronto, Canada</td>
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<td>1987</td>
<td>Alpha Omega Alpha, Visiting Lecturer, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania</td>
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<td>1987</td>
<td>Gilbert Campbell Lecturer, University of Arkansas School of Medicine, Little Rock, Arkansas</td>
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<td>1988</td>
<td>Invited Overseas Lecturer and Visiting Professor, Hospital for Sick Children, Great Ormond Street, London, England</td>
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<td>1989</td>
<td>Frances E. Sarver Memorial Lecturer, Fort Wayne Medical and Surgical Societies, Fort Wayne, Indiana</td>
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<td>1989</td>
<td>Invited Guest Lecturer in Oncology, 25th Anniversary Meeting Scandinavian Association of Pediatric Surgeons, Copenhagen, Denmark</td>
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<td>1989</td>
<td>29th Carl Eberbach Visiting Professor and Lecturer, Medical College of Wisconsin, Milwaukee, Wisconsin</td>
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<td>Distinguished Overseas Lecturer, Hungarian Association of Pediatric Surgery, Pecs, Hungary</td>
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<td>Invited Overseas Lecturer, Turkish Association of Pediatric Surgery, Istanbul, Turkey</td>
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<td>Distinguished Lecturer - Visiting Professor, Hacettepe University, Ankara, Turkey</td>
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<td>Folse-Birtch Lecturer, Department of Surgery, Southern Illinois University Springfield, Illinois</td>
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<td>1990</td>
<td>Invited Overseas Lecturer- Department of Pediatric Surgery, University of Capetown, Red Cross Memorial Children's Hospital, Capetown, South Africa</td>
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<td>1990</td>
<td>Invited Overseas Lecturer- South African Pediatric Society, South African Association of Pediatric Surgeons, The Wilderness, Cape Province, South Africa</td>
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<td>1990</td>
<td>Invited Overseas Lecturer, XII Annual Congress, Brazilian Pediatric Surgical Society, São Paulo, Brazil</td>
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Hospital, Dublin, Ireland

