BARRY LEWIS ZARET, MD: 
A Conversation With the Editor*

Barry Zaret (Figure 1) was born in New York City on October 3, 1940. He grew up in Brooklyn and Queens and attended public schools before college. He graduated from Queens College in New York City, summa cum laude, in 1962 and from the New York University School of Medicine in 1966. His internship and residency in medicine was at Bellevue Hospital in New York City. His fellowship in cardiology was at The Johns Hopkins University School of Medicine from 1969 to 1971. During the next 2 years, he was a major in the US Air Force and stationed at the Travis Air Force base in California. In 1973, he moved to New Haven, Connecticut, joining the Division of Cardiology at Yale University School of Medicine, and he has been there ever since. Within 5 years, he was Chief of the Section of Cardiovascular Medicine and by 1982 he was Professor of medicine and diagnostic radiology. In 1984, he became the Robert W. Berliner Professor of medicine at Yale University School of Medicine. He is one of the founders of nuclear cardiology. He was the founding editor in chief of the Journal of Nuclear Cardiology, and he served in that capacity from 1993 to 2003. In 1999, he became medical director of the Yale New Haven Hospital Heart Center. He remained Chief of the cardiology division from 1978 to 2004 and was one of the 3 longest serving chiefs of cardiology in any university hospital in the US. Dr. Zaret has been a very productive researcher, leading to publication of nearly 200 articles in peer-reviewed medical journals plus numerous editorials, reviews, and chapters in various books. He lectures widely in the US and internationally. He has received several awards and is member of the American Society for Clinical Investigation and the Association of American Physicians. He was one of the founders and second president of the Association of Professors of Cardiology. He is also the author or editor of 5 books, one of which is now in its third edition. Barry Zaret is also a great guy. He and his wife are the proud parents of 3 sons and grandparents of 2.

William Clifford Roberts, MD†[hereafter WCR]: Dr. Barry Zaret and I are in his office at Yale University Medical Center at Yale University School of Medicine. Dr. Zaret, I appreciate your willingness to talk to me and therefore to the readers of The American Journal of Cardiology. Could we begin by my asking you to talk a bit about your early upbringing, some of your earliest memories, and what it was like growing up in New York City?

Barry Lewis Zaret, MD‡[hereafter BLZ]: Bill, thank you for this opportunity. It’s been fun thinking about my past and important aspects of my life. I was born in Brooklyn and lived there until I was 10 or 11. My family then moved to the suburbs of Queens, which is a part of New York City, and I grew up in Far Rockaway, which is on the Atlantic Shore, not far from the border between Long Island and Queens. That is where I lived through college and until I was married after my first year of medical school.

Growing up in Brooklyn in the early 1940s was interesting. The area of Brooklyn that I grew up in was very much a Jewish ghetto. The neighborhoods have since changed dramatically and deteriorated, but hopefully they will have a renaissance in the next few years. Each building housed 4 apartments with steps (stoops) in front where people would sit in the summer. An alley separated each building and laundry lines went from building to building above the alley. Neighbors chatted from the windows across the alley to the next building. We played stoopball by hitting a
little ball off of a step. It was a very sequestered environment (Figures 2 and 3).

I was an only child. My parents were reasonably protective. I was actually quite sickly up to age 8 or 9, mainly from recurring respiratory infections, some asthma (no longer a problem). When I reached puberty I got involved in athletics, which I have continued to the present time. As a young boy, I spent a lot of time in the house because of illness. It was at that time that I first began painting, drawing, and sketching. That was my first exposure to art.

**WCR:** How many stories were the apartment buildings?

**BLZ:** There were 2 stories. The buildings were called “4-family houses.” We lived in very small apartments, even after we moved to Queens. There were 2 apartments on each floor. We had the first floor apartment that faced the street.

**WCR:** Did you have a room of your own?

**BLZ:** No, I never really had a room of my own. We always had a really small 1-bedroom apartment. In Queens, my parents slept in the bedroom and I slept on a sofa bed, which we opened at night in the living room. When I went to Queens College and commuted, my parents gave me the bedroom so that I could study and work hard in college. My parents made many sacrifices to make sure that I had the right kind of education. Their care and desire, in part to see themselves fulfilled through me, was something that has motivated me throughout my life. My dad was an immigrant. He and I were extremely close. My mom was born in the US. Her parents had come from Eastern Europe (from Galicia), which was part of the Austro-Hungarian Empire. Although I knew my mom’s parents, I did not know much about how they came to the US. My grandfather worked as a baker and always worked at night. I remember going to their house in Brooklyn. They had a coal furnace in the basement, and my grandfather would shovel in the coal. I used to help him with that.

My dad’s story is very tragic. My father’s family was from White Russia, now called Belarus. They were from a shtetel, a small eastern European-Jewish community. My grandfather came to the US in 1910 to earn money to bring the whole family to the US from Russia. I have tracked down the ship’s manifest on which he came over in 1910. Several years later, he went back to Russia to get the whole family, and that’s when World War I broke out. Because of that conflict, they were not able to leave Russia. The period immediately after World War I was a particularly ugly and bloody period for Jews in that area of Europe. There were lots of pogroms in which Jews were indiscriminately murdered. In 1 pogrom, most of my father’s family was killed, including his parents, his uncle, his older brother (who was his hero), and 3 sisters. He managed to survive by hiding in a different place. Two other sisters also survived with him. When he was only about 10 years old, he searched a nearby forest for his family and found them all hung from trees and mutilated. Several had been raped. He brought the bodies back on an ox-pulled wagon. The remarkable thing about him is that is he survived all of
this and was always a sweet, unbitter, and loving person throughout his life. He died at age 93 in 2002.

**WCR:** Your father was born what year?

**BLZ:** He was born about 1908.

**WCR:** What about your mother? Is she alive?

**BLZ:** No. They had been married 50 years. She died in the late 1970s. She was born about 1910.

**WCR:** You said you were very close to your father.

**BLZ:** Yes, but actually to both my parents. But, I was particularly close with my father both when growing up and after reaching adulthood and having my own family. He spent his last 1 and 1/2 years living very close to us in an assisted living facility. I saw him everyday on my way home from work. He would always have Friday night dinner with us, and we would go to synagogue together on Saturdays and holidays. We spent quality time together during his last 1 and 1/2 years. It was really quite a blessing to be able to do that.

