



Oral History with James H. Cavanaugh

NVCA-Venture Forward Oral History Collection

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National Venture Capital Association
Venture Capital Oral History Project

JAMES H. CAVANAUGH

Interview Conducted by
Carole Kolker, PhD
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This collection of interviews, *Venture Capital Greats*, recognizes the contributions of individuals who have followed in the footsteps of early venture capital pioneers such as Andrew Mellon and Laurance Rockefeller, J. H. Whitney and Georges Doriot, and the mid-century associations of Draper, Gaither & Anderson and Davis & Rock — families and firms who financed advanced technologies and built iconic U.S. companies.

Each interviewee was asked to reflect on his or her formative years, his career path, and the subsequent challenges he faced as a venture capitalist. Their stories reveal passion and judgment, risk and rewards, and suggest in a variety of ways what the relatively small venture capital industry has contributed to the American economy.

As the venture capital industry prepares for a new market reality in the early years of the 21st century, the National Venture Capital Association reports (2008) that venture capital investments representing just 0.2 percent of U.S. GDP have fueled the creation of 12.1 million American jobs and \$2.9 trillion in sales. Yet even these figures, while significant, greatly understate the collective accomplishments of the venture capital industry.

I'm pleased to have initiated and given my early support to this project, which was later supported by NVCA, and is now receiving support and funding by Harvard University. I believe these oral histories will advance the understanding of the venture capital industry. This collection, along with Paul Bancroft's Bay Area oral history project at the Bancroft Library at the University of California, Berkeley, and Paul Holland's Silicon Valley project for the Western Association of Venture Capitalists, will add significantly to a growing body of venture capital memoirs available to the public sector.

I'd like to extend a special note of gratitude to each interviewee for generously contributing time to this initiative and for candidly sharing memories. Their recollections bring to life the dynamic story of venture capital in the 20th century, providing a powerful perspective on the history of this industry.

Charles W. Newhall III 2010

VENTURE CAPITAL GREATS



A Conversation with James H. Cavanaugh

James Cavanaugh has been a managing director of HealthCare Ventures since 1989. He was previously president of SmithKline & French Laboratories-U.S., the domestic pharmaceutical division of SmithKline Beckman Corporation. He had been president of SmithKline Beckman's clinical laboratory business and President of Allergan International.

Jim served as staff assistant to President Nixon for Health Affairs and then deputy director of the president's Domestic Council. Under President Ford, he was a deputy assistant to the President for domestic affairs and deputy chief of the White House. He also served as deputy assistant secretary for health and scientific affairs in the United States Department of Health, Education and Welfare, special assistant to the Surgeon General, United States Public Health Services, and director, Office of Comprehensive Health Planning.

Jim began his career as a member of the faculty of the Graduate College and the College of Medicine at the University of Iowa where he received his Master's and Doctorate degrees

The following is an interview with Dr. James H. Cavanaugh of HealthCare Ventures, taking place at his office in Princeton, New Jersey. Today's date is June 10, 2010. My name is Carole Kolker. This interview is being conducted as part of the National Venture Capital Association's Venture Capital Oral History Project. This interview has been edited for clarity.

Carole Kolker: *Let's get started. As I said, this is about you. I do want to thank you again for setting aside this time. You are a busy person and seem to lead a very active life both public and private. Let's just get started with your early years: For the record, you can tell me when were you born, and where you were born.*

Jim Cavanaugh: I was born on March 3, 1937 and grew up in Madison, New Jersey.

Madison is a small town, about 25 miles west of Manhattan. In its early days, its rail connections to New York City led to the development of a large and flourishing rose growing business which was starting to decline in the mid-forty's. The town was known as "The Rose City." The town still has some large estates and fine residential areas and again because of its rail connections to Manhattan, it served as a bedroom community for "Wall Streeters", lawyers and corporate executives. The most popular commuter train had a private "members only" car providing newspapers and serving continental breakfast in the morning and cocktails and refreshments in the evening.

CK: *How did it happen that your family was living in Madison, New Jersey?*

JC: I don't know. My father was born in New York City in 1888, and sometime after that moved to Madison. I don't know what year the move to Madison occurred. I asked my father about his family and he told me that his father had been killed in a railroad accident near Madison.

CK: *What were your parents doing there?*

JC: Before World War I, my father owned a garage in Madison that also sold motor cars. He was also the Chief of the Madison Volunteer Fire Department. He enlisted in the Army during the First World War and served in France. He was discharged at Fort Dix, New Jersey in 1919 and was employed as a chauffeur for Leonard S. Hentz, who had just retired to his estate in Madison from the cotton brokerage firm of H. W. Hentz, a firm founded in 1871 by his father, who was an organizer of the New York Cotton Exchange. The Hentz Estate consisted of the main house, various out-buildings, sweeping lawns and formal gardens, apple and fruit orchards, vegetable and flower gardens, and a hen house which provided fresh eggs for the house. There was also a horse barn and tack room, a garage with polished wood floors which housed four mint condition touring cars from the 30's, a Chrysler sedan and a station wagon which my father used on a daily basis.

In addition to my father, there was a farm foreman, a number of gardeners and other workers and a maid as well as a cook to look after Mr. Hentz in the main house.

CK: *Did you grow up going there and soaking up all of that?*

JC: I did. My father's arrangement was such that in addition to his driving responsibilities, he was able to return to active participation in the local fire department, so I saw a lot of my dad as I was growing up. By the early 1940's, due probably to his age and health, Mr. Hentz was confined to the residence and never ventured out. During my growing up period, I was able to make trips with my dad around Madison and occasionally to New York City.

CK: *So rural.*

JC: Well, it was up until the mid 40's, when the area around it became residential. Mr. Hentz died in 1949 and within a few years the buildings were torn down to give way to a new residential development.

CK: *And your mother, she was a wartime mother?*

JC: My mother was born in Mt. Hope, New Jersey in 1910. Her parents lived in their own private residence on a US Army arsenal outside of Dover, N.J. where my grandfather worked. The arsenal did research and development on munitions as well as building bombs. During World War II, I spent a number of school holidays there with my grandparents. During daylight hours during the war years, at thirty minute intervals, you could hear the explosion of a bomb being tested off in the distance.

My mother was a graduate of the School of Nursing at Morristown Memorial Hospital in New Jersey. She was the evening nursing supervisor at the Morristown Hospital through the war years and beyond. She and my father were married in Madison in 1935. He was 47 and had never been married, she was 30.

CK: *Any siblings?*

JC: No, I was an only child.

CK: *Only child. You're my third only child in this project. That's always interesting. They've done a lot of studies on only children. What were your interests as a child? Were you a tinkerer, were you a reader, were you more outdoors?*

JC: I was a reader. I spent a lot of time with my dad in my early years.

CK: *Did you grow up hearing about his experiences in the war?*

JC: No, he never talked about it. He was inducted into the Army at Fort Dix, N.J., served two years in France, and was discharged back at Fort Dix in 1919. It was a time that he just didn't discuss. He did tell me about my great grandfather on my mother's side who served in the Civil War with the New Jersey Regiment and lost an arm at the Battle of Antietam. He also told me about one of his relatives, a General James Cavanagh who was in the New York 69th Irish Regiment and was shot in the hip while leading a charge during the Battle of Fredericksburg. He was discharged from the Army because of his wound. He later rejoined the regiment as a Lt. Colonel and served for many years as its commanding officer. I recently came across an article in the *New York Times* archives on the retirement dinner that was held for him at Delmonico's Restaurant in New York City in 1892.

CK: *So you were a reader. How would you describe yourself as a kid? Were you outgoing or quiet?*

JC: Probably modified outgoing. I mean, I wouldn't be one of the outstanding people in the crowd in terms of outgoing. But I'd say things occasionally, do things.

CK: *Where did you go to grammar school?*

JC: In Madison, the Madison Public School System through my second year of high school when we moved to Morristown.

CK: *Did you have a favorite subject that early?*

JC: History. I grew up around a lot of history in the Madison-Morristown area. It wasn't as rich with history as Philadelphia, but there was the Morristown National Historical Park and Washington's headquarters were in Morristown. Morristown had a very strategic role in the war of independence, in fact it was known as the military capital of the American Revolution...

CK: *And high school?*

JC: I went to Madison High School for two years. My father passed away in 1950 when I was a freshman in high school, and my mother and I moved to Morristown

to be closer to the hospital where she worked. I transferred to Morristown High School for my last two years.

CK: *What subjects were interesting you at that time? Had anything grabbed you?*

JC: History, Social Studies. During my freshman year in high school I was selected by the Madison Kiwanis Club to be a delegate to the New Jersey Model State Legislature. It involved spending a weekend in Atlantic City with other students from throughout New Jersey in mock sessions of the New Jersey legislature. I found that fascinating and it probably contributed to my later interest in public service. During the summer between my freshman and sophomore year, I had a job as a summer camp counselor at the Madison YMCA. While I had had a number of the usual summer jobs, lawn cutting etc., this was the first one that withheld taxes from my pay and produced a W-2! Returning to the "Y" one afternoon after a field trip to the neighboring Jockey Hollow National Park, I noticed a television on in the lounge area, it was before we had one at home. It was broadcasting the Republican National Convention from Chicago. That was the year that General Eisenhower was nominated to be the standard bearer with Richard Nixon as his running mate. I was fascinated over the next few days watching the live coverage from Chicago that led to General Eisenhower being his party's Presidential nominee, and Richard Nixon as the Vice Presidential

nominee. I think the model legislature experience and the TV coverage of the Chicago convention had a role in sparking my later interest in public service.

CK: *Were you involved in any sports?*

JC: Football.

CK: *Were you competitive?*

JC: I thought so.

CK: *Any other extracurricular activities? Were you on the debate team?*

JC: I was a reporter for the student newspaper in Madison. I also did a couple of school plays, one at Madison and another, later, at Morristown. I was told I took direction pretty well.

CK: *Well, you had to have been good to get selected.*

JC: Well, I listened then worked at it.

CK: *Would you characterize yourself as high-energy?*

JC: Yes.

CK: *Exuberant? Would you go that far?*

JC: Short of that.

CK: *This is something Chuck's always been interested in, hypomania. That's why the question still comes up here. How about risk-taking? Were you a risk-taker at that early age?*

JC: Probably.

CK: *I'm sure you were curious. Were you a good student?*

JC: In the courses I liked I did very well.

CK: *Did you have any early role models that you would cite, or mentors?*

JC: There was a fellow who was the administrator of the hospital where my mother worked whom I got to know and had a lot of respect for. I worked there in the maintenance department for the two summers before college, and then had an evening and weekend job there while I was commuting to college every day. His name was Robert G. Boyd, who had been an Army officer during the Second World War. I got to observe him and eventually got to know him during my time there. That led me to conclude that the field of health care administration might be the one to follow, and that's what I ended up doing.

CK: *I didn't expect to hear this so early. Obviously he was a great influence on you.*

JC: Yes, very much so.

CK: *And how would you describe the values in your home relating to education or work ethic or success?*

JC: Well, my folks both worked very hard, and they provided a great home. They set what I refer to today as a really high ethical standard when they were dealing with people, neighbors, the people they came into contact with. My dad was always thought of as a real gentleman, and I'd like to think that I followed his example.