1991  Stanley Mercer Lecturer, Children's Hospital of Eastern Ontario, Ottawa, Canada

1991  Fred McLoed Lecturer, Royal College of Surgeons of Canada, Quebec, Canada

1991  Keith Schneider Memorial Lecturer, North Shore Hospital/Cornell University, New York, NY


1992  Distinguished Lecturer, Pediatric Surgical Oncology, Japanese Association of Pediatric Surgery, Sapporo, Japan

1992  Visiting Professor, Department of Pediatric Surgery, Tokyo University, Tokyo, Japan

1992  Visiting Professor, Department of Pediatric Surgery, Juntendo University, Tokyo, Japan

1992  Distinguished Visiting Lecturer in Pediatric Oncology, Mexican Society of Pediatric Surgeons, Mazatlan, Mexico

1992  Visiting Overseas Lecturer, 7th International Symposium of Pediatric Surgery, Hamburg, Germany

1992  Visiting Lecturer, Houston Surgical Society, Houston, Texas

1993  Visiting Professor and Lauren Chandler Lecturer, Stanford University, Palo Alto, California

1993  Lecturer, Willis J. Potts Seminar Comprehensive Care of the Child, Brooklyn, New York

1993  Visiting Professor and Lecturer, Children's Hospital Medical Center, Boston, Massachusetts

1994  Visiting Professor and Lecturer, Department of Surgery, University of Cincinnati, Cincinnati Children's Hospital and Cincinnati Surgical Society
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<th>Institution and Location</th>
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<td>1994</td>
<td>Danely P. Slaughter</td>
<td>Lecturer, Saint Francis Hospital, Evanston, Illinois</td>
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<td>1995</td>
<td>William Holden</td>
<td>Lecturer, Case Western Reserve University School of Medicine and Cleveland Surgical Society, Cleveland, Ohio</td>
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<td>1996</td>
<td>Emmett Frazer</td>
<td>Lecturer and Visiting Professor, Division of Pediatric Surgery, University of South Alabama, Mobile, Alabama</td>
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<td>1996</td>
<td>Fredric C. Moll</td>
<td>Lecturer and Visiting Professor, Children's Hospital Medical Center, University of Washington, Seattle, Washington</td>
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<td>1996</td>
<td>Ronald W. Cooke</td>
<td>Lecturer and Visiting Professor, Connecticut Children's Medical Center, University of Connecticut, Hartford, Connecticut</td>
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<td>1996</td>
<td>Thomas Nealon</td>
<td>Lecturer and Visiting Professor, St. Vincent Hospital and Medical Center, New York, NY</td>
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<td>1996</td>
<td>Distinguished Overseas Lecturer</td>
<td>Japanese College of Surgeons, Tokyo, Japan</td>
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<td>1996</td>
<td>Overseas Visiting Professor</td>
<td>Department of Pediatric Surgery, University of Osaka, Osaka, Japan</td>
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<td>1996</td>
<td>Invited Overseas Lecturer</td>
<td>Department of Pediatric Surgery, Kyoto University, Kyoto, Japan</td>
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<td>1996</td>
<td>Invited Overseas Lecturer</td>
<td>Department of Pediatric Surgery, University of Hiroshima, Hiroshima, Japan</td>
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<td>1996</td>
<td>Invited Overseas Lecturer</td>
<td>Colombian Pediatric Surgical Society, Santa Marta, Colombia</td>
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<td>1996</td>
<td>Distinguished Overseas Lecturer</td>
<td>Asian Association of Pediatric Surgeons, Taipei, Taiwan</td>
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<td>1996</td>
<td>Thomas Santulli</td>
<td>Lecturer and Visiting Professor, Babies Hospital, Columbia University, New York, NY</td>
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<td>1997</td>
<td>Invited Overseas Lecturer</td>
<td>Lecturer and Visiting Professor, Children's Hospital University LaPaz, Madrid, Spain</td>
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<td>1997</td>
<td>Distinguished Overseas Lecturer, Israeli Surgical Society, Tel Aviv, Israel</td>
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<td>Invited Overseas Lecturer and Visiting Professor, Department of Surgery, Hadassah Children’s Hospital, Jerusalem, Israel</td>
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<td>Invited Overseas Lecturer and Visiting Professor, University of Hong Kong, Queen Mary's Hospital, Hong Kong</td>
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<td>Invited Overseas Lecturer, Asian Surgical Association, Hong Kong</td>
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<td>1997</td>
<td>Emil L. and Winifred S. Barrows Memorial Lecturer, Department of Surgery, University of Cincinnati, Cincinnati, OH</td>
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<td>1997</td>
<td>Invited Lecturer, Cincinnati Surgical Society, Cincinnati, OH</td>
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<td>1997</td>
<td>Arnold H. Colodny Lecturer and Visiting Professor, Department of Surgery, University of Vermont, Burlington, VT</td>
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<td>1997</td>
<td>Invited Overseas Lecturer, 175th Anniversary Symposium, National Children’s Hospital, Trinity College, Dublin, Ireland</td>
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<td>1997</td>
<td>Guest Lecturer, Georgia Surgical Society, Sea Island, GA</td>
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<td>1997</td>
<td>Edward Free Lecturer and Visiting Professor, Department of Pediatric Surgery, Children’s Hospital of Oakland, Oakland, CA</td>
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<td>1997</td>
<td>Invited Overseas Lecturer, Mediterranean Association of Pediatric Surgeons, Cairo, Egypt</td>
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<td>1997</td>
<td>Visiting Professor, Department of Surgery, Vanderbilt University, Nashville, TN</td>
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<td>1997</td>
<td>Edwin P. Lehman Lecturer and Visiting Professor, Department of Surgery, University of Virginia, Charlottesville, VA</td>
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<td>1998</td>
<td>The Frank G. DeLuca M.D. Distinguished Lectureship in Pediatric Surgical Science, Department of Surgery, Brown University, Rhode Island Hospital, Providence, RI</td>
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<td>1998</td>
<td>Visiting Overseas Lecturer, South African Pediatric Surgical Association and Pan-African Pediatric Surgical Association, Capetown, South Africa</td>
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<td>1998</td>
<td>Visiting Professor and Overseas Lecturer, Department of</td>
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</table>
Pediatric Surgery, Royal Children’s Hospital, Yorkhill, University of Glasgow, Scotland