**WCR:** What did your father do when he came to the US?

**BLZ:** He was left as an orphan at age 10. He and his 2 sisters initially stayed with different surviving relatives. When he was about 12 years old, he and 2 cousins and his 2 sisters left Russia with the intention of getting to the US. In Russia he had become a peddler among other things. He, his cousins, and sisters made it to the Port of Bremen in Germany. There were quota systems at the time and initially they couldn’t get to the US. They stayed in a displaced persons camp and apartments for quite awhile. Then the older cousins were able to get to the US, leaving my dad alone to support himself and his 2 sisters. He managed to earn money to put his sisters through school. All 3 broke into German society and stayed there until 1928. He worked eventually in a department store and did quite well. He became a department store window display artist and earned a sustaining amount of money. When in his early 20s, he and his 2 sisters finally made it to the US. He then had to learn a new trade. He became a butcher. One of his jokes was he and his son were MDs: one “a medical doctor” and the other, “a meat dealer.” He worked extremely hard. When he and my mother met and fell in love, her parents were against her marrying an immigrant, because she had been born in the US. But it worked out, and they married.

**WCR:** Your dad spoke Russian, German, and English?

**BLZ:** Yes, as well as Yiddish.

**WCR:** When did your mother and daddy marry?

**BLZ:** About 1935.

**WCR:** Do you know how your mother and daddy met?

**BLZ:** It was through her parents who bought meat from the place where my dad worked as a butcher in Brooklyn. My father was quite a dashing young man.

**WCR:** How far did your father actually get in school?

**BLZ:** He never got to school. The only schooling he had was in the form of tutors in the shtetel, who taught more on religion than secular type information. He never had any formal education. He read and he wrote and was able to run a business. My mom had a high school education.

**WCR:** It sounds to me like your daddy was a pretty smart and savvy guy.
BLZ: He was very smart and very sensitive. He figured out how to survive.

WCR: How big of a man was he?
BLZ: Shorter than me but very strong. He was 69 inches tall.

WCR: How tall are you?
BLZ: About 74 inches tall.

WCR: How much do you weigh?
BLZ: Between 190 and 195 pounds.

WCR: You said that you and your daddy were very close. What does that mean? You talked a lot to each other?
BLZ: We talked all the time, more as we got older. As I was growing up, my father worked so hard just to make ends meet. I wouldn’t see much of him until Friday night when he closed his store early. We had Friday night dinner together. We’d speak on the phone several times a week and see each other regularly. Over time, it was a very nurturing relation for both of us.

WCR: What did you talk about, mainly?
BLZ: About current things, about life, what we were doing, school, my children. The conversations when I was younger were not nearly as deep as they were later on. He never told me early on about the tragedies occurring in his family. It was only as time went on that he was willing to open up about that to me and my children.

WCR: What was Friday night dinner like?
BLZ: It was a standard Friday night dinner in a Jewish family. My parents were not particularly observant. I am more observant today. My wife and I became more observant than our parents. Friday night dinner included all of the traditional Jewish food, and some blessings and standard prayers. Usually, it was a chicken dinner. Then, we talked about the week. At one point my mother’s dad (my grandfather), who lived near us, also was at dinner. My dad would be so tired that shortly after dinner he would go to sleep. Friday was the end of a long, long week for him. He would start at 3 in the morning because he would have to go to the wholesaler to get the meat and bring it to the butcher shop. He worked very long hours.

WCR: He would get home during the week at what time?
BLZ: Seven or 8 o’clock.

WCR: He didn’t sleep much.
BLZ: Correct. I guess I inherited that from him. I don’t sleep much either.

WCR: What was your mother like?
BLZ: She was very caring and warm, not particularly intellectual, but very nurturing. She was very protective of my dad and me. At times, overprotective when I was growing up. By age 14, however, I started working and became relatively independent.

WCR: What kind of work did you do?
BLZ: At 14 I worked on a golf course as a caddy. I did that until I was 16. Then, I worked in a supermarket as a clerk and stock boy, initially on weekends, and, then, starting in my junior year in high school, after school about 4 days a week.

WCR: You worked for spending money?
BLZ: Yes, for spending money and for a certain sense of independence. My parents didn’t have many resources, so if I wanted to get an LP record, for example, or something I needed, I had to find a way of doing that myself. It seems like I’ve always worked. I did so in the summers all through college. During the last 2 years in college, I worked in the post office on the night shift, midnight to 8 A.M. Far Rockaway, where I lived, was a resort area in the summer. People
built bungalows to stay in or to rent. There was a lot of action in the post office and they needed extra people in the summers. I sorted mail. It was a great job, and I did it well. Many interesting borderline psychotic people worked the “graveyard shift.” They were not the most stable people. But, for me it was wonderful. The summer after college (before starting medical school), I worked all night, then took a nap for a few hours, and went to the beach and read. I loved reading. I wrote an editor’s page on that summer called “Summer Reading.” At that time, I was in a self-inflicted panic, thinking I wasn’t going to have the time to read literature anymore after going to medical school, and that my whole intellectual life was going to be consumed with medical writing. I loved art and literature. So, I went on a campaign of reading classics on the beach that summer. I probably went through 15 to 20 classics during those 2 and 1/2 months. Fortunately, I have been able to continue that type of reading. It is one of my passions. My wife and I were engaged at that time.

WCR: Why did you and your family move to Far Rockaway?

BLZ: It was moving up into a nicer neighborhood with green grass, fresh air, and devoid of the oppressive nature of the city.

WCR: What year did you move out of Brooklyn?

BLZ: About 1951.

WCR: Did your father work near where you lived in Far Rockaway?

BLZ: Initially, he worked in Brooklyn, but then he bought a small butcher shop in Far Rockaway and worked there. I used to help him there, too.

WCR: How far was Far Rockaway from Brooklyn were you lived?

BLZ: About a 30-minute drive and about 15 miles.