CK: *And what were the expectations for you in terms of your future? Where were they coming from?*

JC: Well, my father passed away when I was 13, so it would have been a little early to know his expectations. Although my mother passed away in 1957 between my freshman and sophomore year in college, she was pleased that I had started college. After my mother's passing, I would spend my weekends with her sister and her husband, both of whom expected me to go off to college, and were delighted that I did.

CK: *What were their names, your aunt and uncle?*

JC: Alice and Henry R. Sperling.

CK: *Did you ever work while you were in high school? Did you ever earn money?*

JC: I did. In high school, basically, I was the neighborhood kid who cut a lot of grass. And then for a couple of summers I was a counselor in a YMCA day camp, and then as I said earlier, a summer job at the Morristown Memorial Hospital.

CK: *And so when you were graduating from high school, did you have any goals? You said that you were influenced by Mr. Boyd.-*

JC: Yes, I thought I wanted to go into the field of hospital administration.

CK: *And you went on to Fairleigh Dickinson in '55. Is there a reason you chose Fairleigh Dickinson?*

JC: It was close, about a 45 minute drive each way from Madison to their Rutherford campus, and I could afford it as a day student. I had a job at that point in the summer, which continued through the school year at the hospital in Morristown. So I worked in the engineering department there for the four years I was in college, evenings and weekends. That's how I was able to earn my college tuition, as well as save for graduate school. And Fairleigh Dickinson was close. It wasn't in Madison, as it was when they had a campus there later on. It was in Rutherford. So it was about forty-five minutes to an hour commute.

CK: *What was your major?*

JC: My major was industrial engineering.

CK: *So you put history behind.*

JC: Yes I did and it was a big mistake, a big mistake. It was, you know, during an era when many believed that you had to learn something that was going to lead to employment upon graduation. I've probably used some of the discipline for it to approach problems over the years, so I can't say I've never used it — I have — but it was a missed opportunity. I would've loved to have been a history major.

CK: *What were you learning at Fairleigh Dickinson that really interested you?*

JC: I was able to weave in a couple of history courses, and I had a great American historian as a professor, Margret L. Coit. She had won a Pulitzer Prize for her book on John C. Calhoun, *An American Portrait*, which was published in the early 50's, and a later biography on Bernard Baruch.

I later learned that she had taught a course on the American Presidency at a college in the Boston area and I've regretted not having known that during my White House years so I could have contacted her. Hers was a wonderful class. We actually made a couple of field trips. We went up to Cambridge as part of class work. One of our visits was to attend the annual Town Meeting of West Newbury, MA., a town she had lived in after her college years. She was always

very positive about wherever my future endeavors might lead and I've always been very appreciative of that.

CK: *Were you playing sports, still?*

JC: No. I didn't have time for it as I was working forty-four hours a week, in addition to my 15 hour course load every semester.

CK: *How about any mentors at Fairleigh Dickinson?*

JC: Margaret Coit, whom I've already mentioned. I was fairly, I wouldn't say close to her, but she was probably the member of the faculty that I had the most communication with.

CK: *And this is in literature and American history. So, did that develop? You said you were a reader as a child. So I would imagine you never stopped reading.*

JC: Right.

CK: *So, then in 1959 you went to the University of Iowa to the College of Medicine?*

JC: Yes, it was a graduate program in hospital and health care administration that was then located in the College of Medicine.

CK: *How did you choose Iowa?*

JC: Well, at the Morristown Memorial Hospital where I worked, the director was a fellow named Robert Boyd, whom I mentioned earlier. He had, at the time, a well-known hospital consultant by the name of Gerhard (Gerry) Hartman. His full-time job was director and professor of the Graduate Program in Hospital and Health Care Administration at the University of Iowa and Bob Boyd had arranged for me to have lunch once or twice with Dr. Hartman when he was in Morristown. I had applied to Columbia and Iowa, and was accepted to both. Columbia had tuition of about \$1,400 a semester then, and Iowa, at the time, had tuition for out of state students of \$130 a semester. The university wanted to get people from other states to come, so that there was not a differential between in-state and out-of-state graduate college tuition. Iowa was my first pick for the program, and I could afford it. So I went to Iowa and completed the two semesters of course work in the Master's program and went off to a hospital administrative residency here in Princeton, New Jersey. It's just down the street here at Princeton Medical

Center, on Witherspoon Street, within walking distance of where we are meeting this afternoon.

CK: *Were you finding this interesting, what you were studying?*

JC: Very much so. Yes. It was the organization and people and sort of influencing things to make things happen.

CK: *And you were familiar with this hospital setting, obviously. So what kind of career did you see for yourself at this point?*

JC: Well, I thought I'd end up going to a community hospital, and then probably move into a university setting, maybe a university medical center, and probably join them in teaching, because I loved teaching. After Princeton, I did go back to Iowa to pursue my doctorate where I did some teaching as well. And so I thought that was what I was going to do; that was after my Master's program. I've sort of jumped ahead.

CK: *Let's back up just one minute. Were there any mentors at Iowa or in this program that you—*

JC: Well, there was Gerry Hartman, who was the director of the program. And there was a fellow who's been a lifelong friend since then; John W. Colloton had been assistant director of the University of Iowa Hospital when I was a grad student. Later, when I returned to Iowa from Princeton, I did some projects with him for the hospital. He eventually became the Director of the University of Iowa Medical Center until his retirement.

CK: *And what was it about him that just inspired you?*

JC: He's a smart fellow. He was one of the very first people to understand the impact of the then new Medicare and Medicaid programs that were enacted in 1965 and how best to position the medical center to not only survive but prosper in the new environment

Going back briefly while we were speaking of Princeton, it was a wonderful experience for me. I met and worked with some fantastic people here including Jack Kauffman, the hospital president; Barney Kilgore, a member of the hospital board who was then, I think, the managing editor of the *Wall Street Journal*;

Dr. Elmer Enstrom, the President of RCA, who was also a hospital board member; and Harry Hess, a well known Professor of Geology at Princeton, who was in an Office of Naval Research Reserve Unit at the university that I was assigned to as part of my naval reserve commitment. The Princeton experience and the exposure it gave me to an expanded world led me to the conclusion that the world of the

community hospital, as important as they are in our health care system, was not for me. I wanted to have a greater impact that went beyond a local community. The real highlight of my stay in Princeton was that and meeting my future wife.

I met my wife here and we were married at Trinity Chapel. She had thought she was going to be a lifelong resident of Princeton, but instead, we left shortly after we were married to go back to Iowa City, where I went back to graduate school to work on my doctorate. At that time, I also had an appointment on the hospital administrative staff and a teaching appointment in the program in hospital and health care administration. That's when I started to do some teaching.

CK: *How did you like teaching?*

JC: I loved it.

CK: *So you really were thinking of combining these — what you were doing and making a career out of it and you would have been very happy.*

JC: Yes, I would have been very happy. I took what I thought was a short detour to Washington for a public service assignment with the thought that I'd always go back into teaching in the hospital/health care sector. Of course, I never did, but that was certainly my thought for most of the time I was in Washington.

CK: *I know that you attracted the attention of the Johnson Administration with your thoughts on the proposed Medicare program. Am I right?*

JC: Yes. While at Iowa, I was fortunate to have had access to all the data showing what the state was spending on what was then called the Kerr-Mills Program, or Medical Aid for the Indigent Program. With the 1965 passage of the Medicare – Medicaid Act, the Kerr-Mills Program ended up as Title 19 of the Social Security Act, which became the Medicaid Program for Indigents. I was also able to capture some data from nine surrounding states, and with John Colloton, developed some projections on what the utilization rates were likely to be, and then came to the conclusion that the Administration had grossly underestimated the future cost of the program. In fact, I recently saw a reference to a transcript at the Johnson Library in Austin of a 1965 telephone conversation between President Johnson and Senator Ted Kennedy when the President was giving the Senator a lesson on how to get legislation through the Congress. He told the Senator that while he was working on getting the Medicare bill passed, he became aware of projections that had been made on the outer years of the program and that if they had been shown to the Senate finance committee, it would have killed the program, so he knowingly low-balled the Medicare numbers and evaded the future economic projections of the program to smooth its passage during the legislative process.

As a result of talking about that, doing some things, I was invited to attend the 1965 White House Conference on Health in November of 1965. Invited among others, were health policy experts, leaders in the physician and hospital communities and university medical centers. One of its objectives was to lay the groundwork for what they hoped would be the successful implementation of the Medicare/Medicaid program, which while enacted in 1965, was not to become effective until July 1, 1966. I believe I was the youngest delegate there, I'm fairly certain.

CK: *You were twenty-seven-years old.*

JC: The kick off of the Conference with President Johnson was in the East Room of The White House, and then it was back to the Washington Hilton Hotel where they broke us up into panels for presentations. I had a paper on one of these panels. The then Secretary of Health, Education and Welfare was John W. Gardner. A terrific guy, who had been president of the Carnegie Foundation — did a great job as Secretary. They had him circulating among the break-out rooms, and he happened to come into the room where I was making a brief presentation on what the future costs of the two programs could be. I got a chance to meet him after the panel broke up, and he said he'd like to have a chance to chat with me at some point about some of the work that I'd done.

So a couple of months later I was in Washington at a meeting with the hospital branch of The Bureau of the Budget. Later that day I had the opportunity to meet with Doug Cater, an assistant to President Johnson, who in turn suggested I spend some time with John Gardner, Dr. Bill Steward, who was then Surgeon General of the Public Health Service, and Dr. Bill Kissick, a very bright guy who was one of Bill Steward's key assistants. I talked with them, and they ended up saying, "You think you could leave Iowa and come spend some time with us?" So that's what I did. John Gardner, Bill Steward and Bill Kissick were a big part of my decision to do it. Gardner, as I got to know him, I admired him a lot; he was just an incredible fellow. He was president of the Carnegie Foundation. I don't know if you're familiar with the TIAA-CREF Program; well, Carnegie started that. It was a way to help retain people in the teaching professions in colleges and universities. Gardner was instrumental, and Carnegie actually funded the initial White House Fellows Program, while he was the president of Carnegie. And that's how Johnson got to know him. Johnson basically recruited him to be the secretary of HEW.

In the domestic departments, Gardner was clearly a real star and I liked him a lot. In fact, I stayed in touch with him after I left; I'd see him in San Francisco occasionally. But then it was one of those typical White House conferences. You know, for a twenty-seven-year-old who grew up in New Jersey, spent a few years

in graduate school and then on the faculty at the University of Iowa, to be in the White House, listening to the President of the United States, members of the Congress and the Cabinet talking about the pending Medicare program and what they were trying to do with it, that was quite an experience. Little did I know then that 6 years later I would be on the White House staff.

CK: *And what was your reaction to all this? I know you're saying it's interesting, but maybe more specifically, what was your position? You said that what they were proposing for this Medicaid was underestimated, grossly underestimated. Did you have a position as you sat there listening to what they were saying?*

JC: I eventually came around to the fact that they were probably going to need a lot of help trying to figure out how to do this right.

CK: *But, were you in favor of the program?*

JC: No, I clearly hadn't been at that point. But to the point where I thought it was going to happen, I thought, well, if it's going to happen, we're going to have to help figure out how to do this. That's what they asked me to do.

CK: *Well, that's quite an honor for a 27-year-old. But evidently, you'd given a lot of thought to these issues, and the delivery of health care. But now you're looking at it on a national scale, rather than in a hospital.*

JC: Right, university medical centers, states, provinces and countries.

