



ORAL HISTORY PROJECT

**Joan E.
Hodgman, MD**

**Interviewed by
Lawrence M. Gartner, MD**

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Arcadia, California

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PREFACE

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

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

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ABOUT THE INTERVIEWER

Lawrence M. Gartner, MD

Lawrence M. Gartner was born and grew up in Brooklyn, New York. His undergraduate education was at Columbia University, followed by medical education at Johns Hopkins University, where he received his medical degree in 1958 and pediatric internship from 1958 to 1959. Returning to New York, he continued his pediatric residency at the Albert Einstein College of Medicine, where he was Chief Resident in Pediatrics from 1961-62. He continued at Einstein, doing a fellowship in hepatology, neonatology and research. In 1964 he became a faculty member, rising to Professor of Pediatrics and Director of the Divisions of Neonatology and Gastroenterology and of the Pediatric Clinical Research Center. During this period he carried out a major research program in neonatal bilirubin metabolism. In 1980, he became Professor and Chairman of the Department of Pediatrics at The University of Chicago and Director of Wyler Children's Hospital. In 1998, Dr. Gartner retired from the University of Chicago. He now lives and works from his ranch in Valley Center, California (San Diego), continuing lecturing and writing in neonatal jaundice, breastfeeding and history of neonatology.

In 1956, he married Carol B. Gartner, who subsequently became Professor of English at Purdue University and Dean of the College of Arts and Sciences at the Calumet campus. She also writes and lectures on the history of medicine, sometimes with her husband. She also assists in the oral history project, with specific responsibility for the video recording and photographs that accompany each oral history. They have two children, Alex Gartner, a movie producer, and Madeline Gartner, a breast and endocrine surgeon.

Interview of Joan E. Hodgman, MD, FAAP

DR. GARTNER: This is Tape 1, Side A, beginning the interview with Dr. Joan [pronounced as Jo-ann] Hodgman. We're here in Dr. Joan Hodgman's home in Arcadia, California. Thank you for agreeing to be interviewed for the American Academy of Pediatrics Oral History Project. We have four major goals for the oral history today.

First, you're a very major figure in American and global pediatrics, and we want to know something about you, such as your early life, your education and career, your family and how you got to where you are. Second, we want to record, for future researchers, your scientific, clinical and scholarly contributions to the field of pediatrics, with special emphasis on neonatology. Third, as a woman in pediatrics and neonatology, we're interested in your perspective on how women have contributed to pediatrics and neonatology, and how women have fared in the field of pediatrics and neonatology over the period of your own experience. Fourth, this is billed as a neonatology oral history because we're interested in understanding how the field of neonatology developed, its major achievements, and where you see it going in the future. You're one of the creators of the field of neonatology, and we want to document your role in this field and your views of neonatology.

The interview process is a relatively simple one. I have a script which we have used, with some modifications, for all the people we have interviewed. This gives a structure to the interview and allows us to cover the same material with each interviewee. By putting together the answers to each of these questions from each interviewee, we hope to be able to reconstruct the evolution of the field and identify neonatology's major achievements.

Thus, I will ask questions, but that's only an outline. You're free to wander off the topic if thoughts come to your mind that are tangential. Don't be inhibited by me. Please feel free to say whatever you wish. Stories, amusing and sad, are always a welcome addition to the oral history. You'll have an opportunity to edit the transcript for accuracy and content. We hope you will not remove anything or make any major changes except for reasons of accuracy. I will also be editing the transcript, but only to make it readable and smooth. I will not change anything you have said.

We're recording this interview both on audiotape for the transcriptionist and on digital video with sound to have an archival record of the interview which includes your image, the setting here in your home and any artifacts, pictures or anything you'd like to show us about your family or your career.

DR. HODGMAN: I didn't know about that.