WCR: Was the apartment in Far Rockaway bigger than the one in Brooklyn?

BLZ: They always pushed, but I found it relatively easy.

WCR: You didn’t have to study hard?

BLZ: In high school, I didn’t study much at all. I set my goals for getting a certain average and that’s what I did. I began to explore other parts of myself. I wrote some poetry, which appeared in the school’s yearbook. I sketched and drew and was a little artsy as well as being involved in sports and, at the same time, worked after school.

WCR: Were there any teachers in grammar school, junior high, or high school who had a particular impact on you?

BLZ: The closest was a teacher in high school who was one of the neatest people I have ever met. I got to know him quite well. He taught history and English. In his spare time, he managed a jazz musician, Thelonious Monk, who was one of the most famous jazz pianists in that era. This teacher introduced me to jazz and creativity in a very unusual way. My friends and I would take the subway into Manhattan and go to jazz clubs. We were tall and looked old enough to pass as adults. We sat at bars and listened to jazz. This was when beat poetry was just starting with Jack Kerouac.

WCR: Were you an athlete in high school?

BLZ: I played a lot of ball. I was actually in the process of trying out for the high school basketball team when I had an accident and cut my leg. That finished my chances of making the team. At that time I started working a lot more after school.

WCR: How big was your high school?

BLZ: The high school consisted of the 9th, 10th, 11th, and 12th grades. We did not have junior high school there at that time. The high school had about 600 students.

WCR: Were there many books around your house?

BLZ: No, the books present were usually only books.
I read. There were newspapers and magazines, but not many books.

**WCR:** How did it come about that you went to Queens College?

**BLZ:** My choice (Figure 4) was only “which New York City college I would attend?” My family did not have the resources to send me to a so-called “paying school.” Queens, I thought, had the best academic record of any of the city colleges. I had an older cousin who had gone there and that influenced me. He was happy there. The downside was having to live at home. In that way it was like an extension of high school.

**WCR:** How long did it take you to get from home to Queen’s College?

**BLZ:** It was either 2 buses, which took about 90 minutes, or a carpool and a long drive. My dad let me use his car a few days a week and other fellow students used their cars.

**WCR:** Queens College is located where?

**BLZ:** It was in Flushing, near the center of Queens.

**WCR:** How big was Queens College?

**BLZ:** It was relatively small then, but it has grown substantially since then. It was filled with bright middle class, goal-oriented kids, most of whom had a little chip on their shoulders because they couldn’t be in Columbia or Harvard. They were smart enough, but there were a lot of social reasons why they couldn’t. Queens was very competitive. The curriculum was remarkably balanced and diverse and modeled after Columbia. There was heavy emphasis on liberal arts in a broad core curriculum. We had 4 semesters of social science and 4 semesters of English. All students had to take a foreign language for several semesters. There were obligatory courses in art, literature, and music. I majored in chemistry, with a minor in biology; I also took as many extra courses as I could in comparative literature. I believed that I had an extraordinary education. I did very well in college. I worked hard. I wanted to do well and I did. I had a high-grade point average and graduated summa cum laude.

**WCR:** What was your grade point average?

**BLZ:** It was 3.84 out of 4.0

**WCR:** What does summa cum laude at Queens mean?

**BLZ:** That’s a grade point average >3.8. Three or 4 students achieved that.

**WCR:** How many were in your graduating class?

**BLZ:** About 800.

**WCR:** You were in the top 3 or 4 students out of 700 to 800?

**BLZ:** Yes. I knew I wanted to go to medical school.

**WCR:** How did you know that?

**BLZ:** Purely visceral.

**WCR:** Did you know that when you entered college?

**BLZ:** No. When I entered college, I really didn’t know, but as I got involved in science and biology, and even literature and art, it was clear to me that medicine was what I should do and wanted to do.

**WCR:** Were there any physicians in your extended family? Your early illnesses must have brought you in contact with physicians.

**BLZ:** There were no physicians in my family. The physicians that I saw as a patient were pediatricians and allergists. None of them made a particular impact on me.

**WCR:** Did they come to your house or did you go to their offices?

**BLZ:** Both. It was a time when there were still house calls being made. But mostly, I went to their offices.
WCR: But it didn’t occur to you during that period that maybe you wanted to be a physician?
BLZ: Correct.
WCR: Was there any encouragement from your mother or daddy to be a physician?
BLZ: Yes. They viewed it in terms of their son being the doctor, a profession with high prestige and high income. They were somewhat distraught early in my career when it was clear that I was an academic physician rather than a practicing physician, until about 4 years into my faculty position at Yale. I was invited to speak at a symposium at one of the local hospitals in Far Rockaway. My parents came and heard my talk. When they saw me being introduced by a prominent local physician, they became accepting of my career pathway. The fact that I had already spoken in the Ether Dome at the Massachusetts General Hospital didn’t mean much, but lecturing in a small general hospital in Far Rockaway was, in their eyes, quite an achievement.

College was great. I met my wife as a freshman. She was also a chemistry major. Her maiden name also began with a “Z,” Zimmerman. We met signing up for classes. We started dating initially during my freshman year, and then we had an off and on relation for a while. We became engaged at the end of our junior year (Figure 5).

WCR: What is her first name?
BLZ: Myrna.
WCR: Where was Myrna from?
BLZ: She also was born in Brooklyn and underwent the same migratory pattern as my family.
WCR: What were characteristics of Myrna that attracted you to her?
BLZ: Her intelligence, wit, physical attractiveness, and stability. Early on we were often lab partners. She always was naturally smarter than me. However, she never quite wanted to work as hard as I did. We’d do lab experiments together in physics or in other sciences, and she’d do most of the experiments and I’d get the A’s on the tests, although she often knew the subject as well as I did. We got engaged at the end of our junior year. Then I applied to medical school. I was accepted to a number of medical schools, but received a full tuition scholarship to New York University (NYU). That scholarship allowed us to get married at the end of my first year of medical school and not have concerns about surviving financially. She went to work after we graduated from college as a laboratory chemist.