CK: *So you went back to Iowa; you got your doctorate; and you stayed on and taught for two years.*

JC: Well, actually, I had finished my studies and received my doctoral degree from Iowa in 1964. And yes, I joined the faculty, taught some courses, was involved in some research, and had the opportunity to serve as a consultant to hospitals and health organizations in the US as well as Canada.

CK: *Was that part of your plan?*

JC: Well, I thought I'd eventually probably chair one of those university programs, either at Iowa when Gerry Hartman retired, or probably one of the other medical centers. I talked to the people at Duke about going there, and spent a weekend there looking at it. I liked the feel for it, but we were very comfortable in Iowa. In addition to my teaching load as well as an advisor to a number of graduate

students, I was doing a fair amount of consulting with Gerry Hartman. He had a consulting practice, and I helped him with a couple of his major projects, one of which was studying the utilization of the Saskatchewan, Canada hospitals, which probably involved 25 to 30 trips to Canada over a three-year period. And believe me, getting from Iowa City to Regina, Saskatchewan in those days was not an easy task, so you had to be committed to the study. It was catching a plane from the Cedar Rapids Airport to Mason City, Iowa; a stop in Mason City; another stop in Rochester, Minnesota; ending up in Minneapolis; catching another plane to Winnipeg, with stops in Fargo and Grand Forks, North Dakota; and then finally, a non-stop flight from Winnipeg to Regina.

Our study and its recommendations, perhaps more importantly, the adoption of our recommendations, had quite an influence on the health care delivery system. They had an unbelievably long waiting list for hospital admissions in Saskatchewan; due in part to the government program limiting the number of available hospital beds, but also because of practice patterns of the physicians, especially as it related to the average length of hospital stays. We studied the utilization patterns and looked at patterns of care, and looked at this range between, let's say, per surgery, per type of surgery, between the shortest stay and the longest stay.

We were able to present that information to the medical staffs of all these thirty or forty hospitals in Saskatchewan. The doctors would look at it and say, “Well, yes, but I have a reason to keep these people an extra couple of days.” Then we continued to make the information available on a hospital by hospital basis and within a relatively short period of time many of the hospital stays started to shorten, and within six months they dropped even more, and in nine months most of the outliers were back to what had been the common average length of stay. The only thing we did was to collect the data and then communicate it effectively to the physicians. The result was to substantially reduce the waiting time for admission to hospital. That experience of working with a few hundred physicians and the hospitals was extremely helpful as I dealt with problems in the health care system in later years.

I also had the opportunity during this period to serve, with the assistance of a grant from the W.K. Kellogg Foundation, as a visiting professor at the Central University in Caracas, Venezuela. It was a very interesting time in the country as there was a great amount of civil unrest, bombs being tossed, cars set on fire, not unlike what is occurring there now. One afternoon I had a 4:00 pm meeting with one of the government ministers in one of the twin towers in central Caracas. About halfway through the meeting shots could be heard on the streets below that were followed soon by louder explosions. The minister kept the meeting going as

if nothing was going on, but by the end of the meeting we were both shouting to hear one another over the sounds from the streets.

CK: *You then moved on—what happened next?*

JC: Well, in the fall of 1966, I went to Washington as a consultant and then shortly thereafter became Special Assistant to the Surgeon General of the US Public Health Service for Health Economics.

CK: *Was that William Stewart?*

JC: Yes it was. Within the Public Health Service there were a number of categorical health programs that had developed over the years, where the Public Health Service made grants to state and city health departments, for such purposes as to control venereal disease, tuberculosis, heart disease, infectious disease, a whole bunch of categorical health programs, without a lot of regard to what the incidences of disease were between the states or cities.

The administration had proposed a comprehensive health planning program to try to tie together the programs and give the states and regions within the states as well as the cities the ability to sort out and better plan how to use the funds. I

helped Bill Steward and Bill Kissick and their staffs with some ideas about how to implement the legislation, and then I was asked to serve as the director of a new office to set up the program and run it. This involved pulling a staff together to run the program, breaking down the bureaucratic resistance to change, working with the many outside interest groups who had their interests in the programs and working with the nation's governors and mayors whose budgets were affected by the change, as well as testifying before congressional committees in both the House and Senate.

After the Nixon election in 1968, I worked on health policy issues at HEW, first when Bob Finch was Secretary and later when Elliot Richardson became Secretary. Elliot of course went on to become Secretary of Defense, then Attorney General, and later Secretary of Commerce in the Ford administration.

Early one Friday evening in January of 1971, I was meeting with Elliot on a problem we were having with moving a health manpower authorization bill through the Senate. He interrupted the meeting to take a call from the White House. At the end of the call he told me that he had recommended me as the person who could help to pull together a national health insurance plan that the President wanted to send to the Congress. The next morning, Saturday, I arrived at the South West gate of the White House little suspecting that there I would remain until shortly before noon on January 20, 1977.

CK: *And according to your information I'm finding online; you were in public service for almost 11 years. '66 to '77. Is that correct?*

JC: Yes, we left Iowa City for Washington in the fall of 1966 when I started my public service career at the Public Health Service. I then moved on to the Secretary's office in what is now the DHHS, then to the Domestic Council Staff within the White House Office in January of 1971, and then on to the White House Staff, after the Nixon resignation in 1974 where I became Deputy Chief of the White House staff working for Dick Cheney and President Ford until, as I said, we left on January 20, 1977.

CK: *Working with Nixon, then Ford. I want to ask you, just in general, what excited you about this public service work?*

JC: Well, with President Nixon it was the opportunity to work on solutions to major national problems. I joined the Domestic Council team at the White House in January of 1971 to assist in developing a comprehensive health insurance plan because the President had decided that he wanted to do something meaningful in that area. It was also a very exciting time to be at the White House. At that time, January of 1971, Watergate was a hotel and condominium complex along the Potomac River in Washington. The President had recently created the Domestic

Council so that he could have the equivalent on the domestic policy side of the well established and smooth running National Security Council, whose staff was working under Henry Kissinger. My Domestic Council colleagues were working on plans and programs to eliminate the military draft and move to an all volunteer force; form the Environmental Protection Agency, reform the welfare system, desegregate the southern schools and develop legislation to encourage the development of Health Maintenance Organizations. And now the President wanted to develop a national health plan that built on the strengths of the current system while correcting problems like lack of coverage or rejection due to prior medical conditions, and I was being asked to see that such a plan was developed and submitted to the Congress to do just that.

The result was the National Health Insurance Partnership Plan that the President submitted as part of a Special Message to the Congress in early 1971. Although the plan received much favorable review and comment, in the end it was not enacted. I'm sure that if it had, the newly developed Obama plan would not have been needed.

A few years later, after the Nixon bill had died on the Hill, I was told by Elliott Richardson that Senator Ted Kennedy told him that one of his biggest regrets of his years in Washington was not moving the Nixon health plan through the Congress, as that would have fixed the problem.

I recently participated on a panel at the Nixon Library with some of my former Domestic Council colleagues. The program covered part of the Nixon domestic initiatives, and my portion of the program covered the national health insurance program, as well as some background on the President's decision to expand the nation's basic cancer research effort. The presentation was broadcast on C-SPAN. Just a few weeks ago at a luncheon someone played a portion of it for me from YouTube on his iPad. During my White House time during the Ford administration, while I kept an eye on domestic policy issues, I spent a fair amount of time on the administrative and operational side of the White House, while Dick Cheney looked after political and campaign activities.

CK: *Is there anything that stands out as a major accomplishment during that time, for you?*

JC: Helping the President with the development of a major national health insurance program was one. Also helping with the development, enactment and later the implementation of the National Cancer Act would certainly be another. A third would be arranging for the transfer of part of the Army's Fort Detrick chemical and biological facility to The National Cancer Institute.

CK: *Were there any disappointments or frustrations in this—?*

JC: The biggest disappointment was not succeeding in seeing the President's National Health Insurance Plan enacted in 1974. Senator Kennedy's opposition was part of the problem, and by late spring of 1974, the whole Watergate cloud descended over Washington. It was not without frustration, certainly as I've said, some disappointments.

CK: *You were frustrated, but you were successful.*

JC: Yes. But there were times of frustration.

CK: *What were you learning about the politics of public health and health care delivery?*

JC: There was a lot of politics involved in it, a lot of fiefdoms, and lots of empires. Yes, I learned quite a bit.

CK: *But then, in '77 you go from the public sector into the private sector. How did this move come about, or what made you decide to—?*

JC: A couple of things. I had gotten to know a fellow by the name of Benno Schmidt.

CK: *From J.H. Whitney?*

JC: Yes. Whitney was at that point the one of the oldest and most successful venture capital firms. Well, one of the projects I had in the Nixon Administration was the expansion of the National Cancer Institute's cancer research effort, what the New York Times named on its front page headline the "War on Cancer". There was some legislation that had been introduced by Senator Jacob Javitz of New York and Ted Kennedy at the instigation of a woman by the name of Mary Lasker. It was to set up a new cancer authority outside of the NIH and HEW structure, reporting to a three person presidentially appointed panel. which we thought was a bad idea. We also thought there were some things that could be done, however, in that area. Elliot Richardson, who at that time was still the Secretary of HEW agreed. This would have been in the spring of 1971.

Javitz had asked Benno Schmidt who, in addition to being the Managing Partner of J.H. Whitney, had recently succeeded Laurence Rockefeller as chair of the board of the Sloan-Kettering Cancer Research complex in Manhattan, to be chairman of a panel that the Senate was going to create. I got in touch with him and asked if he could meet me at the White House and said, "You know, I think

there are some things that could be done here, and the President wants to do it, but there are some limitations as to how he wants to do it.” Benno thought that made sense. So he came down, we had lunch in the White House mess, and went to work on an administration program that ended up being negotiated with the Senate, and then eventually with the House. I don’t know how much detail you want.

CK: *This is very interesting, because Benno Schmidt was with Whitney.*

JC: I got to know him quite well; liked him a lot. We probably had a dozen or so meetings at the White House over the course of that spring, summer and fall as we were developing the legislation, and then guiding it through the Senate and House into conference and then finally through enactment in late December of that year.

CK: *What was he like?*

JC: A terrific guy, brilliant fellow, smart, knew how to get things done, and always in the right way. We stayed in touch after the legislation was enacted as he helped us a great deal on its implementation, particularly in discussing people to serve on the presidentially appointed Science Panel and Advisory Board. At one point he

invited me to lunch in his office at J.H. Whitney at Rockefeller Center in New York. That luncheon got me thinking that there were some other things I ought to think about first before deciding to go back into the university setting.

CK: *Your safe haven. You were always going back.*

JC: Right. But maybe there are some things I ought to learn about how to run a business, to do some things before I go back and try to teach about them. That was the motivation. But that came a little later.

CK: *And how did you know Mary Lasker?*

JC: I certainly knew who she was, because of her long-standing role in getting the federal government, primarily the Congress, to increase support for biomedical research. And, she knew who I was. She made it a point to get to know people in the public health service, and senators and congressmen that had their hands over the federal government's healthcare purse strings. There was a long-time Nixon ally, Elmer Bobst. He was the son of a minister who grew up in Lititz, a small farming community in eastern Pennsylvania, and went to work as a young man for the U.S. operation of a Swiss pharmaceutical company which became

Hoffman-LaRoche, as a member of their sales force. He eventually became president of the US division of Hoffman-LaRoche. He retired at age 62 and, bored in retirement; a few years later founded what became Warner Lambert, another pharmaceutical company. He had gotten to know Nixon when he was vice president, and had stayed in touch with him.