DR. GARTNER: We can dig some things up later and see what you have. Carol [B.] Gartner is the official photographer and she will do both the video and the still photography throughout the day. She's also a medical historian and may ask some questions, herself. We can expect the interview to take the whole day and maybe tomorrow morning, as well. There's no time limit. We want this interview to be as complete and comprehensive as possible. I will indicate to you from time to time when we need to stop by raising my hand. Just hold the thought you have at that moment because it means we ran out of tape, and we don't want to miss anything. If you want to take a break anytime, just say so or raise your hand and we'll stop. And we'll, of course, break for lunch. So relax and enjoy. The first few minutes always seem a little more anxious, for you, and for me.

DR. HODGMAN: Until we get into it. Are you recording all of this?

DR. GARTNER: All this is being recorded.

Okay, now, the first part we're going to start with is personal history. We want to know about you.

DR. C. GARTNER: I want to know about your name.

DR. GARTNER: Yes. Tell us about your name.

DR. HODGMAN: First, I have to tell you I was born in Portland, Oregon. I'm a born and raised Westerner. I was born on the seventh of September, and the year I was born that was Monday, Labor Day, so appropriate for a neonatologist. So this whole thing has really been my mother's fault. Now, my parents called me "Jo-ann" and spelled my name Joan, J-o-a-n, and by the time I got to school at about five years old, I was firmly convinced my name was Jo-ann. I seriously thought about adding an "n" to it when I graduated from high school, but in that era, if people didn't know you, they called you Miss Hodgman. The people who knew me knew my name was "Jo-ann," so it didn't really seem important. These days, of course, everybody who pumps your gas calls you by your first name.

DR. GARTNER: Especially in California.

DR. HODGMAN: Yes, especially in California. But I have learned to answer to either one. But in my mind, my name really is "Jo-ann."

Now, my mother, bless her heart, was thinking perinatally back in 1923, when I was born because my parents didn't live in Portland. They lived in Medford, which at the time was a small town at the southern end of Oregon, you know, "podunk junction." My mother went to Portland to have me because she wanted expert obstetrical services. I even had a pediatrician shortly after I was born, which was very unusual at the time. I just figured

out that the Academy is celebrating its 75th anniversary this year. That sounds ancient and auspicious, but I figured out, hey, I'm older than the Academy! [Laughter]

My parents moved shortly to Reno, Nevada, and I learned to walk beside the Truckee River in Reno. They moved from there when I was one to Oakland, California, and I only have one memory of Reno. I had a homemade sandbox. It was under a Syringa bush. The reason I think this is a true memory and not just something somebody told me or showed me a picture of is that it was made of wooden boards and it had a step halfway down, a triangular step, and I remember that step as being head high. So I think I was little, playing in that sandbox.

DR. GARTNER: You were pretty small.

DR. HODGMAN: But we moved from Oakland to Southern California when I was about four, I think. My folks first moved to Hollywood where they lived fairly briefly, and then they found a home in San Marino, which is where I grew up. Their friends were wonderful. They gave them a big farewell party because they were moving wa-a-ay out of town. [Laughter] When we lived in San Marino, we had three houses on a big U-shaped — not a dead-end street but a U. All of the houses, other than ours and two neighbors', were built while we lived there and those are a wonderful place for kids to play. Once the workers and the contractors left for the day, hey, we could run along, play follow my leader over the rafters. Marvelous. So that was a great.

DR. GARTNER: And you survived that.

DR. HODGMAN: Yes, and survived. You know, there is this theory that there is a God who looks after kids who are too crazy to look after themselves.

When I was in high school, I was an art major. Where I got the crazy idea I wanted to go to medical school, that I wanted to be a doctor, I honestly have never been able to figure out. I have pretty good data on both my mother's and my father's family back for several generations and there is not a single physician in the crowd. The majority of them, of course, were farmers. That's what people used to do. My father was an engineer. I didn't have any strong medical influence, but I knew even as a kid I never did want to be a nurse. You know, little boys were supposed to be doctors and little girls were supposed to be nurses in that era, but I never had any compelling interest in nursing. I thought that was probably lucky because I think I would have made a terrible nurse. I can see the first time a baby needs resuscitation and I can't do it because I'm a nurse, and I have to call this week's intern and wait and watch the baby turn blue. I don't think I could do that. I think I

would resuscitate the baby, and then I would be fired, of course. [Laughter]
So I think it's lucky that I didn't want to be a nurse.

