MY CAREER CHOICE WAS NOT EXISTENTIAL

Lawrence S. Cohen

I am honored to be here this afternoon as part of the Intellectual Trajectory series of the Koerner Center. I cannot promise how intellectual my remarks will be, but I hope that the trajectory will be upward and not downward.

In practicing medicine for over fifty years I have become increasingly mindful of how important the story is. Everyone in this room has a story. Listening to that story is a window into what is unique about that individual.

I will begin my Intellectual Trajectory from my early beginnings. My father was born in 1899 in Eastern Europe. Depending upon who was czar at that time, it was sometimes part of Poland and sometimes part of Russia. My father and his parents came to the United States around 1903. His family settled in Brooklyn where his father started to work. My mother was born in 1904 in that same general area of Poland, or perhaps Russia. She also came to the United States at a very young age. My parents were married when my mother was eighteen and my father was twenty-two. In the 1920s my father entered the clothing business. He owned a small chain of clothing stores. I remember very well spending Sundays at one of his stores putting together cardboard boxes in which to place suits after they were purchased. I would get paid a penny a box. When I was four years old we moved from an apartment house to a single-family dwelling where I lived until I graduated from high school. Prior to high school I walked to a public grammar school that was located around the corner from our house. There was never any issue of safety.

As I was growing up a favorite sport was stoop ball, played with a rubber ball that was thrown at a corner of one of the front steps of the house. You would try to catch it on the fly as it came back to you. It was played with a Spalding (Spaldeen) rubber ball. Another game called stickball was played on the street between manhole covers. The

---

Lawrence S. Cohen, Professor Emeritus of Medicine at Yale School of Medicine, graduated from Harvard College and New York University College of Medicine. He took housestaff training at Yale and fellowship training at Harvard's Brigham and Women's Hospital. After three years at the National Heart Institute as head of the clinical service for the Cardiology Branch, his first academic position was chief of clinical cardiology at the University of Texas (Southwestern) Medical School in Dallas. He returned to Yale in 1970 as a professor and chief of cardiology. His clinical research has spanned the natural history, prevention, and treatment of coronary artery disease; and he has been the Yale principal investigator on a number of clinical trials. He has further been deputy dean and research integrity officer at the School of Medicine. Throughout his career he has been a dedicated physician treating myriad patients and has taught decades of medical students. He was awarded the Francis Gilman Blake Award as the Outstanding Teacher of the Medical Sciences. He became emeritus in 2007 and still teaches and mentors at the medical school.

distance between manhole covers is 120 feet. Stickball was played with a broomstick as the bat. There was a pitcher, catcher, batter, and one guy in the "outfield." We would see how far we could hit the ball straight down the middle of the street and count how many manholes we could hit on the fly. Fortunately the street was a quiet one and there was very little vehicular traffic. I have pleasant memories of growing up in Brooklyn in the 1930s and 1940s. Each summer for four or five weeks my parents vacationed at a resort hotel in the Catskill Mountains. There was plenty to do at the resort – swimming, games, horseback riding, and other leisure activities. My life changed dramatically in September 1941 when I was eight years old. My father, who was only forty-one at the time, had a heart attack. He was treated at home and not in a hospital. I remember the doctor coming to the house with a portable electrocardiographic machine. After three weeks my father was finally allowed to get out of bed. That was the treatment for a heart attack at that time. His heart attack changed my life because the second phase of his treatment was prolonged rest.

In September 1941 my whole family moved to Miami Beach, Florida, in order to be in a warm climate the coming winter. We spent a year in Miami Beach. We were there when the Japanese attacked Pearl Harbor on December 7, 1941. I remember listening to the radio about the attack on Pearl Harbor. Over the next few years I remember clearly the events of D-Day, the invasion of Europe, Franklin D. Roosevelt's radio talks (fireside chats) and his death. World War II was very much a part of my growing up. By the way, I just finished an excellent book, *The Last 100 Days: FDR at War and at Peace*. I commend it to you as it describes the effects of his hypertension, kidney disease, and congestive heart failure while he was negotiating with Stalin about the partitioning of Europe. These discussions set the tone for the Cold War over the next forty years.

After a year in Miami Beach we moved back to Brooklyn. I graduated from P.S. 193. It was a short walk from my house and I would come home for lunch each day. Upon graduation I entered Midwood High School, which I walked to every day. I would pass the newly built Brooklyn College. While at Midwood High I was in the chorus and also became a cheerleader. I could run and dive over six individuals who were on their hands and knees. Upon clearing them I could tuck and come up on my feet. I now shudder when I think of the disasters that could have happened.