WCR: So you were the same age?
BLZ: She’s a year younger than I am, but we were at the same level in school because she had skipped a year earlier.
WCR: Which medical schools did you apply to?
WCR: You must have had good advice at Queens College because your parents couldn’t advise you.
BLZ: Yes I had an advisor. There was one person who advised all the premeds.

WCR: If you had all the money in the world, you might not have gone to New York University for medical school?
BLZ: I might not have, but, in retrospect, it was a truly wonderful education and environment in which to grow (Figure 6).
WCR: Where did you live after you got married?
BLZ: We lived in Manhattan in what was called a “studio apartment.” It was 1-room with a sofa bed and
small kitchen area. It was a bus ride to NYU for me. Myrna worked at Sloan Kettering so it was about 20 blocks from where she worked. We lived there for 3 years until graduation. When I was a house officer at Bellevue, we moved closer. The hospital helped us get nice, roomy close-by housing.

WCR: How did medical school strike you early on? Where you sure right away that you had made the right decision?
BLZ: Oh yes. I really loved medical school. I worked hard, particularly in the first 2 years. At times, it was really inspirational. We were taught by Nobel laureates like Severo Ochoa, who was the chairman of the department of biochemistry. It was just about the time that the DNA code was cracked. It was exciting. At NYU, the whole school was filled with a sense of the importance of academic medicine and its mission. No doubt, those years shaped my professional life. Some of my mentors there were just spectacular.

WCR: How many students were in your class in medical school?
BLZ: About 110.

WCR: Where did you stand in your medical school at graduation? Was medical school a happy period for you?
BLZ: It was very happy, particularly, the last 2 years when I was seeing patients. I just knew this was what I wanted.

WCR: Did you have a hard time deciding on internal medicine?
BLZ: A little bit. There was a branch point of surgery versus internal medicine.

WCR: You liked surgery?
BLZ: Yes I did. I was surprised that I did. I did my first research as a second year medical student. I published my first study with Fred Becker, a member of the pathology department, and one of my early mentors. He went on to be head of MD Anderson, and he is still down there. Fred was brilliant. He turned me on to science, as did most of the teachers. Then, I hit the clinical rotations and just loved them. The last rotation of my third year was internal medicine. I had a wonderful attending named Jerome Lowenstein, a nephrologist. He became my role model. He was a young junior attending. He wrote a collection of wonderful essays several years ago called “The Midnight Meal and Other Essays.” Between 11 P.M. and midnight, we used to have late meals, leftovers for the house staff. It was a time to rest for at least a few moments, talk about patients, and just unwind. The midnight meal was a metaphor for the communication that house officers and physicians had, which we don’t have anymore. Jerome Lowenstein had a profound impact on me as did the chief of medicine, Saul Farber, who was my father figure. Those were good times. I truly loved medical school.

WCR: Did you have to study hard?
BLZ: I studied hard the first 2 years. The last 2 years were much easier. It came very naturally. I could consume a book thinking about a few patients that I’d seen, and it all came together. It was a natural. Medicine became real fun. I knew I had chosen correctly.
**BLZ:** Ira Goldstein went on to become Chairman of Medicine at Mt. Sinai and then died prematurely of lung cancer. A lot of them stayed locally. My senior year was the 125th anniversary of NYU, and many alumni were invited back and gave lectures. One of them was Eugene Braunwald, who was at the National Institutes of Health (NIH) at the time. I was blown away by Gene’s lecture. That’s when I knew I wanted to be a cardiologist.

**WCR:** So you knew you were going to be a cardiologist before you finished medical school?

**BLZ:** Yes. The irony was that this was the time of Vietnam. I had applied to the NIH and couldn’t get a position at the National Heart Institute. However, based on the research I had done, I got a position in the National Cancer Institute. To accept the National Cancer Institute position meant that I would have to leave after my internship, which I did not want to do. At the same time, I also applied to the Berry plan and obtained a position in cardiology. I accepted this. Thus, I was allowed to finish all of my training. I stayed at Bellevue and finished my house officer training and then did my cardiology fellowship.

**WCR:** When you were thinking about where you were going to do your internal medicine training, did you apply to other places?

**BLZ:** Yes, my first choice actually was Yale. Unfortunately, I was turned down. I applied also to Boston’s Beth Israel Hospital, to Boston City Hospital, and to The Johns Hopkins Hospital. I was disappointed that I didn’t get into Yale. Bellevue was my second choice.

**WCR:** Why did you want to go to Yale for your house officer training?

**BLZ:** Its tradition of academic excellence I thought was quite exciting. Also it was an opportunity to leave New York City.

**WCR:** How did you finish up in your medical school class?

**BLZ:** I was second or third out of 110.

**WCR:** You were Alpha Omega Alpha in your junior year?

**BLZ:** Yes.

**WCR:** How did the house officer training at Bellevue workout?

**BLZ:** It was great because it was a time when I really realized I was now really a practicing doctor. We had enormous responsibilities. The house staff peers were superb. We taught one another. We had incredible patients. I worked as hard as I had ever done in my life during the year as an intern.

**WCR:** What were the hours like?

**BLZ:** They were brutal. The time was arranged in 2-week blocks. You’d come in at 7 in the morning and leave whenever you were finished. On a night when you were off, it meant leaving no earlier that 7 P.M. One week we worked 5 of 7 nights and the next week, 2 of 7 nights. It was brutal. It was a level of fatigue that is hard to imagine.

**WCR:** Did you get any sleep on the nights that you were on?

**BLZ:** Maybe 2 or 3 hours. At Bellevue, the house officers at the time did everything required to care for the patient. When a patient was admitted we drew the...
blood, took the patient to x-ray, did the lab work, took care of the patient, and presented in detail the next morning to the attending.

**WCR:** You did the lab work in the ward lab?

**BLZ:** Right. It was the time when there were still open wards. They were segregated by gender. There would be a resident and 2 interns taking care of the patients on each floor.