In high school, my very best friend and I took something called "Brain Trust Chemistry." This was Doc Bofet's [unable to verify name] chemistry class. She and I were the only two girls in the class. I found chemistry fascinating, and easy. That kind of started me thinking about a scientific career, so the next year I matriculated at Stanford University where I did my undergraduate work. Stanford assigned every beginning student a mentor. My mentor was the chief of the art department because when I had sent in my application I had said I was planning to major in art. So I told this nice guy I had changed my mind and I wanted to be a pre-med, and he was wonderful. His first advice was that I get a new mentor. [Laughter]

At Stanford, in our freshman year, there were 25 young women in the pre-med class. Actually, three of us graduated from medical school. Now, Stanford at the time had no quota for women, but they never took more than two. One of my best friends in college, who was also a pre-med, was the niece of the dean of the medical school, so I figured, "Cross that one off."

DR. GARTNER: Right.

DR. HODGMAN: She wasn't a shoe-in. I mean, she was a good student. There was no reason she shouldn't be chosen. But I didn't have any family pull, so I knew I had to get grades. So I studied like mad in college for grades and I got them. Stanford had a quarter system, and you could honestly study for a quarter in one night if you didn't sleep. So I would get out my books and I would study, and then I would go and take the exam. The exams were usually three, four hours, all written stuff in those days. Then I would come home and sort of empty my brain and pull out the next set of books and start over. I saved my blue books for years. I figured my college education was written on them. [Laughter]

DR. GARTNER: Did you ever refer to them, go back to them?

DR. HODGMAN: Yes, I did for a while. I finally grew up and threw them away. But it worked, because I had an A average when I was admitted to medical school. I have to tell you that the next semester after I was admitted, it slipped a little [chuckles], but I still managed.

DR. GARTNER: You'd do those all-nighters.

DR. HODGMAN: I still managed to get out of school. My roommate and I in college were roommates all through school, and very good friends. She was a serious student, also. She majored in psychology. But we figured there were three things you could do in college. You could study, you could play

and you could sleep. Now, we figured there was only room enough, time enough to do two of them, so we figured we'd study, and we'd play and we'd sleep on the other end.

DR. GARTNER: It worked for you.

DR. HODGMAN: Yes. Anyway, I was not accepted at Stanford and this was now war time. Honolulu was bombed by the Japanese in the December of my sophomore year in college, and that changed a lot of things. The men had to be already accepted to medical school in order to be deferred from the service. Later, they had an actual [draft] — STSA [Selective Training and Service Act of 1940]. The pre-meds were deferred while they were studying. Supposedly, England entered World War II thinking it was going to be a fast war, and they did not exempt their physicians, their dentists, their engineers, and their scientifically trained crowd. As the war went into its third and fourth year, they began to run out of them, so supposedly the United States took a leaf from their book and started deferring their engineers and their — It was unlucky in those days to be a lawyer, because they, of course, got sucked up into the service.

So we interviewed for medical school very early. I think I was 17 or 18. Anyway, I didn't get accepted at Stanford. Now, I had sense enough at the time to realize Stanford at the time was very similar to the town I grew up in, San Marino, California. It's middle class, maybe upper middle class, conservative, a lovely place to grow up, but limited. And Stanford was very much the same. There weren't as many scholarships as there are now, which meant that the students' families had to be able to send them because it's an expensive school. I realized it was time for me to get out and get a wider look at life. If Stanford had accepted me, I would have stayed, of course. It's much easier to stay put than it is to move. But since they didn't — they shoved me out — I had to go up the peninsula. I went up and applied at the University of California, San Francisco [UCSF], which in that era was called Cal. Actually, at the time, it was a better medical school because Stanford was still Stanford way up in San Francisco, run mostly by voluntary faculty, whereas UC had full-time faculty and a bigger research presence.