1998  Luther Longino Lecturer and Visiting Professor, Department of Pediatric Surgery, Children’s Hospital of Alabama, University of Alabama School of Medicine, Birmingham, AL

1998  Invited Overseas Lecturer and Visiting Professor, Yongdong-Severance Hospital, Yonsei University School of Medicine, Seoul, Korea

1998  Distinguished Overseas Lecturer, Korean Surgical Society, Pusan, Korea

1998  L.K. Ferguson Lecturer and Visiting Professor, Allegheny University Medical School for the Health Sciences, and St. Christopher's Children's Hospital, Philadelphia, PA

1998  Denis Browne Gold Medal Lecture in Pediatric Surgery, British Association of Pediatric Surgeons, Bristol, England

1998  Invited Overseas Lecturer, International Symposium on Gut Hormones and Nutrition, Osaka, Japan

1998  Visiting Professor of Surgery, Department of Pediatric Surgery, Juntendo University of Tokyo, Japan

1999  Visiting Professor of Pediatric Surgery and Imre Pilaszanovich Lecturer, University of Pecs, Hungary

1999  Invited Overseas Lecturer and Visiting Professor of Pediatric Surgery, University of Genoa, and Gaslini Children’s Hospital, Genoa, Italy

1999  Invited Overseas Lecturer and Visiting Professor of Pediatric Surgery, Umberto I School of Medicine and Polyclinic, LaSapienza, Rome, Italy

1999  John Waldhausen Lecture and Visiting Professor, Pennsylvania State University College of Medicine, Hershey Medical Center, Hershey, PA
1999  Hitchcock Lecturer, Visiting Professor, Hennepin County Hospital, Minneapolis, MN
2000  Invited Lecturer, Longmire/Fonkalsrud Surgical Symposium, University of California at Los Angeles, Los Angeles, CA
2000  Invited Lecturer, Throckmorton Surgical Society, Iowa Chapter, American College of Surgeons, Des Moines, IA
2000  Visiting Professor, Department of Surgery, Ohio State University, Columbus, OH
2000  Keynote Speaker, Royal College of Surgeons of England, Annual Convocation of Fellows, London, UK
2000  Visiting Professor, Department of Pediatric Surgery, Columbus Children's Hospital, Columbus, OH
2001  Visiting Professor, Department of Surgery, University of Utah School of Medicine, Salt Lake City, Utah
2001  Distinguished Overseas Lecturer, 4th Meeting European Society of Pediatric Surgery, Budapest, Hungary
2001  Visiting Professor and Guest Lecturer, Department of Pediatric Surgery, University of Graz, Austria
2001  Visiting Professor, Department of Pediatric Surgery, Kyushu University, Fukuoka, Japan
2001  Visiting Professor and Invited Lecturer, Schneider Children’s Hospital, New Hyde Park, New York
2001  Raymond A. Amoury Visiting Professor and Lecturer, Department of Pediatric Surgery, Children’s Mercy Hospital, Kansas City, MO
2001  Overseas Lecturer WOFAPS/International Surgical Symposium, SIC/ISS, Brussels, Belgium
2001  Visiting Professor and Invited Overseas Lecturer, Garrahan Children’s Hospital, Buenos Aires, Argentina
2001  Distinguished Overseas Lecturer, Southern Cone Pediatric Surgical Congress, Montevideo, Uruguay

2002  Visiting Professor and Lecturer, Challenges in Surgical Education, Department of Surgery, University of Louisville, Louisville, KY

2002  Visiting Professor and Invited Overseas Lecturer, Japanese Society of Pediatric Surgeons, Tokyo, Japan

2002  Jessie L. Ternberg Visiting Professor and Lecturer, Department of Surgery, Washington University in St. Louis School of Medicine and St. Louis Children’s Hospital