In my senior year at Midwood I applied to Harvard, Columbia, and Cornell, and to Franklin & Marshall as my safety school. I applied to Harvard because it was Harvard and I had heard very good things about it. Columbia was close by and it too was Ivy League. Cornell was not too far away. Franklin & Marshall was a good small school. I didn't visit any of them. I was interviewed locally by alumni. I got into Harvard, Columbia, and Cornell. I was rejected by Franklin & Marshall. I always found that interesting. I chose Harvard because it seemed to be the ultimate college to go to. The first time I was in Cambridge was when I entered college as a freshman. However, the circumstances of my starting Harvard were less than optimal. My entry was a shock in that my dad died a few days before I was to leave for college. I stayed at home for a week and missed orientation. I took a midnight train out of Penn Station

in New York City and arrived in Boston at 6 a.m. I stayed awake for every stop that the train made—Bridgeport, New Haven, New London, Westerly, Providence, and finally South Station in Boston. I got into a cab and told the cabbie to take me to Harvard Yard. He asked me "How do you get there?" I said I didn't know because I had never been there. But the cabdriver finally found Harvard Yard. I found my dormitory, getting there at about 7:30 a.m., and introduced myself to my three roommates. That was my introduction to Harvard College.

At some point in my second year I decided to become a premed. I enjoyed science and I enjoyed people. I majored in a field named Social Relations. It was a discipline that combined anthropology, social psychology, and psychology. That major was invaluable because medicine is so much an interaction psychologically with patients, peers, trainees, and students. I look back upon that major as an extraordinary launching pad for life. In addition, I came in contact with some extraordinary teachers. I remember some of them very well. McGeorge Bundy taught government; Thornton Wilder, the author; John Finley, a classicist; Louis Fieser taught organic chemistry and wrote the organic chemistry textbook; Clyde Kluckhohn taught anthropology and specialized in the Navajo Indians; Albert Guerard taught comparative literature. They were just some of the outstanding teachers I came in contact with at Harvard.

I applied to a small number of medical schools and was accepted and matriculated at New York University College of Medicine-Bellevue. In honor of the current dean, it was recently renamed the NYU Robert I. Grossman School of Medicine. The first two years were rigorous, but in my third year I really started to enjoy the place. The basic sciences had some great teachers, Severo Ochoa and George Wald, both Nobel Prize winners. Dr. Bergmann and Dr. Pick were émigrés from central Europe at the time of the approaching war. In the clinical years there were a number of role models. I was starting to gravitate toward cardiology. There was Charlie Kossman, Bertha Rader, Sherwood Lawrence, Saul Farber. NYU medical school was a very rich place in terms of having a long tradition in medicine and having some great teachers.

Upon graduation I applied to Yale School of Medicine for an internship. This was in 1958 and was also my first contact with Yale other than for "The Game" each year. At that time there were only about twenty full-time members of the Department of Internal Medicine. Now there are more than 250. Some of you may have known some of them. Paul Beeson was chair of the Department of Internal Medicine; and there was Frank Epstein in nephrology, Howard Spiro in gastroenterology, Allan V. N. Goodyer in cardiology, and Gerald Klatskin in liver disease. I remember being invited for an internship interview. I was looking forward to meeting Dr. Beeson. Instead I was interviewed by a young physician, the chief resident. He was not even a faculty member. Discouraged, I wrote Dr. Beeson that I would be happy to come to New Haven again in order to meet with him. He wrote back that another visit would not be necessary. I took this to mean that I would be interning elsewhere. I was therefore quite surprised when my acceptance letter came through a few weeks later. The internship year was grueling but I thoroughly enjoyed it. In addition to being at the

hospital Monday through Friday during the day, an intern was on duty Monday night, Wednesday night, and for the whole weekend; or on Tuesday, Thursday, and Friday nights. I had no other responsibilities such as to a young family, and I had room and board at the hospital. My take-home salary was about $25 a week. But the training was superb and I was learning a lot.

After two years of the internship-residency I joined the Public Health Service. The Vietnam War was going on, and young physicians had the choice of joining a military or paramilitary service. I joined the CDC (Centers for Disease Control and Prevention) instead of being sent to Vietnam. The mortality rate among young first lieutenant physicians serving in Vietnam was quite high. Fortune smiled upon me once again and I was sent to the Johns Hopkins Hospital as hospital epidemiologist to track down hospital-acquired infections. Johns Hopkins at that time was a non-integrated hospital divided into male wards, female wards, Caucasian or black, Medicine or Surgery. It was therefore relatively easy to track down a cluster of infections as the demography of the hospital was so segregated and partitioned.