So anyway, I piled all my stuff in my little car, which my darling father had given me for my seventeenth birthday, I think.

DR. GARTNER: Lucky you!

DR. HODGMAN: Well, I was 16 when I started college, so this was my second year in college. And considering what he thought about my driving, I thought I'd be lucky to get a little Chevy convertible — not a convertible, he wouldn't give me a convertible — a little Chevy coupe, but instead I got an absolutely gorgeous silver and navy blue Buick. It was the prettiest car I've

ever owned, of course. I had a serious talk with my father about handling my car, and as part of the talk, he said, “Now, if you have an opportunity for somebody else to drive your car, I think you ought to take advantage of it because it will probably be in better hands.” [Laughs] And he was serious! [Laughter]

DR. GARTNER: Did he teach you to drive?

DR. HODGMAN: He started to. Well, he had me parallel park, and he told me how to do it, and I did it, and I ended up right by the curb. He sat there and looked at me with his mouth open. Fortunately, my boyfriends in high school were the ones who taught me how to drive. That worked much better.

But at any rate, I put all my belongings in the back of my gorgeous car and I drove up to Berkeley. At the time, the first year in medical school was in Berkeley, and then the succeeding three years were in San Francisco at the medical school campus. Now the medical school is a whole separate campus and so the whole medical school is there.

DR. GARTNER: At that time, it was actually part of Berkeley, officially?

DR. HODGMAN: I’m sorry?

DR. GARTNER: Was it then part of Berkeley?

DR. HODGMAN: Yes.

DR. GARTNER: I mean, it was officially part?

DR. HODGMAN: They didn’t call it Berkeley; they just called it Cal, because most of the other campuses hadn’t been established yet. So the first year we spent the majority of the year in the science building and the library, and I don’t think I saw the inside of many other of the institutions on the Berkeley campus. Fortunately, during the war the colleges weren’t playing football because the guys were off fighting the war, so I didn’t have to worry about the Cal-Stanford [rivalry]. That didn’t come up until after I got out of school. We went to medical school.

DR. GARTNER: Before we get into the medical school years, tell us a little bit more about your family.

DR. HODGMAN: Okay.

DR. GARTNER: What was your mother’s background? You said your father was an engineer. What kind of an engineer?

DR. HODGMAN: My father was born in Cleveland, Ohio, and he came from a pioneering family. I am actually eligible to be a DAR [Daughters of the American Revolution]. Well, I have to tell you, I never applied because of their, to me, rather peculiar politics. But his family located in New York before the Revolution [the American Revolutionary War]. I have a crazy great-uncle who traced the family history, and he could get them back as far as New York, but then he couldn't make the bridge from Europe. But almost certainly they were English background. But anyway, they left New York and came across the mountains to what was then the Northwest Territory. This was the era when you woke up in the morning and there was a tomahawk in the front door of your cabin. But they farmed and persevered. I visited my grandparents who were living in the 150-year-old farmhouse that Robert Hodgman built for his bride. They had added on to it, of course.

My dad went to Case Western Reserve University in Cleveland. When he started out, he was 17 and he wanted to play football. Now, since he was under age, he had to get permission from his family, but my grandfather refused to give him permission. So my father took a year off and came west to the Four Corners and spent a year surveying. Then after his 18th birthday, he went back and matriculated in school and played football. So he had some taste in the West. He was in World War I, of course, and as an engineer in World War I, he was in the [US] Cavalry. And you can say, "What's an engineer doing in the cavalry?" Well, they were changing from horses to the caterpillars. The cavalry was becoming mechanized. During that time, he met my mother. He was stationed in Portland, and that's where he met my mother.