**WCR:** How many patients on each floor?

**BLZ:** 30 to 35.

**WCR:** You would have 15 or so patients?

**BLZ:** Yes. We also followed patients in the clinic afterward. I formed some very close relationships with patients.

**WCR:** How often would you have the outpatient clinic?

**BLZ:** One afternoon a week. That fit into whatever else you were doing. Early on, internship was very difficult and often traumatic. I can remember, however, so clearly, an epiphany. It happened one morning in early October; after being up all night I looked out and saw the sun rising over the East River. I had just cared all night for a patient and likely saved his life. I looked out and saw the most beautiful sunrise. I realized literally at that moment, looking out at this scene of absolute beauty, that I was now doing what I had dreamed of for years. It was a very moving moment for me. Having that responsibility was wonderful and I think it made all of us at Bellevue into unique physicians who could deal clinically with whatever was put before us.

**WCR:** What was it like as a first year resident?

**BLZ:** It was, a different type of experience. It was our job to make sure everything was done well, but at the same time we taught and were responsible for interns and students.

It was pretty demanding. I pushed my team pretty hard, but they responded.

**WCR:** You did the internship and 2 years of medical residency and then you went to Hopkins for the cardiology fellowship? How did you pick Hopkins?

**BLZ:** It was a clinical program, with opportunities for research and with great attendings.

There’s one other very interesting story I should tell you about graduation from medical school. The year I graduated (1966), NYU gave Robert McNamara (then Secretary of Defense) an honorary degree and many of us, in view of Vietnam, believed that it wasn’t a good idea. At medical school, we organized a walkout. My colleagues made me one of the leaders. It was a very important event in my life. We walked out; we were supposed to be able to come back in to the graduation ceremonies right after they announced the honorary degree for McNamara. We got up and walked out; but they wouldn’t let us back in and every one of us was photographed. There were FBI agents outside, and I often feared when I applied for my first NIH grant that I wasn’t going to get it. My parents were mortified. Here was their only son finally becoming a doctor, and he walked out of the graduation ceremonies. I had gotten several awards and recognition and here I walked out. I tried to prepare them, but they couldn’t be prepared.

**WCR:** Did all of the students walk out?

**BLZ:** No, only about 30 or 40 of us from the class walked out.

**WCR:** Was there any consequence of that when you started your internship?

**BLZ:** No, just the opposite. In fact, I believe Dr. Saul Farber always respected me and my classmates for what we did.

**WCR:** Were you president of your medical school class?

**BLZ:** No.

**WCR:** Did you apply to places other than Hopkins for the cardiology fellowship?

**BLZ:** Yes. I looked at other places, but Hopkins was my first choice.

**WCR:** Now you’re going to Baltimore. This is 1969?

**BLZ:** Yes.

**WCR:** The cardiology fellowship at that time was 2 years. This was the first time you had ever lived out of New York City. How did Baltimore strike you?

**BLZ:** Baltimore in 1969 to 1971 is not what it is today. There was a lot of crime. It was not the safest of cities. We lived in Mount Washington, which was not far from where the Pimlico Race Track is.

**WCR:** How far was that from the hospital?

**BLZ:** About a 20- or 30-minute ride.
WCR: How did the cardiology fellowship strike you?

BLZ: It was like starting all over again. It was a small group of incredibly qualified people. This was the first time that I was exposed to a referral institution as opposed to a city hospital. We saw a memorable spectrum of disease—congenital heart disease, valvular heart disease—conditions that I had never encountered previously. I had a tremendous amount of respect for both the faculty and my fellowship colleagues. Richard Ross, the chief, was a giant, a great teacher. Our faculty was quite small. Dick Conti directed the cath lab. J. O’Neal Humphries directed the clinical service. Bud Friesinger was a great source of overall wisdom on every level, whether it was investigative or clinical. Bert Pitt was my research mentor. Henry Wagner in nuclear medicine was my other research mentor. It was very intense. I was able to start my research there in nuclear cardiology. It was there that gated pool imaging, measuring ejection fraction, and assessing wall motion, so-called “MUGA scans” was first described. That was under Burt Pitt’s leadership in association with Bill Strauss. Bill was a fellow in Henry Wagner’s program of nuclear medicine. Bill and I were good friends. We had been house officers together in New York, so it was natural that we worked together. We continued to work together in the next phase of my career.

WCR: How did you get involved with the nuclear work? Did Burt ask you to come or did that just appeal to you?

BLZ: Dick Ross accepted me into the program and assigned me to work with Bert Pitt. He said the first thing I had to do was apply for an NIH grant, which I did. We were using radioactive xenon to measure nutritive coronary blood flow. The theory was that you would inject it into the coronary artery and would measure its washout. From that washout curve you could determine flow. We had done all the preliminary experiments and we could look at this qualitatively. We were waiting for an engineer working in Wagner’s department to come up with a computerized gamma camera data (which now is routine, but at that time it was hot stuff) so that we could quantify the washout curves. The computer person kept telling us that it was going to happen, but nothing ever quite happened. We did our experiments at night when the equipment was available. One night, while getting a little despondent about not having any data, we suddenly realized there was gating circuitry available for looking at pericardial effusions and that it was now stored away in the basement of Hopkins Hospital. We retrieved it and linked it to the gamma camera and were then able to look at the blood pool in systole and diastole, and that’s how we began to measure ejection fractions! That was the first time it had been done. This was in 1969. In 1971, we published the technique for looking at wall motion and ejection fraction in The New England Journal of Medicine. That’s how I began applying physiologic principles to nuclear imaging. We began using it at Hopkins in the acute myocardial...
infarction research unit. They had a gamma camera which was in the coronary care unit and obtained measurements in patients in the early stages of infarction. It is quite pedestrian now, but in 1970 it was exciting. In those 2 years I learned clinical cardiology and began my research career. It was a wonderful 2 years for me. Our second son was born at Hopkins. From there I left for the military (Figure 7).