He took credit for convincing Nixon to leave California, after he lost the governorship, and move to the Mudge Rose law firm in New York, which was the Warner Lambert law firm. One of the things Elmer did in the 1930's was co-found, with Albert Lasker, Mary Lasker's husband, the American Cancer Society. So Elmer and Mary knew each other.

Mary Lasker had approached Elmer Bobst about helping her with his friend Nixon, in getting him interested in the cancer research area. Shortly thereafter, the President called Elmer and said, "I'm going to do something for you nobody else can do for your 80th birthday — I'm going to have your birthday party at the White House." So Elmer helped put together a guest list. Mary Lasker heard about it, called Elmer and said, "You should talk to him about doing more in the field of cancer research. The area's very fertile now to do more." The party at the White House was on a Friday night. Elmer apparently had that conversation and on Monday, I get a call saying: The President thinks "It's time to look into exploring the field of cancer research and determine if any federal effort at this

time could be productive in better understanding the causes and treatments of the diseases.

CK: *And who called you?*

JC: At first, as the White House operator placed the call, I thought it might have been the President, but it was Ken Cole, a White House Assistant, calling on his behalf. I then had an office over on the first floor of what's now the Eisenhower Office Building in the White House complex. About two hours later, I had a visit from a fellow by the name of Bill Safire, later a columnist with the *New York Times*, then one of the President's speechwriters who said, "We've been talking this afternoon with the President about his forthcoming State of the Union message." He said that he understood from the President that I might have something in the cancer area to contribute to it.

That State of the Union message was Friday night. So I called up Elliot Richardson as well as talked with people in the budget bureau. To make a long story short, we put together a \$100 million initiative to expand the field of cancer research. I drafted a couple paragraphs, and gave them to Bill Safire with the understanding that Elliott had signed off on it but it had not gone through the OMB clearance process. He said not to be concerned as he would show it to the

President later that afternoon. I went home from the White House that Friday evening to watch, with my wife and two young children, the State of the Union message, not knowing what if anything about the cancer program was going to be in it or how it was going to come out. The theme of The President's message that year was six great goals, the first being to reform the welfare system, the second to go to a full employment budget, the third to restore and enhance the natural environment, and the fourth, how he would be later submitting proposals for improving America's health care and making it available more fairly to more people. At the end of that section, he then said "I will also ask the Congress for an extra \$100 million to launch an intensive campaign to find a cure for cancer". Well, the major headline of the *New York Times* on Saturday morning was not the six great goals but "Nixon Declares War on Cancer." The phrase "war on cancer" was never in any of the language that was ever used. That was purely a function of the press. We never used it, it was never in our fact sheets, and it was never in the address.

CK: *That's certainly a powerful statement.*

JC: Yes. Then we started working with the legislative groups on a new authorization bill that involved Ted Kennedy, Jack Javitz and their staffs and we didn't have a lot of success there. Most of the success was over on the House side, working

with a Congressman from Florida by the name of Paul Rogers. He was head of the health subcommittee in the House and had a long-time interest in the health field.

During the period we were working with the Congress to get a good bill, Elmer Bobst called to advise me he was going to ask Mary Lasker get in touch with me. She called and we arranged for her to come in one morning. My secretary met her in the West Wing lobby and brought her to my office. I thanked her for coming in and told her we were looking forward to her thoughts and recommendations on the cancer research program. She looked around my office with what appeared to be a puzzled look on her face and I asked if she was alright. With that she smiled and said, "This is the first time that I've been in a Republican White House."

I replied that the last cancer incidence data that I had seen revealed that the incidence was about the same between republicans and democrats and that the President's interest was finding cures for all American's. Well, that was the proverbial ice-breaker and we went on to have a very good meeting.

You may recall that Mrs. Lasker was a friend of President Johnson and had provided the private funding for Mrs. Johnson's program of planting daffodil bulbs along the mall and GW Parkway that are still enjoyed each spring.

I recall, almost like it was yesterday, being in the White House mess one day, having lunch when my secretary called and said, “Chairman Rogers wants to talk to you.” So I called him back, and he was in a committee meeting. He said, “You’ve got to come up here and tell us what the President wants and what he doesn’t want in this bill, because we’re going to go to conference with the Senate tomorrow; we’re willing to take a strong position, but we want to make sure the President’s for it.”

I said, “Look, there’s something called, as you are well aware, executive privilege and it’s being exercised quite a bit around here these days. You want me to come up now this afternoon and meet with the committee?” He said, “Well, we won’t have a stenographer here, and it’d be a private session. I guarantee you it’ll be kept private.” And he said, “If you want the bill, if the President wants the bill, that’s what we’re going to have to do.” And I had gotten to know him and I trusted him, and I trusted the fellow by the name of Anchor Nelson who was the ranking Republican, very decent people. So I said to myself do I call the White House Counsel’s Office? And I said, No, because I know what the answer’s going to be.

So I just got a car and I went up, and a half hour later walked into the executive session of the committee. We met and after hearing their positions, laid out sort of what I thought ought to be done to reflect the President’s positions and they

agreed what they could do. The next day they were in conference with Senators Kennedy, Javitz and other members of the conference and for the most part the House positions prevailed. Both Houses passed the bill within days, and it was sent to the White House which the President signed two days before Christmas in an East Room signing ceremony attended by Benno, Mary Lasker, Senators Javitz and Kennedy, Congressman Rogers and the President of the American Cancer Society among others.

In addition to the legislation, there were other developments occurring at the White House to further contribute to the expanded cancer research effort. Early in his first term, President Nixon announced his decision to renounce the US Offensive Biological Weapons Program. The research and development work for the program was carried out at a US Army base at Fort Detrick, Maryland, about a 45 minute drive from the main NIH campus in Bethesda, Maryland.

I was reminded of that decision at a White House briefing in the summer of 1971 as we were working with the National Cancer Institute on plans for the expanded cancer research program. The Cancer Institute was concerned about their lack of adequate laboratory space for the expanded effort. I asked the Department of Defense if Dick Rauscher, the NCI director and I could visit Fort Detrick to tour the biological warfare development labs and a few days later we met at the Pentagon for the flight to Fort Detrick. It was quite an experience for both of us to

walk through the buildings viewing the equipment which only months before, had been developing deadly toxins and other biologicals for possible warfare.

At the end of the tour, Dick told me that he thought NCI could put the labs and related space to good use for the expanded cancer research effort. Upon returning to the White House, I prepared a decision memorandum for the President laying out the situation and the opportunity that a transfer of the weapons labs at Fort Detrick to the NCI presented. Mel Laird, the Secretary of Defense and a former member of Congress who had been a long time supporter of the federal government's support of biomedical research, supported the transfer, and the President approved it.

I was able to join The President on October 19, 1971 when he went to Fort Detrick to announce the transfer.

CK: *But it had to have been a thrill.*

JC: The thrill, if you will, was in the sense of accomplishment. What I was able to contribute to the enactment of a major piece of the President's legislative program but one that would enable funding and then programs to be put in place that would make major contributions to understanding the causes of cancer as well as the development of programs on prevention and treatment.

Today, the 3,000 government and contractor employees at the National Cancer Institute's Fort Detrick labs are engaged in understanding the molecular basis for cancer and developing novel strategies for the prevention, diagnosis and treatment of cancer as well working on developing faster and less expensive ways of turning laboratory discoveries into new diagnostic tests and treatments for cancer and AIDS. I've always thought of the Fort Detrick transfer as a classic example of a nation turning arrows into plowshares.

CK: *When I say "thrill," I mean with a flutter.*

JC: Yes. Going back to the legislative process that produced the National Cancer Act. It was a thrill. The members of Congress that we were dealing with were true to their word—about the executive session that we had.

CK: *Did you feel kind of out of your league in any way or—?*

JC: No I didn't feel that. I knew the bill cold; I knew what the President's position was on the provisions of the bill. I suppose there was some risk of going into the meeting, but it was a measured risk. I viewed it actually as essential. It was either a question of getting the bill or not getting the bill. I was able to do it

because I knew the legislation that the President wanted and I thought I could convince the members on what needed to be done. I also trusted the members to keep their word on the ground rules for the meeting, and they did. But that was a different period.

CK: *You started to tell me, you moved into the private sector. You thought there was more for you to learn about business. So how did that come about?*

JC: I used to have breakfast — we used to have a 7:30 am senior staff meeting at the White House. And after it, a couple of us would go down to the White House mess for coffee or breakfast. I went down one morning with a fellow by the name of Paul O’Neill, who was then deputy director of the Office of Management and Budget. (He later became Secretary of the Treasury in the Bush 43 administration). It was at a point where it looked like President Ford had a chance to win the 1976 election and Paul and I thought if we were going to leave government we ought to be giving a lot of thought to who we would recommend as our successors. Now I think I’m jumping ahead. Paul and I were talking about post-government, and he said something like, “I love having all these business guys coming and seeing us all the time. There are a lot of smart guys, but then there are a lot that aren’t so smart.” He said, “You and I, if we wanted to, could go out and do something in the private sector and probably make it work.” And I

said, “Yes, I’ve thought a little about that, you may be right.” And that was probably the seed along with my conversations with Benno Schmidt that got me thinking about doing something other than returning to a university.

I did it on the basis of, if I’m going to teach administration, teach about how to run medical centers, maybe I ought to know something about the business side of it, which I really hadn’t spent any time on. That was the appeal of it. It got me thinking.

CK: *You were telling me how you were seduced from the public sector into the private sector. I think that’s where we had left off. Could you pick up that story?*

JC: I had gotten to know Benno Schmidt, and Benno occasionally asked what I was thinking about doing when I was leaving the public sector, going back to private sector. And I said, “Well, you know, I’ve not given it a lot of thought because I’ve always thought I’d go back to the university setting somewhere.” And he said, “Well, you might want to think about the private sector, and I hope you’ll come talk to me at some point.” I said, “Well, what do you basically do?” He said, “Well, I’m in the venture capital business.” And he told me about his history and how Jock Whitney had recruited him from Washington in 1946 and asked him to come up and help him manage his *adventure* capital money. So he said, “I did it.”

And he said, “We made some interesting investments, like we invested in something called the Connecticut Vacuum Company,” a vacuum process company, some such thing as that. And then he said they had a method of extracting water from orange juice that basically became Minute Maid. We needed some advertising, and Jock knew Bing Crosby. So he called him up and said, ‘Would you do some radio advertising for us for this new product, this frozen concentrate?’ So he arranged to have some company stock given to him in lieu of cash. And Benno said “that’s how Bing Crosby amassed his fortune, not only from a singing career, but some of it from that”. And he said, “It’s a really interesting field.” “Actually,” he said, “I think the word venture capital; the term was created in our offices at Rockefeller Center.” And I said, “Really?” He said, “Jock hated being referred to as investment bankers.” And he said “Every time J.H. Whitney was involved in a deal, a financing or something in Jock’s little *adventure* fund that he put some risk money in — He said: “Whenever we got any press, it was always referred to as J.H. Whitney the investment banking firm, and Jock didn’t like to be identified in that sector.” And he was fussing about it one day around the office,” Benno said, “and there was a fellow that used to come in our office from time to time by the name of Webster B. Todd. He had a construction company that built Rockefeller Center, and before that had helped the Rockefeller family with the restoration of Williamsburg. When he’d be in New York, he’d come to our office. And he happened to be in the office one day

when Jock Whitney was talking about this article that appeared in one of the New York papers that morning that again mentioned J.H. Whitney as an investment bank. Benno said that Webster Todd had heard the conversation, thought about it for a minute and he said, ‘Well, why don’t you call it venture capital? Just drop the ‘ad.’ from venture, ‘venture capital.’ And Jock said, ‘That’s a good idea.’ So they started to refer to themselves as a venture capital firm. Webster Todd, of course, was the father of Christie Whitman, the former governor of New Jersey.