While at Hopkins I met my wife, Jane, who had been born and brought up in Baltimore and was attending the University of North Carolina at Chapel Hill. We were married and had gone out about a dozen times, as it was a long-distance courtship. We celebrated our fifty-sixth wedding anniversary this past August. It was at this point in my life that I decided to become a cardiologist.

Looking back it is clear that my father having developed coronary artery disease at a young age influenced my decision. I applied to Richard Gorlin's program at the Peter Bent Brigham Hospital, now called Brigham and Women's Hospital. I had read some of Gorlin's work on valvular area formulas. He and his father, an engineer, were working together on them, combining their respective knowledge of medical physiology with hydraulic fluid engineering principles. I was attracted to cardiac catheterization, cardiovascular physiology, and the city of Boston. I was fortunate to be selected in 1962 as a cardiology trainee. Dick Gorlin was a rigorous taskmaster, but he asked nothing of us that he did not do himself. He was a very good mentor, leading by example.

On Mondays in the catheterization laboratory we would participate in research protocols involving cardiac catheterization of a dog. On Tuesday through Thursday we would do diagnostic cardiac catheterizations on patients. On Fridays we would have a conference reviewing the week's findings and results. On Monday morning the other first-year fellow and I would walk across the Harvard Medical School yard in order to obtain our dog for that day. We then gave the dog a sedative and walked it across the yard toward the laboratory. At some point the dog would start to fall asleep. At that point we lifted the dog into a covered cart on wheels for transport to the cardiac catheterization suite. There was only one elevator, and it was shared by patients and us. We received many querulous looks from patients wondering what was in that box on the cart.

In 1965 I received an offer to work at the NIH. I was to be head of the clinical service for the Cardiology Branch. We were learning about the pathophysiology of valvular heart disease and congenital heart disease. Appropriate patients would be admitted, have diagnostic procedures and cardiac operations if needed. The three years that I was at the NIH were productive ones and also solidified my intention to stay in academic medicine. A colleague, Jere Mitchell, with whom I worked at the NIH, was currently on the faculty of the University of Texas (Southwestern) Medical School in Dallas. He was chief of cardiovascular research, and he asked if I would join him in Dallas as chief of clinical cardiology. The medical school in Dallas was young and vigorous. Donald Seldin was a charismatic chair of internal medicine. After thinking about it a bit my wife and I decided to move our young family to Dallas. To our surprise we found that we really liked living in Dallas. There was a friendliness and acceptance that was quite unique. On the first day that we arrived and were moving into our house, I looked out our window and saw a man mowing my lawn. I went out and introduced myself. He said "I'm your next-door neighbor. I see that you are just moving in so why don't I mow your lawn this first time just to give you a head start?" It was an interesting time for Dallas. It was 1968 and as far as we could put together, the State of Texas and Dallas itself were still reeling from President John Kennedy's assassination. The fact that Kennedy's assassination occurred in Dallas ignited a spirit, as far as I could tell, of liberalism and friendliness. People wanted to change the image of Dallas. We found it an extraordinary place to be. We made a number of friends very quickly. Jane got a job in local TV as an associate producer of a TV news station. The program was run by Jim Lehrer, who later moved nationally to partner the "MacNeil/Lehrer Report."

In 1970 at an annual medical meeting in Atlantic City, Dr. Phil Bondy, who was then chair of the Department of Internal Medicine, asked me if I would return to Yale to become a professor and head of the Section of Cardiology. The challenge was to build Yale cardiology into a nationally recognized clinical and research section. At the time the section was quite small. The challenge was exciting. Moving back to Yale was professionally coming home.

The 1970s at Yale and in medicine in general were an exciting time. Coronary angiography became routine. Coronary artery bypass grafting (CABG) relieved the burden of angina from thousands of patients. Cardiac transplantation was a miracle. Going to the operating room and watching a patient receive a new heart was incredible. Coronary artery catheterization became a routine procedure. Drugs to combat high blood pressure were developed. ACE inhibitors and angiotensin receptor blockers (ARBs) were synthesized. Beta blockers were developed and became the cornerstone for the medical treatment of patients with coronary artery induced angina pectoris. The same is true for long-acting nitrates. Cardiac pacemakers were being perfected. A host of anti-arrhythmia agents were developed. Echocardiography was developing. Then in 1979 Andreas Grüntzig, a Swiss cardiologist, developed coronary angioplasty, a procedure that could widen a narrowing in a coronary artery by blowing up a balloon

at the site of the stenosis. Over a few years several hundred thousand of these procedures were performed in this country and abroad.

In the 1980s my own research interests led me from cardiovascular physiology to clinical trials. I had turned over the running of the Section of Cardiology and I found myself with more free time. The NIH sent small delegations of cardiologists to Russia in order to develop collaborative programs with the Russians. I went on several of these in the mid- to late 1980s.