**WCR:** What was your military experience like?

**BLZ:** It began in September 1971, and I was able to spend an additional month at Hopkins doing more research. By this time my friend Bill Strauss had left Hopkins and was already in the Air Force doing nuclear medicine on the west coast. We were in contact and we talked about his assignment. It sounded like the Air Force base at which he was stationed was a great assignment. They had an affiliation with the University of California at the time when Dean Mason was chief of cardiology. I tried very hard to get to that hospital, Travis Air Force base in the Sacramento Valley. Bill and I were reunited once again. It was also a great opportunity to spend some time in California. We lived on the base for 2 years. It was like a first faculty job. We had a house staff, and I functioned as an attending. I saw only cardiology patients, except when I was on call in the emergency room. I did some very relevant research in this most unlikely place. What I believe is my most single important study was done there. It was there that we described exercise perfusion imaging in 1973, a study that also appeared in *The New England Journal of Medicine*. It was a series of interesting events. Bill Strauss and I talked about what we could do. We settled on the imaging with radioactive substances of myocardial ischemia rather than at infarction. We injected material while patients were being stressed with exercise. That study in 1973 still holds true today. Millions of stress perfusion studies are performed annually. We obtained the radioactive material from Berkeley, only 45 minutes away, from a company called Medi-Physics, which was producing radioactive potassium-43. We wondered how we could pay for it. It turned out that our hospital commander had just moved on to the Surgeon General’s office, and he helped us secure a research grant for $20,000, which paid for the radioactive potassium. We started doing the experiments and demonstrated that ischemia could be visualized. There in the middle of the sheep pasture, we were able to publish several major articles. We described false-positive exercise testing, and how one could define it with stress perfusion imaging, and also reported on assessing the results of coronary bypass surgery. This was in 1973. In those 2 years in the service, I wrote 5 major papers. By then my career was set as a nuclear cardiologist, when nuclear cardiology still didn’t exist. As the 2 years were coming to a close, I had to find a job. I had assumed I would go back to Hopkins, but there were not any openings at the time. Bert Pitt helped me look for a position and introduced me to Larry Cohen at Yale. I looked at positions in Arizona, Buffalo, Ce-

**FIGURE 18.** BLZ with close colleagues and friends at the International Nuclear Cardiology Meeting in Cesena, Italy 2004 (from left to right, Jagat Narula, BLZ, Bill Strauss, Frans Wackers, and Ignassi Carrio.

dars-Sinai in Los Angeles, and Yale. I accepted a position at Yale. That was in 1973, and I have been at Yale ever since.

**WCR:** When did you become chief of cardiology at Yale?

**BLZ:** In July 1978.

**WCR:** You were unable to get an internship at Yale and here you were brought on as a faculty member. What happened after you came back to New Haven?

**BLZ:** It certainly contains a bit of irony. Once I joined the faculty, I began developing a research career and obtained my initial grants from NIH and the American Heart Association. I began working intensively on developing programs that involved animal and clinical research. I wound up recruiting most of our fellows to do projects with me. It was a time when nuclear cardiology was just beginning to develop as a subspecialty of cardiology. It was an exciting time. I remember the first time I was at the American Heart Association, at a session that was devoted entirely to nuclear cardiology. I happened to be sitting with my friend and colleague, Bill Strauss. We commented that it's really happening. I felt good to have played a role in making this all happen. I became chief at age 38, perhaps too early, but I don’t regret it at all. Sam Thier was chief of medicine at the time. He was one of my major mentors and an incredible leader. He was chair of medicine for 12 years. He was one of the key people in my professional life. I have always tried to emulate him.

**WCR:** What were his leadership skills and style that impressed you so much?

**BLZ:** Vision, forthrightness, honesty, incisiveness, courage, loyalty.

**WCR:** He stood straight with you?

**BLZ:** Yes. You may not always like what he said, but you could count on it being straight. If he promised you something, it didn’t need to be in writing. He was a joy to work for and to learn from.

**WCR:** How did you like being chief of the division?

**BLZ:** At the beginning it was very stressful. It happened at a time when my research career was blossoming. I had just received an established investigatorship from the American Heart Association and had to give it up. There was a lot of stress and problems at the time. It wasn’t an easy period. I was relatively naïve. I didn’t know what to request, and there were no big packages for me like there are today. I built the division using my own resources to get people started. It was tough.

**WCR:** Did you have second thoughts those first 2 years?

**BLZ:** Periods of anxiety. Yes.

**WCR:** You were chief form 1978 until 2004, for 26 years. Only Bob Myerberg at the University of Miami and George Beller at the University of Virginia have served as chief of an academic division of cardiology longer than you in this country.

**BLZ:** That’s correct.

**WCR:** Are you glad you did it for that long a period?

**BLZ:** Yes. The last 10 years, particularly, have been very enjoyable. We’ve gotten more resources, we have grown, and we have integrated our investigative programs with our clinical practice. It has been an enormous amount of fulfillment and satisfaction.

**WCR:** What are you most proud of during your 26 years as chief of this division?

**BLZ:** I’m proud that we were able to grow to the point where there was equal investigative and clinical excellence and that we developed this through mutual respect and caring among faculty.

**WCR:** How many faculty do you have now?

**BLZ:** Forty-two.

**WCR:** How many fellows?

**BLZ:** Between 30 and 35, and some of them are PhDs. Many come for subspecialty training. We take 5 fellows per year for a 3- to 5-year program depending on what the goal of the fellow is.

**WCR:** You’ve got 42 faculty, 30 to 35 fellows. If you add to that all the secretaries and lab technicians in the division of cardiology, the total people would be what?

**BLZ:** About 150.

**WCR:** Do you know all of their names?

**BLZ:** I used to.

**WCR:** What is the budget?

**BLZ:** The annual operating budget is now >25 million dollars.

**WCR:** You’re running a very large business.
It’s a large and diverse business.

How much time do you spend running this operation administratively?

Probably over half of my time.

Is the other half the most enjoyable portion of it?

That’s not totally true. The idea of running a successful enterprise is in itself enjoyable and the idea of being able to mentor people and watch their careers develop is very enjoyable. Putting in place new programs is enjoyable. Jousting with other components of the medical center is not always so enjoyable. The politics are complex and can be difficult. One learns how to deal with that aspect. Learning the business was something not in the job training. One learns how to do that over time—build an infrastructure and feel comfortable delegating responsibilities. When all of that works well together, it’s like a good symphonic orchestra.

Did you learn a lot about yourself by being chief of this division for so many years? Were there surprises that came out of you that you weren’t sure were there?