As an aside here, Governor Whitman called me a few years ago in my capacity as Chairman of Shire PLC, a British pharmaceutical company which had just announced its intention to acquire a New Jersey based pharmaceutical company. The Governor had heard rumors that the company might not stay in New Jersey and was urging us to keep it there. Unfortunately, I couldn’t hold out much promise for that, but I did have the opportunity to tell her about her Dad’s role in creating the venture capital term. I think she was glad to hear about it.

CK: *So Webster Todd is the one who--*

JC: Well, that’s what Benno told me over lunch one day in his office. I used to have lunch with Benno three or four times a year in his office. They had a private dining room in Rockefeller Center at J.H. Whitney; it was always the same menu.

We always had filet of sole and green string beans, and the steward would always bring in a plate with a round, small wheel of Swiss cheese. It was kind of a light Swiss cheese, and he'd always cut a slice out, and there'd always be a bowl of fruit. And I had lunch with him, probably three, four times a year, I'd say, over five, six, seven years, and it was always the same menu — and iced tea. And I know that other people would have lunch with him on different days of the week. So that's what he used to have for lunch.

So he planted the seed about venture capital. But when I got ready to leave Washington, I'd been approached by a couple of search firms, a large consulting firm, as well as a couple of pharmaceutical firms. And then a former associate from the White House called me one day and said, "There's a fellow in California that's building a pretty successful eye care company; he's looking for someone to come help him figure out and plan the future of the company."

And so I went out and met this fellow. His name was Gavin Herbert. He was a founder of an eye care company called Allergan. I ended up joining him as vice president for corporate development. What he wanted me to do was help him figure out how to grow the company, what to do with it.

Benno Schmidt had offered to take a look at the opportunities that I was looking at post-government service and share with me his thoughts, and I took him up on it. We were sitting in his office and I was reviewing my short list with him. The

last one I discussed was Allergan, by some measures the smallest of the opportunities I was considering and certainly the farthest from the east coast. I opened that file and passed it over to Benno with the comment “then there’s a small California company that I like. Benno, upon hearing “a small California company” rolled his eyes, but went through the file. After a few minutes he said, “This actually looks pretty interesting, mind if I make a call?” With that, he picked up the phone and called a senior partner at White Weld, Allergan’s investment banker.

At the end of the conversation he hung up the phone and said “you were right, a nice California company with a CEO who goes after good people. It’s the smallest opportunity you are looking at, but if you really want to get some real company operating experience under your belt before considering things like we do here, I’d give it a hard look.” Fortunately, I already had, and my wife and I and our two children were on way to California. So that’s what I did in March of ’77.

CK: *So you had decided to leave. Is it because the administration was changing?-*

JC: Yes. That was the reason. I was, by then, Deputy Chief of the White House staff. Remember that I came to Washington first as a consultant with the expectation that after a few years, I would leave to return to a university setting. Well, over

those few years, I went from a consultant to the Surgeon's General's Office to the HEW's Secretary's Office to the White House. By August of 1974, at the time of President Nixon's resignation, I thought the opportunity to depart would certainly present itself. In retrospect, I was very fortunate to have had the opportunity to serve on President Ford's White House staff, And by then it was three or four years longer than I had ever originally intended to stay, but I did.

CK: *So you were planning on leaving the White House, but you were either going to go back to Iowa or you were going to go somewhere else, and you had decided--*

JC: I'd go somewhere else first.

CK: *People knew that you were looking. You said there were headhunters, or there were people kind of--*

JC: I don't know that many people knew I was looking; I think people presumed that I was.

CK: *That you'd be available for something. Your time was up. Or, I mean, Ford's time was up.*

JC: Exactly. Right.

CK: *Do you want to stop and enjoy your sandwich?*

JC: That's all right. You can ask a question and take a bite while I answer.

CK: *Okay. You went out to California, to Irvine?*

JC: Yes, I did, and joined that company. It would've been in March of '77. Gavin Herbert and Allergan gave me a great opportunity during those first three years. I started in a corporate development role looking at acquisitions and licensing opportunities. Later, in addition to that, I had responsibility for the research and development program. After the Reagan election in 1980, I took a three-month leave of absence, which ended up being about four months, after the 1980 election, to help put the first Reagan cabinet together. I had had lunch at the California Club in the spring of that year, and was approached by a fellow I had known in Washington by the name of Penn James, who had been asked by Mike Deaver and Ed Meese to help think about the Reagan cabinet if, in fact, he was going to be successful in winning the election that November.

So I joined the team, and we had a couple of meetings in Washington, in Alexandria, actually, in an office over a drugstore in downtown Alexandria, because it was a very quiet operation, and he didn't want anyone to know that he was presuming he was going to win the election, but he wanted to be ready if he

did. So we went to work on it, and then the day after the election, I took a three-month leave from Allergan and Washington and helped with recruiting the cabinet.

CK: *That must've been a pretty heady time. That's an enormous job.*

JC: I had done things like that before, but it was. It was a new administration and new excitement about it—yes. I remember Penn and I having dinner with Bill Webster one night over at the Jefferson Hotel about how the FBI clearance process would be organized for cabinet appointees and senior staff. It was an interesting time, but it was a lot of hard work.

It was seven days. We worked hard at it, and we think did a reasonably good job. My wife showed me, a couple of weeks ago, something she had cut from, *Time Magazine*. *Time* did one of those “Day in the Life of the President” stories, and it happened to be the day I had my last meeting with President Reagan before going back to California and Allergan. I think it must've been the first week of March in '81. Penn James and I were meeting in the Oval Office with the President, Jim Baker, Ed Meese, Mike Deaver, and Vice President Bush. We were sitting around the fireplace and at the end of the meeting Penn mentioned that I was going back to California later that week, and the President turned to me — and this is a quote,

it's in *Time* : "Wait just a minute 'til I get my hat, 'cause I'm going with you."(laughter) And it went in the story. It was sort of a reference to; I've had enough of this cold.

CK: *I hope that's all it meant.*

JC: Yes.

CK: *I'm surprised that you weren't tempted to stay in Washington.*

JC: I didn't think about it for a second, not one second. I had my fill of it the first time around. There was a young fellow who was a McKinsey consultant, who worked for us in the office where we were screening and recruiting people, really bright guy, I liked him a lot. He was amazed that I wasn't going to stay because he knew a couple things that they wanted me to do. I was anxious to get back to California.

I went back to California, and for some reason — maybe because I was going to be in Washington — I went to the White House Correspondents' Dinner that year. It's usually the first Saturday in May. I was on the down escalator at the Washington Hilton, and this other fellow, he had been the McKinsey consultant,

and we had worked together the four months I assisted with the Reagan transition — Don Reagan had just been moved out as Secretary of the Treasury, and this other fellow had worked with Don — and he was coming up on the up escalator and I was going down. He said, “Now I know why you didn’t stay in Washington. I want to come and talk to you.” He turned around and went the wrong way down the escalator so we could have a little chat. He said he now clearly understood why I was in California. It was a great time, I enjoyed every minute while I was there. There were some challenges, and probably a moment or two I didn’t enjoy very much that I’ve forgotten about, but once was enough.

I’ve been very fortunate to have had four careers, the first as an academic at the University of Iowa, the second in public service in government including a White House assignment, then the corporate world at Allergan and SmithKline and last, the challenging world of venture capital, which is clearly from a calendar standpoint, the longest one of the four careers.

From time to time, I’ve been asked if I had any regrets about not getting into the world of venture capital earlier. My answer has always been the same. I enjoyed my time in the academic, public service and corporate world, but more importantly, the prior experience in those three sectors contributed immensely to whatever contributions I’ve made in identifying opportunities of unmet medical need, to put together the right talent to work on those opportunities and then to

build successful commercial organizations to take those advances from the laboratory to the bedside. I've often thought over the last twenty five years about how fortunate I've been to be in a field that develops new medicines to prevent, treat or cure illness and disease.

CK: *Politics wasn't the way you wanted to make a difference in this world.*

JC: No. So I went to Allergan for four years, took a three-month leave to work on the Reagan transition and then came back to Allergan to be president of Allergan International, which was basically taking a lot of export businesses in all of our countries and turning them into in-country businesses. By that, I mean, we'd go out and hire a country manager for France, hire a country manager for another country, and then help them put together a business plan, registration statements, and start to import products, and start to sell products. It was a tremendous opportunity, and the experience of helping to start those country businesses was extremely helpful later as I transitioned into venture capital.

So in effect, we were starting small, little companies, which basically you do in venture capital. And then Gavin Herbert and the Allergan board decided to accept an offer from SmithKline, a Philadelphia based pharmaceutical firm to acquire the company. About six, seven months later, I left California to move to the

Philadelphia area to become president of SmithKline's clinical laboratory business, and then a few years later moved over to become president of SmithKline, the US pharmaceutical business, and then left SmithKline at a time when I was being recruited by two other companies to join them. In the middle of that I had a call from a search firm one day, who asked me if I'd ever thought about the venture capital community, and I said, "I had, actually." I harkened back to my Benno Schmidt experience.

CK: *And you were still in touch with Benno Schmidt.*

JC: I was. And they had a client who had formed an investment bank. The two fellows had been with Johnson and Johnson's internal venture capital organization and left to form a small investment bank, to finance small biotechnology companies. And they had started a small venture capital fund, and they were looking for someone to come in and help get that fund more established and to help them raise their second fund. I met with them, liked the fellows, signed on board, and joined them in 1988.

CK: *Wally Steinberg and Hal Werner-*

JC: That's correct.

CK: *You were with Allergan and Smith Kline for 11 years. Am I right?*

JC: It'd be '77 through '88. Eleven years.

CK: *What were you learning about yourself during that time?*

JC: I think probably that thoughtful analysis, developing a plan, sticking with a plan was a way to do good business, where the facts would prevail, no matter what the challenge was. And in Allergan, particularly the international part of it, the challenge of starting companies; of recruiting managers and putting them in charge of a business in France; then supporting them, helping them build a business, was a great experience, it was an unbelievable experience. It still pays me dividends with the scores of companies we founded at HealthCare Ventures — and the ability to find someone to run it, help and coach them, counsel them and move them along.

CK: *That was a venture capital model, as you said.*

JC: Yes, in large part, it was. I was very fortunate to have had that experience prior to my joining a venture firm where the approach was to start companies from concepts, hire the first employee, and then build them into successful enterprises.

CK: *Was there anyone at Allergan that you would cite as a role model?*

JC: Gavin Herbert. He's still a very close friend.

CK: *What was it about him that was inspiring?*

JC: He's a real entrepreneur; he has a great sense for business opportunities and how to market them. Just good common sense about business, good judgment, how to think about things. He's been extraordinarily successful in the things he's been able to do, Allergan being the prime example, but not the only one.