2002  Visiting Professor and Invited Overseas Lecturer, Japanese Society of Pediatric Surgeons, Tokyo, Japan

2002  Visiting Professor and Invited Overseas Lecturer, University of Hong Kong Surgery Forum, Hong Kong, China

2002  Visiting Professor, Train the Trainers Program, Beijing Children’s Hospital, Beijing, China

2002  Visiting Professor, Train the Trainers Program, Department of Pediatric Surgery, 2nd China Medical School, Shenyang, China

2002  Invited International Lecturer, Mexican Society of Pediatric Surgery and Pan American Pediatric Surgical Association, Acapulco, Mexico

2002  Suruga Lecture, Asian Association of Pediatric Surgeons, Singapore

2003  Visiting Professor of Pediatric Surgery, State University of New York at Stony Brook, NY

2003  Visiting Professor Pediatric Surgery and Clifford Benson Lecturer, Children’s Hospital of Michigan, Wayne State University School of Medicine, Detroit, MI

2003  Visiting Professor of Surgery, Methodist Hospital of Brooklyn, Brooklyn, NY

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2003 Visiting Professor of Pediatric Surgery and Robert E. Gross Lecturer, Children’s Hospital Medical Center, Harvard Medical School, Boston, MA

2003 Alpha Omega Alpha Lecturer and Visiting Professor of Surgery, Albany Medical College, Albany, NY

2003 Otis Bowen Lecturer, Memorial Hospital, South Bend, IN

2004 Visiting Professor and Marvin Gleidman Lecturer, Albert Einstein College of Medicine, Bronx, NY

2004 Invited Overseas Guest Lecturer, 4th International Symposium on Hirschsprung’s Disease, Gaslini Children’s Hospital, University of Genoa, Sestri Levante, Italy

2004 Invited Overseas Lecturer, Professor Lewis Spitz Retirement Symposium, Hospital for Sick Children, Great Ormond Street, University of London, London, UK

2004 Visiting Professor and Invited Guest Lecturer, Asian Association of Pediatric Surgeons, Hong Kong, China

2004 Visiting Professor and Guest Lecturer, Shanghai Children’s Hospital, Shanghai, China

2005 Visiting Lecturer, Krickenbeck Conference on Anorectal Malformations, University of Cologne, Cologne, Germany.

2005 Invited Lecturer, Pediatric Surgery Colorectal Club, Dublin, Ireland

2005 Visiting Overseas Lecturer, Royal College of Surgeons of Thailand, Pattaya, Thailand

2006 McEwen Visiting Professor of Surgery, University of Kansas, Wichita, KS

2006 Lawrence Pickett Lecture, State University of New York/Syracuse University, Syracuse, NY

2006 Excelsior Surgical Society/Edward D. Churchill Lecture, Spring Meeting American College of Surgeons, Dallas, TX

2006 Invited Overseas Lecturer, European Cystic Fibrosis Society, Copenhagen, Denmark
2006  Invited Overseas Lecturer, Pediatric Colorectal Club, Helsinki, Finland

2006  Visiting Professor and George Holcomb Lecturer, Vanderbilt University, Nashville, TN

2006  Invited Overseas Orator, State of the Art Lecturer, Asian Association of Pediatric Surgeons, New Delhi, India

2007  Visiting Professor and H. Biemann Othersen, Jr. Lecturer, Medical University of South Carolina, Charleston, SC

2007  Distinguished Visiting Professor, Uniformed Services University of the Health Sciences, Bethesda, MD

2007  Distinguished Lecturer, Milwaukee Surgical Society, Milwaukee, WI

2007  Visiting Professor and Edwin H. Ellison Lecturer, Medical College of Wisconsin, Milwaukee, WI

2006  Invited Overseas State of the Art Lecture-2nd World Congress of Pediatric Surgery, Buenos Aires, Argentina

2007  Visiting Professor of Surgery and Hunter Sweaney Lecturer, Duke University School of Medicine, Durham, NC

2007  Invited Overseas Lecturer, International College of Surgeons, Antalya, Turkey

2008  Visiting Professor and James L. Talbert Lecturer, University of Florida College of Medicine, Gainesville, FL

2008  Visiting Professor and Theodore Jewett Lecturer, Buffalo Children’s Hospital, SUNY School of Medicine, Buffalo, NY

STATE, NATIONAL, AND INTERNATIONAL COMMITTEES/APPOINTMENTS:

1973-93  Surgical Steering Committee - Children's Cancer Study Group

1974-75  Secretary, Surgical Section, Indiana State Medical Association

1974-82  Intergroup Rhabdomyosarcoma Committee - Children's Cancer Study Group
<table>
<thead>
<tr>
<th>Year</th>
<th>Office</th>
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<tbody>
<tr>
<td>1974-88</td>
<td>Metastatic Neuroblastoma Committee - Children's Cancer Study Group</td>
</tr>
<tr>
<td>1974-88</td>
<td>Committee on Trauma, Indiana State Chapter, American College of Surgeons</td>
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<tr>
<td>1975-76</td>
<td>Vice Chairman, Surgical Section, Indiana State Medical Association</td>
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<tr>
<td>1975-78</td>
<td>Member, Postgraduate Education Committee, American Pediatric Surgical Association</td>
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<tr>
<td>1976-77</td>
<td>Chairman, Surgical Section, Indiana State Medical Association</td>
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<tr>
<td>1976-81</td>
<td>Member, Publications Committee, Surgical Section, American Academy of Pediatrics</td>
</tr>
<tr>
<td>1977-78</td>
<td>Childhood Cancer Advisory Committee, Indiana Division, American Cancer Society</td>
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<td>1977-80</td>
<td>Membership Committee, Central Surgical Association</td>
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<td>1978-80</td>
<td>Associate Examiner for Pediatric Surgery, American Board of Surgery</td>
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<tr>
<td>1978-88</td>
<td>Member, Committee on Cancer, American Pediatric Surgical Association</td>
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<tr>
<td>1980-82</td>
<td>Member, Non-Hodgkins Lymphoma Task Force, Children's Cancer Study Group</td>
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<tr>
<td>1980-82</td>
<td>Member, Neuroblastoma Task Force, National Cancer Institute</td>
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<tr>
<td>1980-88</td>
<td>Member, Germ Cell Tumor Committee, Children's Cancer Study Group</td>
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<tr>
<td>1980-89</td>
<td>Neuroblastoma Task Force, Children's Cancer Study Group</td>
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<tr>
<td>1980-2000</td>
<td>Examiner, for Pediatric Surgery, American Board of Surgery</td>
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<tr>
<td>1981-91</td>
<td>Committee on Continuing Education, American College of Surgeons</td>
</tr>
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<td>1982-85</td>
<td>Councilman, Executive Council, Central Surgical Association</td>
</tr>
</tbody>
</table>
1982-85  Member, By-Laws Committee, American Pediatric Surgical Association

1982-88  Membership Committee Panel, Societe Internationale de Chirurgie

1982-87  Vice-Chairman, Surgical Committee, Children's Cancer Study Group

1983-89  Member, Program Committee, American College of Surgeons

1984-87  Governor, American Pediatric Surgical Association

1984-87  Member, Membership and Credentials Committee, American Pediatric Surgical Association

1985-88  Secretary, Central Surgical Association

1985-91  Board of Governors, American College of Surgeons

1988-89  President-Elect, Central Surgical Association

1988-91  Committee on Professional Liability, Board of Governors, American College of Surgeons

1989-90  President, Central Surgical Association

1989-91  Vice Chairman, Program Committee, American Pediatric Surgical Association

1989-95  Member, Advisory Council for Surgery, American College of Surgeons

1989-95  Executive Committee, Surgical Section, American Academy of Pediatrics

1989-91  Committee on State Chapters, Board of Governors, American College of Surgeons

1989-97  Board of Directors, American Board of Surgery
1990-93  Member, Executive Council, British Association of Pediatric Surgeons

1990-96  Member, Program Committee, Collegium Internationale Chirurgiae Digestiae

1991-97  Delegate, American Board of Medical Specialties, American Board of Surgery