Now, my mother was, as you might guess, a frustrated career woman. Her parents came from Scotland, and they were lowland Scots. You know, the highland Scots are so romantic. I can remember once in my youth I was going on about the highland Scots and the romance and all, and my mother turned around and looked at me and said, "Those highlanders are just savages." [Laughter] At any rate, her parents came to Minnesota where there was a Scots conclave. I think this is right. Her parents had visited the United States on their wedding trip, and they looked at those gorgeous acres and acres and acres of beautiful black loam soil, and then when they got back to Scotland it did look a little hardscrabble. So they saved their money and as soon as they could they moved permanently to Minnesota, and she grew up in Minnesota.

Her father, in addition to farming, also was involved with the railroad. She lived in Crookston, which is a small town in northern Minnesota. But after her father died, the family moved to Oregon. They became fruit ranchers along the Columbia and Hood Rivers. When she was growing up, she had a choice, she could be a nurse, or she could be a teacher, but that was it. She

did manage a little leeway because she was supposed to teach Latin, but she ended up teaching music and art. But she was doing very well. She had gotten up into the administrative level of the school when she met my father. But they met, and at the end of the war, they married.

He already had a job. He was appointed as highway engineer for the state of Oregon, and since he was the lowest man on the totem pole, they were living in Medford. But, now, once they married, it was not possible for my mother to work for money. My father was supposed to do that. She could volunteer for any number of community operations, but it had to be as a volunteer. She was energetic, and she ended up the head of the ways and means committee of practically every do-good outfit in town. So she was busy, but it was not appropriate for her to work [for money.]

DR. GARTNER: In your father's view or her own view?

DR. HODGMAN: Well, I think it was in society's view, including my father, of course. But she accepted it. I think the pressure was too great for her to do something else. She was in her 30s when I was born, and my dad was 40. I'm the oldest, so they were over age. And I must tell you, when you're a kid, you don't think of your parents as being any age. They're just your parents. But I never did find having older parents a disadvantage. I thought rather the reverse, actually. I have a younger brother, three years younger, who was born when we were living in Oakland, so he's a real Californian.

DR. GARTNER: That's your only sibling?

DR. HODGMAN: Yes. San Marino, the town where we grew up, was a lot of open land, yards. It was divided and subdivided and everything. My folks, bless their hearts, turned us loose, and my brother and I rode our bikes all over Southern California. We rode our bikes to the beach, we rode our bikes to the mountains, and I rode to school in the spring through vacant lots full of blooming California poppies.

DR. GARTNER: How lovely.

DR. HODGMAN: It was nice.

DR. GARTNER: Pretty.

DR. HODGMAN: Now you're afraid to let your kids out on a bike, with all the traffic and all the stuff. My parents did two really important things for me in raising me, which I didn't really appreciate until I got older. But the first thing they did, they raised me honestly in my heart to think it was okay to be a girl. Most girls of my era, honestly, were raised to be second-class to

guys. But I wasn't. There was never anything my brother could do because he was a boy that I couldn't do because I was a girl, so I really, honestly felt it was okay to be a girl, and that's been helpful.

The other thing they did, which is really very, very useful, is they raised me to be essentially unafraid. And there really isn't much I'm afraid of, which saves me all kinds of time and energy, because I don't have to worry about all this stuff. I was very fond of my parents. In addition to being good parents, they were also fun. After I married — and we'll get there eventually. But my husband and I were married in January, between semesters in medical school. He was in school. It was right after the holidays, and we weren't all that excited about some big celebration. We were kind of happy to get the Christmas decorations down and relax. So we didn't always make a big fuss about our anniversary. But one year, he actually got organized. He got tickets to a play and he got reservations for dinner for ourselves and another couple. And the other couple he took were my parents!

DR. GARTNER: Aw!