CK: *So you decided to go with HealthCare Ventures. Was it called HealthCare Ventures at that time? And did you come in as a general partner?*

JC: It was called HealthCare Ventures and yes, I joined as a general partner.

CK: *Why did you feel you were well-suited for venture capital?*

JC: Because I liked the technology; I liked the health care field. I think I knew something about starting businesses at that point, and running businesses, from a very large business at SmithKline to a smaller but more complex business at Allergan. I had responsibility during my first three years at Allergan for the research and development program, so I knew something about research and development; and almost sort of a hands-on approach to product development, and that's in part what our venture backed companies had been formed to do.

CK: *And I would add that you brought the characteristics of being competitive and a risk-taker—measured risk, did you say?*

JC: Yes. I've never really rolled the dice, but I've taken a lot of measured risks. Big difference.

CK: *And high energy.*

JK: I've been very fortunate to have that. Travel is something that I've never had a big problem with. Some people just don't like to do it. I'd prefer not to do it, but

I can do it, and I've done it most of my life, including the training ground I had on prop planes from Cedar Rapids, Iowa to Saskatchewan.

CK: *What was exciting to you or motivating you in this work?*

JC: I think being able to have an idea about developing a product that would benefit mankind in some way, and seeing it through from the planning stage to the development stage, to the implementation stage, to successful creation stage. There's a company in your Maryland backyard we had a big hand in; I spent an awful lot of time with them over six, seven, eight years, called MedImmune, which we did. And I spent a lot of time with the founder of that company and went through some really bad times and some good times, and it turned out to be quite a successful company.

CK: *Tell me about it. There must be a story there.*

JC: Well, it was a company that we originally thought was going to be developing vaccines. And we got into it, concluded that that wasn't quite the opportunity that we thought it had been. And we had started, actually, in our offices, another company called Pediatric Pharmaceuticals that had an approach to treating a then

somewhat unknown disease in infants and newborn children. And we sort of married the two together. We recruited a great CEO for the company by the name of Dr. Wayne Hockmeyer and helped him put together a business plan that eventually led to a product to treat RSV in newborn infants and premature babies, and developed a very successful company from it.

CK: *How did this company come to HealthCare Ventures? How did you find them, or did they find you?*

JC: They didn't; we found them. It was an idea that Hal Werner, one of my partners, had talked to us about. We had started to use a search firm, started looking at some CEO candidates around this original vaccine company, which we were going to organize, find the CEO and fund. That's what we ended up doing, but it turned out not to be a vaccine company; it turned out to be this other company. And the CEO was smart enough to figure out that that was the avenue we ought to pursue, and we did.

CK: *So when you are looking at a company, just generally speaking, how do you vet a company? How do you decide whether you want to be involved, whether you want to fund this, either a company or a new drug?*

JC: Historically, particularly in the early years — the first fifteen to seventeen years — we weren't really in the deal flow of looking at opportunities. We were creating opportunities. We were a little off the traditional mode of venture capital in that we were looking at areas of need in the medical field, deciding whether there was an unmet need and whether we could figure out how to meet that need; whether there was a market for it, and then what we needed to put together to do it, and then how we would finance it.

For instance, before my time here, one of my partners, Hal Werner, who is actually a Princeton graduate and lives here in town. Hal had been with the Johnson & Johnson Development Corporation. After he left Johnson & Johnson, he spent some time with a market research firm. He used to visit hospitals, and he'd know that people were doing work with bone chips and bone fragments, orthopedic surgeons. They would store these parts in a refrigerator in the operating room that the nurses put their lunches in. I'm sorry. He thought there was an opportunity there to build a company around cleaning up that process. So one of the first companies was a company called Osteotech, which is still in existence, over in Shrewsbury, New Jersey, and its business is basically processing bone fragments, sterilizing them and providing them to hospitals and dental offices for use in all sorts of procedures. Dental work, jaws, the whole nine yards. The company was recently acquired by Medtronic. Our daughter just had a

little jaw infection problem that required an implant, and my doctor referred her to a fellow that's done some of that work in Bryn Mawr, Pennsylvania that uses that implant material.

CK: *So this is a different approach than most venture capital groups, because you're looking at need first, and then you're looking at market.*

JC: See if there's a market opportunity — lots of needs out there. Whether there's a market that would support it is another question. So we identify the need, determine if there's a market there, then try and do it. Now, most people in venture capital will tell you there's a certain amount of luck connected with all of this as well.

One of the companies that we did that turned out to be quite a success was a company called Human Genome Sciences — again, it's in your backyard there in Maryland. And I had a call one day from a fellow by the name of Alan Walton, who was a partner at the time at Oxford Ventures. He said, "I met a fellow that I want to have you spend some time with by the name of Craig Venter," and he said, "I think you fellows could help me a lot with this, and we don't have the financing to do everything that's involved. He's currently at the NIH, and he thinks he wants to leave there, but he's not sure how to do it. You've had a lot of

experience over the years with the NIH. Would you be willing to meet with him and have a conversation?” So I said, “Sure.”

So one of my partners and I went down to the Bethesda Hyatt and met with Craig Venter for the first time. And out of that, came up with a structure which would allow him to leave the NIH in good graces and go to a non-profit group that he put together, an institute, which would then have a license with a new company we formed called Human Genome Sciences. So we didn't identify that need, and then Alan Walton called me up and told me about this very bright fellow at NIH who was doing that work, and then from there we took it and put together Human Genome Sciences.

CK: *How did you know that what he was doing was going to be profitable or—?*

JC: Shortly after SmithKline acquired Allergan, they had a management institute, and they used to run their senior managers through it once a year. It was an annual off-site meeting — the CEO of SmithKline and probably about twenty people from around the world. I was then heading up research at Allergan, and it was my turn to go to this institute. It was at a resort outside of Atlantic City.

The first night I was there, I sat next to a fellow by the name of George Poste, who was head of research at SmithKline. This was probably 1984. George

started to talk about genetics and the whole molecular background of people and how all this was going to have a great influence on the future of medicine. And I was keenly interested in it. So I had a couple of follow-up conversations with him over this four-day meeting about it.

Four or five years later, when Alan Walton called me, and we had the first meeting with Craig Venter, I said, “This fellow is on the edge of doing something that George Poste used to talk about. It could be extraordinarily significant.” We formed the company, which we named Human Genome Sciences and got Dr. Bill Haseltine, a Harvard professor who was a member of our fund’s Scientific Advisory Board, to head it up. After the company was up and running, we called four or five companies, including SmithKline, to expose them to the science to see if there was interest in developing a collaboration with Human Genome Sciences. The SmithKline people loved it.

A few days later I was in Naples, Florida at a scientific retreat our fund held every two years and I had a call from Jan Leschly, the president of SmithKline, saying that they were sending George Poste, that night, down to the conference with a check and a contract to form collaboration. They had made the decision to commit \$125 million to Human Genomic Sciences, which back then was real money. I told Jan Leschly, who’s now in venture capital down the street here in Princeton at a firm called Care Capital that “You’ll get it all back.” He said,

“Yeah, yeah, Jim, everyone tells us that.” I said, “Believe me, you’ll get it all back.” About five years ago he called me up and said, “You know what? We got all of our investment in HGS back, and then some.”

CK: *There’s a really interesting story with Human Genome Science. You set up another company — with Haseltine?* Well this was the company we had set up, HGS.

JC: Bill Haseltine, as I said, was on our scientific advisory board. We’d known Bill for a long time. Bill’s a very smart fellow, a very smart guy. We thought if there’s someone that can really take a crack at pulling apart the science of this, it’ll be Bill. So we exposed Bill to it and set him up to meet Craig Venter, and he said, “Wow, this is going to be pretty significant stuff.”

That was one of the tests we used to decide whether we were going to go ahead. Because to get this started we made a commitment of \$80 million to pay over ten years, to Craig Venter’s institute. And that’s what caused him then to leave NIH, because we were able to form this non-profit institute that he’d wanted to be part of and wanted to head. And at the time we did it, we didn’t really know where the \$80 million would come from.

CK: *Leaving NIH is kind of turning your back on the God of Science in some way.*

JC: In some ways it is. There are some great scientists there and great people. Most of them are very happy to spend their careers there. Thank God they are. There's a fellow who has headed up the Institute of Allergy and Infectious Diseases for years by the name of Tony Fauci. Great, smart guy. Tony could be out doing anything in the private sector, but he stays there and worries about the big things that we need to worry about in this country, like infectious disease, anthrax, and all those awful things that are going on.

CK: *I know that when you're bringing a drug to market, it takes a long time. What makes you able to anticipate the future, that this drug will be, when it's brought to market, that the timing's going to be right—?*

JC: You do the best work you can on it. You talk to anyone that you think has got some views on it, use outside experts, and you predict what you think will happen. You never know 100%. The FDA is very unpredictable. Drug development is very unpredictable. Clinical trials are very unpredictable. And then, we might think that there is a market for the product and that the market's going to like it, but it may not. We may think it's a \$100 million drug and the market thinks it's a \$10 million drug.

CK: *Do you have an example of one way or the other?*

JC: Well, with MedImmune, after we formed the company, put the management team in place and did the early development work, the company had enough funding to do one clinical trial. We did the clinical trial, used an investigator out of Children's Hospital in Denver, a great gal who was the lead investigator. However, she did something that we didn't know was going to happen; she published the findings of her study in the *New England Journal of Medicine*, about a week before the FDA's advisory committee met to review the drug, which got the FDA's nose out of joint; they didn't like the trial data being made public before the advisory committee meeting so they basically told the company they had to do another study. We hadn't budgeted for another study. We had to go out and raise some money, and for two or three months we probably could've lost the company. It was almost running on fumes, but we were able to finance it with some outside financing,, the company launched a successful second clinical trial, the FDA approved the product, and the company went on to great success.

CK: *When you go to develop a fund or raise a second round, do you have a network of venture firms that you work with?*

JC: We do, but in the past — it's changing now. In the past—

CK: *We'll stay with the past.*

JC: Okay. Well, in the past we were doing so much work on these companies that we wanted to maintain a large ownership position, so that our limited partners would benefit from the work that we were spending on it. MedImmune, there were no other investors in it. We were the only investor in MedImmune until its first public offering. The outside funding that we got was from banks, investment banks. Another company we did, we brought two or three investors along, one being Chuck Newhall from NEA; that was Genetic Therapy. We knew that unless we were successful in lining up an early corporate partnership, that a vast amount of capital would be required.

In our early companies, we owned probably 60-70-80% of. We did it for two reasons: one, because we were spending a lot of time creating the company and we wanted to see that our limited partners benefited from that. Secondly, we wanted the ability to influence the management of a company, because we were spending so much time on it, and we didn't want to sit around the board room with seven or eight other people, each having a say in what the strategy was going to be. And we thought since we put so much time and, quote," knew so much about it," that we wanted to drive the company. A lot of firms traditionally haven't worked that way.

CK: *I wanted to get back to networking, but since you're talking about the time you spend — this is different — you aren't managing the management; you want to be the management.*

JC: No. We don't want to run the day-to-day operations, but we want to have a significant seat at the table in terms of the strategy, and if need be, have the ability to replace the management.

CK: *How much time do you spend with each new venture: with board meetings, with calls and emails.*

JC: The first couple years, a lot of time, weekly. Weekly meetings, weekly calls, sometimes, for short periods, daily. It's hiring the first person, helping him or her to put together the team under that, helping with the financing, helping with the target selection of products. We eventually back off as the management becomes mature and experienced and has got their hand on the wheel. We then back away from it.