Yes. I grew in the job. Early in my career, I did not have a lot of patience for either situations or people. I learned to deal with situations, to accept things that aren’t done the way I absolutely want them to be done, but do ultimately work. I have been impressed over the years that time is an ally, and ultimately your reflexes get to be very good. I’m impressed with how visceral I’ve now become in assessing both people and circumstances.

How many of your decisions are in your gut?

At this point, most are. They often tend to be right more often than wrong. That frankly has surprised me. That’s something that you can’t anticipate while growing.

What has your day-to-day life been like during these 26 years? What time do you get up in the morning, get to work, leave the hospital, and so forth.

I’ve always gotten up early. I inherited that from my father. I get up about 3:30 A.M. during the week. I go to bed about 10 or 11 P.M.

You live quite well on 4 to 5 hours a night?

I get by. I try to catch up with Saturday afternoon naps. When the kids were small, I’d try to get home by 6 P.M, so we could eat dinner together. Then, I would work late into the evening. In the mornings, I worked at home for about 1 or 2 hours, then exercise or run for 1 hour and get to the office by 7:30 to 8 A.M. Now, that the kids are gone, I often get home a little later. It’s pretty intense. I have a lot of other interests (Figures 8 and 9).

Do you come in on Saturday or Sunday?

I took clinical calls in rotation with a call group on weekends up until about 6 years ago, and then I stopped. I just couldn’t handle it with everything else. Saturdays, I don’t work. We usually go to synagogue. We have a committed life to our religion.

You and your family are quite religious?

I’d say we are observant. “Quite religious” is a relative statement. We belong to the conservative movement of Judaism. We don’t go out on Friday nights, and we attend Saturday services regularly. We observe home rituals, maintain a kosher home, and observe kosher dietary restrictions. My wife evolved to a professional within our synagogue. She plays an important role in our synagogue services, reading Torah every Saturday. For many years she trained students for their bar mitzvahs. She also was the ritual coordinator in our synagogue for many years. She has now retired from that position. She has been a driving religious force in our family. On Sundays, I have worked a lot. Particularly when I was editing The Journal of Nuclear Cardiology. Sundays would be my big work catch-up day.

You started The Journal of Nuclear Cardiology in 1993. How did that come about?

There was a feeling in the early 1990s that nuclear cardiology had emerged as a field, and at that time a society of nuclear cardiology had just been formed (The American Society of Nuclear Cardiology), and it was believed to be a real discipline. The field needed an official journal. I was asked to be the first editor-in-chief by a number of people in the leadership of the society. I thought it would be worth doing. That was a fun 10 years. It was an opportunity to really learn and also to impact the field. The journal served as a bully pulp. I believed that one of my missions was to push the field more into the molecular era. I spent a good deal of time on my editor’s page actively promoting molecular imaging as the key to the next era. I have had the opportunity of seeing that come into fruition. One editor’s page was called “A Call to Molecular Arms.” That helped I think to set the stage. Now there’s a big symposium at the NIH on it, and a lot more work is being done in this area.

Why did you step down from the editorship?

Ten years was the maximum period an editor could serve.

How many manuscripts through the years did you get a year?

About 150 to 200 each year. It wasn’t as overwhelming as a general cardiology journal. However, starting a journal was quite an undertaking. To start a journal, to get it into Index Medicus (and you were helpful, you wrote a letter in support), to get your colleagues to publish good work in a new journal, particularly before it’s in Index Medicus, to get advertisers to commit, and to have quality is a real challenge. We did all of that, and it became a respected journal. I was delighted when my friend and colleague, George Beller, was named as the second editor. He started 1 year ago.

As you look back over your professional career, what are the things you are most proud of?

Personally, I helped to found a new discipline. That to me was very exciting. I’ve made contributions that have impacted the way patients are cared for. That’s really what medicine is all about. I’ve done things that helped answer questions that are important. On an administrative level, I was able to build a section from a group of 7 or 8 faculty to >40, with a robust and diverse research portfolio working side by side.
I have never taken formal lessons. I have painted in Israel with a close friend who is a professional artist. You sell a lot of your paintings? BLZ: I don’t go out of my way to sell them. I’ve had shows that have sold well and I’ve had people who have liked my paintings and purchased them regularly. I’ve also donated paintings that have been auctioned at different charity events. I’ve probably sold 50 paintings.

WCR: Do you hate to part with them? BLZ: Not anymore. At the beginning I did.

WCR: Are most of the paintings in the house yours? BLZ: No, a lot of them are not.

WCR: You buy paintings, too? BLZ: Yes. I love to buy paintings.

WCR: What kind of paintings do you like to buy? BLZ: It’s pretty eclectic. They range from surrealism to British Victorian watercolors. My own paintings are neoimpressionist.

WCR: You read a lot, but usually not just before you go to sleep at night? BLZ: No, usually I’m too tired. I’m not very good for much at the end of the day. I also like to write poetry. It’s something I did a little when I was in high school and then stopped (Figure 14). I wrote a series of poems inspired by some of Chaim Gross’s drawings. I’ve written other poems since. Several have been put to music and performed in concert. This was done in collaboration with my friend, Josh Konigsberg, who is cantor in our synagogue. We’ve had 3 concerts. One of my poems is going to be published in a local publication this fall (Figure 15).

WCR: Do you like painting or writing poetry better?
**BLZ:** I like both. It depends. I can’t do both at the same time. There are different periods when I really enjoy writing a lot and there are different periods when I prefer painting. I just finished a painting of one of the medical school buildings. It took a while, but I was really into it.

**WCR:** Do you ever do any portraits of people?

**BLZ:** I did a self-portrait once, but it wasn’t very good. I think I will in the future. But, I will probably take lessons for that.

**WCR:** How much time do you take off a year?

**BLZ:** I travel a fair amount, mostly professionally. I will often extend a professional trip for a few days, so I don’t take off >2 weeks for pure vacation. I love Egypt and Israel. We go to Israel and Europe a lot. Usually, I’ll take a couple of weeks off in the summer. Now that we have a place up in the Berkshires, I’ll likely take off more time.