1992-93  Board of Directors, Second Vice President, Central Surgical Association Foundation

1992-94  Secretary, Surgical Section, American Academy of Pediatrics

1992-95  Board of Directors, Halsted Society

1992-95  Member, Executive Council, World Federation of Associations of Pediatric Surgeons

1992-98  Board of Directors, Association of Program Directors in Surgery

1993-94  First Vice President, Central Surgical Association Foundation

1993-94  President-Elect, American Pediatric Surgical Association

1994-95  President, Central Surgical Association Foundation

1994-95  President, American Pediatric Surgical Association

1994-95  Chairman, Surgical Section, American Academy of Pediatrics

1994-95  Vice-Chairman Elect, American Board of Surgery

1995-96  Vice-Chairman, American Board of Surgery

1995-98  Vice-President, World Federation of Associations of Pediatric Surgeons

1995-98  Member, Council of Board Representatives and Executives (COBRE), American Board of Medical Specialties

1995-96  Board of Directors, American Pediatric Surgical Association Foundation

1995-96  Vice-President, Halsted Society
1996-97  Chairman, American Board of Surgery
1996-97  President, Halsted Society
1996-98  Member, Ethics Committee, American Pediatric Surgical Association
1996- 2002  Member, Advisory Council for Pediatric Surgery, American College of Surgeons
1996-  Chairman, Board of Directors, American Pediatric Surgical Association Foundation
1997-98  Member, Council on Certification, Sub-certification, and Recertification (COCERT), American Board of Medical Specialties
1997-98  President, Western Surgical Association
1998-2001  President, World Federation of Associations of Pediatric Surgeons
1998-2003  Member, ACGME-Residency Review Committee for Surgery
2000-2002  Vice-Chairman, ACGME Residency Review Committee for Surgery
2001-  Secretary-Treasurer, Societe Internationale de Chirurgie Foundation
2004-  Member, Board of Directors, Cure Childhood Cancer in China
2005-2006  First Vice-President, American Surgical Association
2006-2007  President, American Surgical Association
2007  Chairman, Board of Directors, World Federation of Associations of Pediatric Surgeons Foundation
2007  Member, American Surgical Association Task Force on Competence
2007  Member, Honorary Overseas Membership Committee, American Surgical Association
2008  Member, Nominations Committee, American Surgical Association

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2008  Member, Board of Directors, American Surgical Association Foundation

EDITORIAL ACTIVITY

1978-84  Editorial Board, Pediatrics
1980-94  Associate Editor, Journal of Pediatric Surgery
1989-  Board of Consulting Editors, Pediatric Surgery International
1989-  Member, Editorial Board, Surgical Rounds
1991-  Editor, Seminars in Pediatric Surgery
1993-2001 Section Editor, Pediatric Oncology, Annals of Surgical Oncology
1994-  Editor-in-Chief, Journal of Pediatric Surgery
1995-  Editorial Board, European Journal of Pediatric Surgery
1999-  Editorial Board, Tohoku Journal of Experimental Medicine
2000-2004 Editorial Board, Journal of the American College of Surgeons
2005-  Editorial Consultant, Indian Journal of Pediatric Surgery

LOCAL COMMITTEES:

1973-1995  Disaster Committee, J. W. Riley Hospital for Children
1973-2002  J. W. Riley Hospital for Children Hospital Planning Committee
1973-2005  Cancer Committee, Indiana University Medical Center
1973-2005  Tumor Board, J. W. Riley Hospital for Children
1973-2005  ICU Committee, J. W. Riley Hospital for Children
1974-1979  Respiratory Therapy Committee, Indiana University Medical Center
1974-1979  Chairman, Curriculum Committee on Cancer, Indiana University Medical Center
1974-1979  Pharmacy and Therapeutics Committee, Indiana University Medical Center
1975-2002  Chairman, Children's Trauma Center Planning Committee, J. W. Riley Hospital for Children
1978-2005  Chairman, Outpatient Surgery Committee, J. W. Riley Hospital for Children
1979-1986  Chairman, Operating Room Committee Design Team, J. W. Riley Hospital for Children
1979-1986  Chairman, Recovery Room Committee Design Team, J. W. Riley Hospital for Children
1980-1986  Design and Planning Team, Neonatal ICU, J. W. Riley Hospital for Children
1981-1982 Member, Search and Screen Committee, Obstetrics & Gynecology, Indiana University Medical Center
1982-2005 Member, Operating Room Committee, Indiana University Medical Center
1982-2005 Chairman, Operating Room Committee, J. W. Riley Hospital for Children
1984-2003 Chairman, Operating Room Committee, Indiana University Medical Center
1984-1990 Member, Strategic Planning Committee, Indiana University Medical Center
1985-1986 Member, Search and Screen Committee, Hospital Administration, Indiana University Medical Center
1985-1986 Member, Directory Planning Committee, Indiana University Medical Center
1985-2003 Dean's Executive Forum, Indiana University Medical Center
1986-1987 Member, Search and Screen Committee, Otolaryngology Department, Indiana University Medical Center
1986-2003 Dean's Steering Committee, Indiana University Medical Center
1986-2003 Chairman, Council of Surgeons, Indiana University Medical Center
1986-1996 Member, Board of Directors and Secretary, University Health Care/HMO, Indiana University Medical Center
1987-1988 Member, Search and Screen Committee, Department of Pediatrics, Indiana University Medical Center
1987-1990 Chairman, Operating Room Productivity Committee, Indiana University Medical Center
1987-2000 Member, Institutional Task Force for Research, Indiana University Medical Center
1987-2003 Chairman, Surgical Coordinating Committee, Indiana University Medical Center
1987-2003 Member, Board of Directors, IU Care (Executive Committee) Faculty PPO
1987-2005 Member, Committee for Postgraduate Medical Education, Indiana University Medical Center
1988-1999 Member, Indiana University School of Medicine Research Goals Committee
1988-2005 Member, Indiana University Medical Center Dean's Council Fund Committee
1994-1995 President, Indiana University Care Faculty PPO
1994-1995 Member, Dean's Review Committee Indiana University School of Medicine
1994-1995 Member, Primary Care Initiative Committee, Indiana University School of Medicine
1994-1996.1 Chairman, Search and Screen Committee, Chairman, Department of Urology
1995-2003 Member, Council of Chairmen, Indiana University School of Medicine
1995-2005 Member, Board of Directors, Indiana Pediatrics, Inc (PHO)
1996-2003 Member, Executive Committee, IU Faculty Practice Group
1996-2002 Member, Joint Medical Council, Clarian Health Care System
1996-2005 Member, Joint Operating Room Committee, Clarian Health Care System
1996-2005 Member, Development Committee, Children's Services Consolidation Clarian Health Care System
1999-2005 Co-Medical Director, Clarian Health Care Partners Operating Rooms
1999-2005 Medical Director, Operating Rooms, J. W. Riley Hospital for Children
2000-2005 Planning Committee, Phase V Tower, J. W. Riley Hospital for Children
2002-2004 Planning Committee, Indiana University Cancer Hospital
2002-2005 Executive Committee, J. W. Riley Hospital for Children

**PUBLICATIONS**

**Articles**


46. Mills, N.L., Grosfeld, J.L.: One-Stage Resection for Massive


64. Berman, I.R., Grosfeld, J.L., Adelman, B.A., Rapp, R.J., Metz, B.S.,


218. Dunn, S. P., Gross, K.R., Dalsing, M., Hon, R., Grosfeld, J.L.:


475. Escobar MA, Grosfeld JL, Powell RL, West KW, Scherer LR, III,


BOOKS


**BOOK CHAPTERS**


22. Grosfeld, J.L.: Management of High Undescended Testis, in The


98. Grosfeld JL: Liver Tumors in Children: Treatment Based on Laboratory and Clinical Observations in Pediatric Surgery: Masters and Frontiers, Klein M (Ed), Children's Hospital of Michigan, Detroit, MI, 2000, pp. 43-54.


117. Grosfeld JL: Jejunoileal Atresia and Stenosis, in Pediatric Surgery 6th