DR. HODGMAN: The reason he took them was because they were fun. [Laughs] My parents were fun. I told you we had this summer place. When my parents were in Medford, they rode in on horseback into this little lake up in the Cascade Mountains and they got a permit to build a cabin. It's national forest, so we don't own the land. We just have a permit to use a lot on which we built a cabin. There are cabins all around the lake, but it was primitive when they first went up there. My mother loved it. It reminded her of Lost Lake in Minnesota where she had gone as a girl, so they decided they would get a permit and build a cabin. They found this nice lot in the middle of one bay, with huge big Douglas fir trees on it. I mean, gorgeous, you know, hundreds of years old, gigantic trees and a view across the lake to snow-capped mountains. Really lovely. And there was nothing on the lot except a stove in, old, flat bottom rowboat.

But my dad went over to the Forest Service, and it turned out the permit for that lot had already been given to a couple in Portland, so my parents were very disappointed. But this story is classic of my dad. He was reading the paper in Medford one evening, and here was this notice that the man of the couple had a heart attack and died suddenly. My dad figured the widow was not going to want to try to build a cabin up the single-lane dirt road in the wilds of Oregon. According to the Forest Service, you had to build on your lot within a year. You couldn't just sit on it. You had to use it. So he got on the night train from Medford to Portland, and when they wheeled the body out of the front door, he was sitting on the porch waiting to offer to take the permit off the widow's hands. And bless her heart, she sold it to him! She sold him the permit for ten bucks, but she made him pay \$15 for the stove in,

flat bottom rowboat. So he got the whole schmear for \$25. But, I mean, that was typical of my darling father. [Laughter]

DR. GARTNER: He was determined.

DR. HODGMAN: Yes. Well, they did build the cabin, and the next year I was born. I spent my first summer there when I was nine months old. I have been back every summer since, but two when I was in medical school.

DR. GARTNER: My goodness.

DR. HODGMAN: As I told you, now my daughters have spent every summer of their lives there and so have my four grandkids. They're the fourth generation of our family to use this place. It really gives you this marvelous sense of continuity. We have a wood stove, a real, honest-to-goodness working wood stove in the kitchen and we use it to cook on, but we also use it for heat because up there you trap your heat. My dad used to get up in the morning and fire up this stove, and then he would make hotcakes for us on a grill. One of my grandsons like to cook, and bless his heart, he makes hotcakes for us in the morning on the same grill his great-grandfather used to make hotcakes. That's kind of fun.

DR. GARTNER: Yes.

DR. HODGMAN: Now, I got off the track.

DR. GARTNER: You were talking about your family. What does your brother do?

DR. HODGMAN: My brother considers what I do fairly disgusting, okay? I took him to lunch at the hospital one day. I was assigned to pathology at the time so I gave him a tour of the path section. I walked into the room where they do the dissections and I was talking away, and I looked over my shoulder, and nobody was there! [Laughter] He had split. So we went down to have lunch, and he could barely swallow the food.

DR. GARTNER: Poor fellow.

DR. HODGMAN: Poor baby. So he considers what I do thoroughly disgusting. But then, I have to tell you, I consider what he does worthwhile, but dull.

DR. GARTNER: What does he do?

DR. HODGMAN: He's into municipal bonds. Anyway, he is three years younger than I, but about four years behind me in school because back in my

era, if you were bright, you tended to skip. They don't do that so much anymore. I ended up as a freshman in high school when I was, I think, 13. I was still a kid, and the rest of the crowd was growing up and getting interested in boys and all that stuff. So there's a social hazard to getting ahead of yourself. But anyway, he followed me through school. He was actually four years behind me, so when he started high school, I had graduated. Then the war came along when he was a pre-legal student. He was ripe for induction, so he joined the [United States (US)] Navy in order to avoid the [United States (US)] Army.