**WCR:** How many presentations do you give a year outside the local community?

**BLZ:** About 7 to 10. I try to limit that aspect of my work.

**WCR:** Your traveling is, generally, speaking and/or attending meetings?

**BLZ:** Yes.

**WCR:** You love to go to Israel?

**BLZ:** Yes. It’s like a second home. I’ve been there about 15 times.

**WCR:** And you mentioned Egypt.

**BLZ:** I’ve trained a number of Egyptians and have close ties with them. I’ve spoken frequently at the Egyptian Cardiac Society. That’s been a very important relation. We’ve worked very well together. My colleagues are very observant Muslims. We respect and understand one another and our religions, and we’re very good friends.

**WCR:** Tell me about your family.

**BLZ:** I’ve been married 41 years. We have 3 sons aged 36, 34, and 30 years. My oldest son, Adam, is married and has 2 daughters (Figures 16 and 17). He now is a pilot for Delta Airlines. Earlier he flew C-130s for the US Air Force. My middle son, Elliot, is an artist (formally, a journalist.) He paints portraits and landscapes. He also teaches. He is just starting his career as an artist. He now lives in Norfolk, Virginia, and was recently married. His wife is an ob-gyn physician and is taking a fellowship in in vitro fertilization. My third son, Owen, is a physician assistant in urology. He lives in Massachusetts. So, 2 live in Massachusetts and 1 lives in Virginia. We’re in contact several times a week.

**WCR:** You had some major changes in your professional life recently. In September 2004, you gave up the chiefship of cardiology at Yale, and also the editorship of The Journal of Nuclear Cardiology. What are your plans and goals professionally now?

**BLZ:** I am doing a lot of writing. George Beller and I just completed the third edition of our nuclear cardiology book, which will be out in October. I’m working on another book for the public. It will be called Heart Care for Life.

**WCR:** Who is publishing it?

**BLZ:** Yale University Press.

**WCR:** When will that be out?

**BLZ:** Probably in February 2006. I’m working on it now. I may take my editor’s pages from The Journal of Nuclear Cardiology and put them together in a book. I’m also thinking of another more personal book relating to former patients, my family, and other aspects of my personal life. But, we’ll see how that sorts out. I intend to keep teaching and seeing my patients. I’ve had an active clinical practice for the 31 years I’ve been in New Haven. I have patients that I have been following for as long as 30 years. I want to continue that.

**WCR:** How much each week do you see patients?

**BLZ:** I see patients 2 sessions a week, for about three fourths of a day. I see patients in an office setting, as well as in the hospital. I also teach and do consultations in the hospital.

**WCR:** You’ve stayed an active cardiologist for all these years?

**BLZ:** I have. I feel that you can’t be an academic cardiologist and division leader if you’re not taking care of patients. It’s also something that I enjoy enormously and that’s often been my occupational therapy. I often maintain close relations with my patients.

**WCR:** Do you see them with fellows?

**BLZ:** No.

**WCR:** You see them by yourself?

**BLZ:** It’s fast and intense. I spend 15 to 20 minutes on a return visit, and 30 to 40 minutes on a new patient. Our fellows have their own clinics. I like that way.

**WCR:** How do you see cardiology evolving in the next 10 to 15 years?

**BLZ:** I think we’re going to get closer to targeted therapies based upon better understanding of the biology of disease. I think the genetic aspects of disease are going to be far more important. There will be a lot more individualized therapy. I think pharmacogenomics is going to be a big issue. We’re going to learn how to diagnose diseases at earlier stages. This too will be very molecular based. We’ll continue to improve on patient outcomes. However, I worry about the way we’re teaching students and house staff now and the extent that they really talk to and interact with patients and examine patients. That’s one of the challenges medicine currently faces. Physicians are often becoming data collectors rather than doctors. That’s why all the humanism in medicine courses are coming forward to help redirect training concepts. How many fellows can really make a sophisticated diagnosis by examining a patient rather than by doing an echo? These are things that I worry about. The science is wonderful, the advances are extraordinary, but the doctor skills are lessening. I think it’s our job to bring those all together in a better way. We’re not there yet.

**WCR:** Are you going to work forever?

**BLZ:** No. There will be a right time for me to do less and then do nothing. But, my gut will tell me when. For the foreseeable future I’m looking forward to working (Figure 18). I’m looking forward to a time when it will be, perhaps, part-time rather than of the
intensity that I've experienced over the past 3 to 4 decades. But now, I'm feeling good physically and mentally. I hope that I still have things to contribute. I think I do. I also love my painting (Figures 19 and 20). When I stop feeling that I'm contributing, I'll stop.

WCR: How long have you been wearing a beard?

BLZ: Since I had a near fatal accident. It's got to be 18 years. I was almost killed in an automobile accident. I was driving to work one morning and my car skidded out and I was plowed into by another car. (It turned out my car had defective rear brakes [there was a recall several months afterward.]) I wound up with a pneumomothorax, a concussion, and a shattered scapula. A chest tube was inserted. I was in the hospital for a week. The scariest moment of my life was when I woke up on the wrong side of the car facing the wrong way, having trouble breathing and not knowing if I was a quadriplegic. I remember moving the fingers of one hand and another and then my toes. When everything moved I said "O.K. just stay quiet until they cut you out of the car," and they did.

WCR: You were in your early 40s at the time? How long did it take you to recover?

BLZ: About a month.

WCR: What did you learn from that experience?

BLZ: What it's like to be a patient. It made me a much better doctor. Because I then understood the little things that we as physicians ignore. They are much better doctor. Because I then understood the correlation of thallium-201 myocardial uptake in experimental infarction with quantitative radionuclide angiography: sequential left ventricular ejection fraction: normalized left ventricular ejection rate, and regional wall motion. Circulation 1977;56:820 – 829.


Barry, I really appreciate you talking to me

WCR: We have gone on for a while, Bill.

WCR: Barry, I really appreciate you talking to me and therefore to the readers of The American Journal of Cardiology and especially thank you for your openness.

BLZ: Thank you.

MOST IMPORTANT PUBLICATIONS SELECTED BY BLZ

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BLZ: Thank you.