CK: *How long does that take?*

JC: A couple of years.

CK: *That's a lot of time.*

JC: It is, but it's a critical time in the life of a new company, the time when you are putting the team, the science and the financing together, and you've got to get it right. I mean, but it's an evolving process. The step back begins after three, four, five, six months. What throws a wrench in all that, of course, is when you've made the wrong selection, and you have the wrong person in place, and you come to that conclusion. And usually, by the time you make that change, it's a little late; you probably should've made it three or six months earlier. So then you're back at square one, putting a new team together.

CK: *And how about, during this time, kind of the hand-holding, as things move along, or getting additional financing?*

JC: That's all in the telephone calls, the meetings. I was a frequent rider on Amtrak during the early years of Human Genome Sciences, MedImmune, and Genetic Therapy.

CK: *So if you could just take one of these and say, out of your week, 40 percent of your time, 70 percent of your time would be devoted to the issues as they came up, whether it's putting management together or--*

JC: Sixty percent. More than that.

CK: *How involved do you get when you go to sell a company?*

JC: It varies, but we're always involved. The smaller companies, the ones that are less established, we're more involved in the sale of that company; the ones that are full-blown companies, probably a little less. When MedImmune was sold, I was on the board, along with five or six other people, and we'd get calls from Dave Mott the company's CEO, who by the way is now a partner at NEA, and we helped him a little bit with an idea or two, but he basically handled the sale of MedImmune.

We had a smaller company by the name of Vicuron that we sold to Pfizer about four years ago. It was a public company, but had not reached the level of maturity of MedImmune, and I was with George Horner, the CEO, at his request, in New York, for a week, going back and forth between Pfizer, who was the eventual successful acquirer, and another overseas company that was in New York that

same week trying to acquire the company. We'd go to one meeting then to another, and back and forth, so I was pretty involved in that.

CK: *This is really what you spend your time doing, whether it's with one company or another company.*

JC: Yes, I enjoy doing it and I like to think I know something about it, and I'd like to think that every once in a while, I actually add something to the process.

CK: *How do you handle tension? How do you personally handle tension?*

JC: Well, I don't feel under tension or under pressure very often. That probably goes back to my days in Washington and some other things I've done in my career.

CK: *Do you have a philosophy about these kinds of issues that most people would find stressful?*

JC: I just kind of keep to focus on what I'm trying to do, not worry about what other people are thinking about it or who's being critical of it. If you're on the right approach and you're doing the right thing — it's not like we're doing God's work,

but in some of these areas where you're helping develop these novel drugs, it's just little bit short of that.

CK: *What do you think has given you your self-confidence?*

JC: Probably experience. My dad passed away when I was 13. Getting myself off to college on my own, I've had a lot of experience, at a relatively young age for some people. The working experience in a hospital during my undergraduate college years, leading a consulting team in Canada at a relatively early age, and then my public service tour, if you will. I was doing some things at the White House when I was thirty or thirty-two that were somewhat unusual; I mean things most people don't come across in their daily lives or for that matter in their lifetimes.

And I've done things—when I was at Iowa, teaching, I was visiting a professor down in Caracas at the University of Central Venezuela, during a time when they had just overthrown a dictator, and there was a small revolution going on, and I was there right sort of in the middle of it, watching cars being burned up, bottle bombs being thrown. I just got on with what I was sent there to do. And I've never been influenced by that, I never felt any tension about it.

As I said before, I've been fortunate to have had four careers; academic, public service, corporate and for a great majority of my working career, organized venture capital.

CK: *Do you sleep well at night?*

JC: I do.

CK: *You look like you do. What is your release? Do you play any sports now?*

JC: I don't today. I walk a lot, almost every day. I love walking. And I don't do as much now as I used to, but over the years I've loved to do gardening. And if I'm not doing it, I love to visit gardens, which I did the week before last over in Italy and England. In fact, I brought back a half a notebook full of some ideas.

CK: *So you must have a garden.*

JC: Yes. Fortunately, I have two—one in California, a small one, and a larger one outside of Philadelphia.

CK: *I just wanted to get back to — we were talking about networking, and that very often HealthCare Ventures is on its own, it doesn't pull in outside firms. But are there times when you need to?*

JC: Oh, sure.

CK: *Do you see any of this networking — and again, as you say, early on maybe in contrast to today — as a band of brothers in any way?*

JC: Yes. We feel that way about Chuck and NEA, and Brian Dovey and Jim Blair at Domain, which is just down the street from us here; a group over in the UK, we've worked with Abingworth, historically, in the early years particularly, and back when Alan Walton was still active at Oxford Partners.

CK: *Is there a crossover between business and social interaction with these venture capitalists?*

JC: Probably not as much as others participate in, but there is. Chuck has always been very good about hosting meetings at his place in Bermuda, or out in the West over the last couple of years. We do some things. And the National Venture Capital Association, we usually get together for occasional meetings.

The one gathering point has been traditionally, what had been the H&Q annual health care conference in San Francisco, over the years, which has now been taken over by JP Morgan when they acquired H&Q. But that was always a favorite meeting ground for people who do what we do in the venture capital community.

CK: *You invest solely in health care. And early stage.*

JC: Yes, and by and large, early.

CK: *Is there a way, other than that, to distinguish HealthCare Ventures from other venture capital firms? How would you say that you're distinctive?*

JC: We've started quite a few companies from our own concepts, rather than being in a deal flow of watching things come in and developing an inventory of opportunities, and then deciding which ones you're going to invest in. And so that's one differentiation. The other is, by and large, we've kept a large portion of the initial couple of rounds of investments for ourselves. There are pluses and minuses to that.

If you have a problem, or something goes wrong, you don't have a syndicate to go out to; you're kind of stuck with it. But that's been a risk that we've been able to take historically. I don't know that you're going to see as much of that in the future, as we've seen in the past.

The other thing I think — and I don't want to talk about the health field generally, because the health field involves medical devices, involves pharmaceuticals, involves biotechnology, and involves health services, clinics, whatever — we've limited ourselves by and large to the biotechnology piece of it. I suspect that that's changing. The long lead times, the long development times, the cost of clinical trials, the unpredictability of the FDA, I think, are causing people to have second thoughts about this sector and how rewarding it can be.

I think the other thing that's changing in venture capital — and you'd have better insight in this than I would because of the interviews you've done, the research you've done. Venture capital — you know, when I talked to Benno Schmidt, and I did talk to him before he passed away, and others who have been around in this field for a long time — these were very smart people and they had access to capital, who were basically making measured investments on opportunities they saw and had been quite successful in it.

Somewhere back, maybe fifteen, eighteen years ago, at least in our field, it almost got a corporate approach to it. People started to professionalize it a little bit more,

people thought it was an easy thing to do because the markets were great; there were public markets, just about everybody could get into it, and they started to raise large funds. And the limited partners, I think, probably contributed as much to some of the things that have happened in the last couple of years, because they continue to fund these opportunities, thinking that the payday was always going to be there. And what's happened is that it hasn't been.

If you go back, as we've done, and now the Venture Capital Association has done, and plot returns on venture capital and put it on a graph, and plot another line in terms of funds flowing into venture capital, what you'll see — and I've got it, I think, in my office; I've shown it to a few people over the last year — a chart that shows venture capital returns going like this.

CK: *Falling.*

JC: Down, and money flowing into venture capital going just the opposite direction. As more money has gone into venture capital over the last five, ten years, the returns have dropped dramatically. And I think it's too much money chasing after the same deals, probably in the hands of people that haven't had the experience of the people that you've been out talking to. It's become a little bit more, quote, "professionalized," less entrepreneurial.

CK: *That's interesting. When you started HealthCare Ventures, because you're so focused, what was your mission? The mission statement.*

JC: The mission statement was to produce above average returns for our limited partners.

CK: *By—?*

JC: By investing in unique opportunities that we saw in a growing, emerging field of molecular biology and biotechnology. When we started doing this, the field of molecular biology was in its infancy, and I knew something about it because of my SmithKline days, and Hal Werner knew a little bit about it from his Johnson & Johnson days. But the major pharmaceutical companies had no idea what the potential of molecular biology was.

The whole history of the pharmaceutical industry had grown up on the chemical industry. In fact, most of the pharmaceutical companies were originally chemical businesses — large, bulk chemicals — and got spun off from that, these little divisions that became pharmaceutical companies: Merck being a prime example of that, not the only one, but certainly a prime example.

And most of the people involved in research were dealing with chemical entities. They were modifying chemical structures, and the traditional growth of pharmaceuticals was through “better chemistry,” to use a DuPont phrase. And the field of molecular biology, where you could alter biology, just introduced a whole new field, and we hit this field about that time, when molecular biology was starting to grow.

As I thought about doing this, I went out and talked to people that I knew — scientists around the country — about what the opportunities were to do something like we were planning to do at HealthCare Ventures. And many of the people I talked to were trained through the cancer grants that came out of the Nixon cancer research expansion. Because the \$100 million that was established was a lot of money at NIH at that time, just in the cancer field and they didn’t have the research programs to put it into.

But what they knew they needed were trained people in the whole new field of biology and molecular biology, because that’s where the future breakthroughs were going to come. So those training grants went out to university departments to train molecular biologists. Most of the people now worldwide working in molecular biology in the field of cancer were trained under those original cancer grants, going back thirty years ago, twenty years ago. And these people saw where it was heading and convinced us that this was a field we needed to pay attention to. When

we were about ready to raise our second fund, I took one of my partners — because I had been on the board of what was then called the Pharmaceutical Manufacturers Association, I think it's called PhRMA now, so I knew the heads of all the pharma companies — and I called up and got appointments, and we went out to see them and tell them about what we were up to here.

And most of the companies, when we went to call on them, had their heads of research there. And I can remember more than once after concluding the meeting, the head of research would walk us down to the lobby and through the door, and on two occasions, paraphrasing what they said, was: I'm sure glad that I've had this great career in chemistry, and I think molecular biology's going to be the field of the future, but I'm retiring in eighteen months, and I'm sure glad I don't have to worry about what to do about it.

That's what happened. It's interesting now that the pendulum has gone through molecular biology, explored the opportunities that have been there, and it's now starting to swing back towards chemistry. And I think we're going to find a blend of molecular biology and chemistry that I think is going to make a lot of contributions to the future. But we've sort of watched that change occur. It's been absolutely fascinating.

CK: *You talked about how important it was to get the right management. What's more important, the management or the technology?*

JC: The management. You can have the best technology in the wrong hands and it'll get screwed up nine times out of ten. Management is almost everything, and I'm a big believer in technology and science. But unless you have the right management — and that's so true in so many endeavors.

CK: *How emotionally do you get invested in the particular ventures that you bring or products that you bring to HealthCare Ventures? Or, when you're on the board and you're working on something, how invested are you emotionally?*

JC: I'm pretty invested in it, whether it's emotionally or not. I feel strongly about some that we believe are right, like MedImmune's product. I was convinced it was a product that had to see its way through clinical trials and the FDA, and I was pretty — emotional maybe is not the right word, but pretty invested in it. In a number of things that we've done, we've all been heavily invested in it.

CK: *Any that come to mind?*

JC: I'd say MedImmune's product.

CK: *Was it that one product that you were talking about?*

JC: Yes, Synagis for RSV (Respiratory Syncyntial Virus). It's saving lives and reducing deaths and hospitalizations.