I will relate a few experiences from those visits. One night a colleague asked if I would join him in order to attend a meeting of a small group of scientists who had been labeled Refuseniks. The term came from the fact that they requested to leave Russia and emigrate to Israel. This request would be refused, they would be removed from their positions, and from then on they would be called Refuseniks. It was a Monday night and a dozen or so of these scientists, mathematicians, engineers, and physicians were going to have their weekly meeting at the house of Alexander Lerner, a brilliant scientist who was one of the founders of cybernetics. My colleague and I took the underground and went to the apartment of Vladimir Slepak, one of the scientists. He told us that we could talk freely even though the apartment was bugged. He explained that visits by people from overseas were important so that the Rufuseniks could not be summarily forgotten about. They were happy to have the Soviet police know that there were people from overseas who knew about them. We visited for a while and then the three of us left his apartment. He walked over to a parked car whose driver seemed to be asleep. He woke the driver up and said that we were going to go to Alexander Lerner's apartment and that the driver would get into trouble if he didn't know that. The driver was NKVD.

At Lerner's apartment the subject for the night was the artificial heart. Although the scientists had no laboratory in which to test their hypotheses and perform experiments, their ideas were first-rate. Two weeks after I returned to the United States I read that Vladimir Slepak had been arrested. In protest against being a Refusenik he hung a banner from his apartment balcony saying, "Let us go to Israel to be united with our son." Slepak and his wife were sentenced to five years in Siberia.

On that same trip we were visiting Russian hospitals. It was 1987. Two years previously an American cardiologist, Bernard Lown, and a Russian named Yevgeny Chazov, who was head of the Ministry of Health, were awarded the Nobel Peace Prize for heading a large international group of physicians whose organization was the International Physicians for the Prevention of Nuclear War. One of Chazov's responsibilities was heading a model research and clinical hospital named the Moscow Cardiology Center. Although most Russian hospitals in the 1980s were quite primitive by our standards, the Moscow Cardiology Center was first-rate. It had all of the modern equipment that would be found in U.S. hospitals. We went to the coronary care unit where a patient was hooked up to all appropriate equipment and was receiving intravenous fluids. We were told that he was recovering from a heart attack. In the following year I was sent over by the NIH once again and we made a repeat visit to the Moscow Cardiology

Center. To my surprise the same man, in the same bed, with the same monitoring equipment receiving intravenous fluids was there. He was not a patient at either the first or second visit. He was there for show. He was a prop.

In the late 1980s I was chair of the Clinical Trials Review Committee of the National Heart, Lung, and Blood Institute; president of the Association of University Cardiologists; and president of the Interurban Clinical Club, which was started by William Osler more than a century ago.

Let me conclude by saying that in 1990 then Dean Leon Rosenberg asked if I would become deputy dean. I took on this responsibility, as the deputy dean was also dean of faculty. I divided my time fifty-fifty, 50 percent in the dean's office and 50 percent in cardiology. Another of my responsibilities was as research integrity officer at the School of Medicine, looking into any allegation of possible scientific misconduct, plagiarism, fabrication, or falsification, or any issue surrounding authorship. One of the better decisions that the dean and I made was in 1991 when we created the first Office of the Ombudsman (now Ombudsperson) at the medical school. This office continues to perform wonderfully with the original ombudsperson, Merle Waxman, still in place. It remains the only such office in the university.

However, the core of my career at Yale has always been seeing cardiology patients, teaching, and running clinical trials. In 2007 I became emeritus and in 2013 I turned over my patients to appropriate colleagues at the medical school. I had taken care of some of those patients for over forty years. I continue to teach, am involved with clinical trials, help out in advising in the research integrity area, and have become heavily involved in the International Ombudsman Association.

My wife, Jane, is a psychiatric social worker. She and I have recently begun a new initiative. We specialize in health care mediation in the elderly. There is often conflict within families concerning how their elderly parents are doing. Baby boomers are living longer. Each day 10,000 baby boomers, born between 1945 and 1953, turn age sixty-five. That is over three million individuals each year. Also, we are living longer so the number of people over age sixty-five has increased. Families are often spread between the East Coast and West Coast. We help them come to an agreement on how best to allow their parents to continue to live a healthy and safe life.

Lastly let me share with you advice that I give to my students.

1. Feel passionate about the field you choose.
2. Aim high. Try not to compromise your goals.
3. Your career will be a long one. Choose a practice, academic position, or laboratory that will give you flexibility over the span of your career.
4. Continue to study. Continue to learn.
5. Learn how to juggle. There will be many competing interests that arise in your life.

I hope that this trajectory was up rather than down and that a recounting of my career was of some interest to you. Thank you.