We were really separated once I got into high school. When we were kids, we were kids together, but I didn't realize it until years later that he competed with me. I was always pleased that I was the foremost, that he followed me because he did much better than I did. He was valedictorian of his class, he was elected a member of the student executive body, and he played football. At any rate, I was happy I was out there and I didn't have to worry about what he was doing, following me up. Fortunately, in our old age we have become good friends, and he is, in fact, visiting. He grew up, stayed in San Marino, but about ten years ago his law office, O'Melveny & Myers [LLP], big stuff here in California, opened a New York office. Municipal bonds are, of course, big in New York, so they asked him to head the New York office, so he has moved back east. But he comes out to visit his sister in January and February to get away from the weather in the East.

DR. GARTNER: So he's a lawyer.

DR. HODGMAN: Yes, and he's pretty well retired. He still keeps an office, but mostly people leave him phone messages, and he can meet his friends in downtown New York.

I think when you asked me about my family, it was just before I was going to go to medical school.

DR. GARTNER: Yes.

DR. HODGMAN: I don't think there's too much else I can tell you, except one thing I think is perhaps important. Even though I wasn't doing what my family wanted me to do, they were very supportive, and my darling father paid my bills all the way through residency so I could afford to go. I didn't have any GI Bill like the guys did, and that's an issue to come on down the road. When I was a resident, in pediatrics now, at the County [Los Angeles County General Hospital] here, my dad actually called me up one morning about a health problem for advice. It was a minor health problem. He had a conjunctivitis. But not only did he call me up and ask my advice, he took it! And I walked away from that phone saying, "Today I am a doctor."
[Laughter]

And my darling mother, never, the whole time did she ask my advice about herself. But she really worried about the kids. I have two daughters. We'll get to that later, of course. But the youngest one was very bow-legged when she was a baby. She walked early, so this little, fat bow legs. My mother fussed and fussed and fussed, and I kept saying, "Don't worry about it, Mother. It's very common and she'll grow out of it." But she fussed. Finally I said, "Mother, I took her to the pediatrician and he said it was normal." And she said, "Oh, well." [Laughter]

But nevertheless, bless their hearts, they were supportive. Years later, my husband was a resident. He was doing his plastic surgical training, and I was home with two little kids, two 3-year-olds by this time. I spent a good deal of time that winter with my mother and I was very glad I did because that spring she had a terrible stroke. She recovered from the stroke, but, you know, I had the shell of my mother left. Anyway, she would come and pick us up and take us to church. She and I would go to church and the kids would go to Sunday school. They had adult Sunday school at the church, and the minister was excellent. He was a good psychologist and interested in a lot of stuff. So anyway, we'd go to adult Sunday school, and they'd go to their Sunday school, and then we'd drive home and she'd stay and have lunch with us.

We pulled up in front of our little house and let the kids out to run around because they had been pent up for a couple of hours. We were sitting there just chit-chatting, and I said, "You know, Mom, you and Dad could have saved me a lot of trouble in my youth if you'd been a little more directive." And my mother looked at me and said, "Well, yes, dear. Your father and I knew that, but we were afraid we would alienate you." What she was really saying was, "Hey, we've got this stubborn-as-a-mule kid and what the hell are we gonna do with her?" [Laughter]

DR. GARTNER: They may have made the right choice. [Laughs]

DR. HODGMAN: I don't really know. I mean, how can you tell? But I think if they had been adamant I go to art school and I wanted to do something else, I think I would have figured out how to do the something else. I think so. And bless their hearts, I didn't have to because once they realized that was what I wanted to do, they were very supportive, and they didn't give me any nonsense about, "That's not what women do." That was never mentioned at home. I told you, they raised me to think it was okay to be a girl.

So I got through college, and I was on my way to medical school. Now, by that time we are in the war and all my male classmates are in either the Navy or the Army. There were eight women in my class, in a class of 72 at the

time, I think, or 70ish. That was partly because of the war. Most of us graduated. We went to school for three months — that's a semester — and then we got a week off, and then we went to school for another three months, and then we got another week off. So I finished medical school in two years and four months.