CK: *So the product that finally came to market — you say that the FDA made it go through another—*

JC: But it got approved. Yes. It's a remarkable product and it's doing very well.

CK: *How did you fare during the bubble and the burst? How did that affect you?*

JC: During the heydays of biotechnology, we did great — MedImmune, Genetic Therapy, Human Genome Science were great returns. The last, I guess, five years have not been great years. We've had decent returns, we're returning money to our limited partners, but it's nothing like the days early on. Our returns have declined along with those most other people. It's been a tough area to slough out and keep working on it.

CK: *Did you learn something about this—? You weren't in Internet technology, so I'd imagine the bubble didn't affect you to the extent that—*

JC: Well, the information technology bubble didn't. But I think what we've learned is that when we closed Fund Seven — and Fund Eight's our newest fund — we had the opportunity, with Fund Eight, to take in probably twice the amount of money we did, and we decided not to do it, because we would have had to add a couple of new partners, or we would have had to change the way we do things. And we figured out we didn't want to change the way we do things, and we didn't want to add more people, so we thought we'd just keep on the same strategy. Some other firms increased the size, and they've found it hard to find good investments for those funds.

CK: *Doing a little reflecting: Chuck says that he sees venture capital as a romantic quest. I'm wondering if you would agree with that.*

JC: Yes. It allows you to have a vision; it allows you to think about how you'd implement that vision; how you'd build towards it; how you'd put things together and fund it; how you'd nurture it along and hopefully have some successes, knowing you're probably going to have a few failures along the way, and knowing you're going to be involved in a lot of hard work to make it happen.

These things are never on auto-pilot. Everyone's had some great successes, and we've had a lot of good luck, but you have to have a structure to make that happen. And then, if you have good luck on top of it, that's a big plus. We've had some of that, but it's not been all our own doing; we've had luck.

CK: *How about disappointments? Have you had any real disappointments?*

JC: Oh, sure.

CK: *Anything that sticks in your mind?*

JC: Well, we've had a clinical trial or two that failed where we've had to shut down a company. We've never had a bankruptcy, but we've had to shut down operations and lay off people, and sell the asset to another company — that's not much fun.

CK: *What continues to excite you about this venture business?*

JC: I think it's the technology. Things are continuing to develop that are going to improve mankind, basically, and the human condition. That's what's exciting

about it. That and the ability to be able to grow activities that contribute in a positive way to an expanding economy.

CK: *Especially in health care. You've kind of alluded to this, and I guess we don't really have to rehash it—I was going to ask you how venture capitalism has changed since you've been in it in the early '80s.*

JC: It's evolving now, and my guess is that it may sort of go back to its original roots. Smaller funds, going back to the way they used to operate. I think this "professionalism," where these large pools of money have brought more people into it, and they thought, well, this is easy. They found out when the going gets tough, it's really not easy. I think that's probably going to discourage some limited partners from continuing to fund those organizations and I think what's going to result is these smart people will do what they've done in the past, figure out ways to finance entrepreneurial ideas, get these companies up and running. And I think that's exciting. I'm not disappointed by that.

CK: *So the band of brothers will come back and the romance will come back?*

JC: Yes, I think so.

CK: *Have you ever stopped to think over the years, maybe at a low point, that you would enjoy doing something else?*

JC: Other than what I've been doing? Yes, I have. I've actually had a couple of opportunities to think about that but always decided that I'm not going to, because I've enjoyed this so much.

CK: *What might you have done?*

JC: I've had a couple of opportunities to do some lectureships, not just on an on and off basis, but spend a year here, a year there. I may do that at one point. I've got just the right number of interesting boards that I'm on now that keep me interested in activities that are doing good work.

CK: *You're most fortunate, aren't you?*

JC: I am extraordinarily fortunate, yes. I met someone sitting at the next table at a restaurant in London last Sunday morning, having breakfast, and he happens to be a tax attorney in Austin, Texas. We're probably about the same age. He asked me what I did, and I gave him a snapshot of what I did, and he said, "Aren't we lucky that we're both doing things that no one told us we had to retire, and we didn't hit

the mandatory retirement age in X Corporation?” And I said, “You know, I’ve never really thought about it that way. I never saw myself as a corporate guy. But yes, if I had been in that situation, I wouldn’t have liked it very much.”

CK: *Is there some way that you feel that you could describe the contributions that you’ve been able to make? I guess it’s really, at this point, not only to mankind, but to our economy, as a venture capitalist.*

JC: Oh, sure.

CK: I would love to hear it. Why don’t you go on and tell me?

JC: Well, we formed a small company, a private company, again, in the Maryland area, which we ended up selling to a U.K. company called Shire Pharmaceuticals, because they wanted the drug delivery technology, and they wanted the experience with the U.S. Food and Drug Administration, and our small private company in Maryland had that. And I joined the board of Shire, and eventually became its chairman. It’s the fourth largest pharmaceutical company in the UK. That doesn’t say a lot because there were three giants ahead of it but it’s been an extraordinarily successful company. It’s developed a key drug, and then through

the technology of our private company it developed a long-acting drug to treat people with attention deficit disorder. It's been enormously successful. The company had twelve North American locations, which it centralized in southeastern Pennsylvania, about seven, eight years ago. We probably had 3,000 - 4,000 people employed there. I recently checked and found the market cap of the company was over \$30 billion. It's a great success story, but it wasn't on auto pilot. When we got involved it had a great CEO who had quite an entrepreneurial bend, but the company was rapidly out growing his management style, so the board decided it was time to make a change and we recruited a former Merck executive who came in, added to and strengthened the management team, and took the company to new heights. We went through the venture/entrepreneurial phase where you transition from start-up to lots of responsibilities and opportunities. We did the same thing with MedImmune. We hired the first employee — the first employee we hired at MedImmune was not the CEO; the first employee we hired was to develop the business plan in our office here in New Jersey.

CK: *So you've kind of had this network.*

JC: Oh yes, and that's been very important to us. The scientific network's been important, the people we can reach out to and talk to about developments. So we

were able to reach out and call some people about Craig Venter and the technology that he was developing. And then, as I said earlier, management is nearly everything. And to have a network of people you know are proven and have done things before, and can do it again, that you can call upon. Our success has been getting a lot of help from technical people, getting a lot of help from a network of people in the pharmaceutical industry and the university community, people that we know and have access to. And what we try to do is funnel that into the companies and funnel that into the individuals that are running these companies that will help make them successful. It's their success that's going to make our success. You can't lose sight of that. It's not what we do. We provide some expertise and some coaching and some counseling, and some scientific leads from time to time and product ideas from time to time. The people who are living there day after day make it happen and are the people who are going to determine whether it's successful or not.

CK: *That's why they get the credit for the success and the venture capitalist — nobody knows who that was.*

JC: Yes, and that's the way it should be.

CK: *You said there were several companies — Shire was one.*

JC: MedImmune was another, Genetic Therapy is a third. There are several of them.

CK: *Major contributions. In a lot of ways. Improving lives, saving lives, employing people in the industry.*

JC: Yes, and a big help to the economy.

CK: *I want to cite your Distinguished Alumni Award from the University of Iowa. That was in 2000. What boards are you on now?*

JC: CardioKine is a Philadelphia-based company that I'm on the board of; there's a San Diego company called SkinMedica, and another San Diego company called Verenum, which I'm currently on the board of.

CK: *Outside of these venture interests, are you active in the community, lending your expertise?*

JC: Yes. Currently, I'm the chair of the board of The Jumby Bay Island Company, an association of homeowners which owns a 330 acre private island off the coast of

Antigua which has a 40 room resort. There are 49 private homes and villas on the island as well.

Six years ago, we decided to close the resort for two years, and rebuild it. It reopened it four years ago to rave reviews.

Recently I was in New York, meeting with the president of Rosewood, the company that manages the resort for us. Rosewood is a top-line hotel management group. They manage the Carlyle in New York, and they are the manager of Jumby Bay Resort. I'm also working, in a very small way, in helping with fund raising for a new eye institute at the University of California, Irvine to be named after Gavin Herbert, the founder of Allergan.

CK: *In doing my research, I noted that when you received the award from the University of Iowa, they were citing other causes that you contributed to — your support to the American [Refugee Committee].*

JC: Right. That was really early on as they were getting started in Southeast Asia. My wife and I did some things with them.

CK: *And the Society for Women's Health Research. The American College of Health Care Executives*

JC: I was on the Board of the Society for Women's Health Research for a few years. Their major focus was to call attention to the fact that for the most part, women were grossly under represented in clinical trials for new drugs and important clinical observations could be missed. Thanks to their efforts, that situation is improving, but more needs to be done.

CK: *The American Hospital Association.*

JC: A long, time ago.

CK: *Pharmaceutical Manufacturers Association.*

JC: Yes.

CK: *President's Export Council. You've been busy. And I know that you're on the board at NVCA.*

JC: Right.

CK: *You've had a full plate for quite a while.*

JC: There are a few things to do. I think you can overdo those kinds of things, but I think if you have something to contribute, I think we all ought to be doing things outside of our basic endeavor. And I happen to have some expertise in some of those areas where people thought I could be helpful, and I'm glad I had the opportunity do to it.

CK: *In the public health care field and industry, you've contributed a lot through your work. I'm wondering, what kind of legacy you feel you'd like to leave, you will you be able to leave?*

JC: I think the legacy is the people I've worked with over the years that I've recruited into activities that I have been involved in and the people they've recruited and what they have done. I would hope that some of those people are doing a little bit better now because of some of the things I was able to help them with along the way. That's what I think is important.

CK: *Is there something I didn't ask that you would like to add?*

JC: I don't think so because this went in a different direction than I thought it was going to go, but I'm happy to have the conversation, I'm happy to do it.

CK: *What did you think that—?*

JC: I thought it was going to be more the history of venture capital and some of the things that happened in the early days. There are people with a lot longer experience than I have, that could tell you a lot more about the early days. But then, I suppose as part of this project that you have talked to them. I was very fortunate to get to know Benno Schimdt and glad that I could tell you about his experience with Jock Whitney, Webster B. Todd and the founding of the term "Venture Capital".

CK: *Are there some venture capitalists that you have worked with or that you know of that you admire, who would you say are outstanding in the field?*

JC: I think Brook Byers at Kleiner Perkins; Chuck Newhall at NEA, David Leathers at Abingworth and of course Jim Blair and Brian Dovey of Domain over at Palmer Square here in Princeton. The people like them that I've come across in the venture capital community are just great folks to deal with. They're straight

up honest; they're not trying to pull deals over on people. They're all the things you'd hope are the good things about American business.

CK: *So I guess you made a right decision when you left Washington.*

JC: Remember that I didn't go directly into venture capital. From time to time, I've been asked if I have any regrets about not, for instance, joining Benno in New York, right out of Washington, instead of going the corporate route. My answer has always been the same. No. I really felt that for me, I wanted to get some hands-on, real time business experience and more importantly, have some real responsibility for bottom line performance. I could never had dreamed up a program that would have prepared me better for my career in venture capital than my corporate days beginning at Allergan.

CK: *Well, I thank you for the National Venture Capital Association, for participating in this. And of course, I'm sure Chuck would like me to thank you, as he really spearheaded this and continues to be involved. He really is the heart and soul behind this project.*

JC: You are most welcome. I enjoyed meeting you, and please pass my regards along to Chuck.