DR. GARTNER: Wow.

DR. HODGMAN: That was eight semesters if you didn't take any vacations. So I was young starting college. I forgot to mention that college campuses changed dramatically during the war. The guys were off in the service. They had units, Army and Navy units in colleges, but they were very restricted. College was kind of a backwater, and all of us were in a hurry to get out, so I finished Stanford in three years instead of four.

DR. GARTNER: Now, how old were you when you started medical school?

DR. HODGMAN: I started at 16.

DR. GARTNER: So you were 19 when you —

DR. HODGMAN: When I started medical school, I was 19. And when I got out of medical school, I was a week past my 22nd birthday, so I was young. I grew my hair long and rolled it up on a rat, to make me look older. [Laughs] The young guys were not only not teaching school because they were off in the service, they also weren't seeing patients because they were off in the service. The older faculty really had a huge job on their hands. Getting through fast was an advantage in one way, but we didn't have the time to do electives and a lot of the enriching things the students do now. The advantage for me was that I got through my medical school and my resident training before I needed to have babies. So I didn't have to be pregnant while I was a resident, and that was an advantage.

DR. GARTNER: It certainly is.

DR. HODGMAN: Yes.

DR. GARTNER: What was medical school like for a woman at that time? Were you treated differently?

DR. HODGMAN: It was hard to get into medical school. There were a fair number of women professors, particularly in pediatrics. I think there were none in surgery, of course, and none in OB [obstetrics], but pediatrics had some good ones, very good role models. But once I got into school, I never felt discriminated against. Most schools are like this. They're careful about picking their students, but they do their very best to support them, to

get them through school once they've got them. They're not in a hurry to weed out the class. No, I felt well supported.

We had one guy who taught GYN [gynecology] pathology, whom I still remember because he really did stick it in our heads. He was kind of Germanic. He was sort of square and gruff. He delighted in picking on the women. He would get the gals up. They'd have to go up in front of the class on a stage, and then he would ask questions to these gals until he had them back to the wall and he had them in tears. Well, he called on me one day, and bless my heart, he asked me questions and questions and questions and questions, and I knew the answers, and finally, he threw up his hands and gave up. And he never called on me again. [Laughter]

DR. GARTNER: You weren't a good victim.

DR. HODGMAN: I didn't fit his protocol.

DR. GARTNER: Good for you!

DR. HODGMAN: So except for an occasional [incident], I really did not feel discriminated against in medical school, with the one exception. And that's when I started getting to be a card-carrying agitator.

END OF TAPE 1, SIDE A

DR. HODGMAN: Now, of course, students were going to be expected to go into the service once they graduated. But I think it was our senior year, junior or senior year, and they had women Army and Navy units, the WAC [Women's Army Corps] and the WAVES [Women Accepted for Volunteer Emergency Services]. Some WAVES women physicians visited the medical school and they wanted to get the women in the class to sign up to join the WAVES after we had finished medical school and internship. Then we would have this wonderful career. Well, that really ticked me off. I said, "If you really want us, get a program and support us now, and then you'll have us hooked." But that, of course, did not come about, so I did not join the WAC, and I did not join the WAVES. But it really ticked me off, you know? That was really the only time I honestly felt discriminated against. Once I was in school, I found school very supportive.

DR. GARTNER: And your classmates, the male classmates were not a problem for you?

DR. HODGMAN: Oh, yes, they were a huge problem.

DR. GARTNER: Oh, okay.

DR. HODGMAN: Okay?

DR. GARTNER: [Laughs]

DR. HODGMAN: Half of them wanted to sleep with me. [Laughter] And at the time, I didn't realize I should be flattered. [Laughter] At the time I was kind of miffed. But, no, I'm exaggerating. It wasn't that many. It wasn't all half of them. But, no, that really was no problem. The other thing is, I did get married at the end of my freshman year, so that kind of took care of it.

DR. GARTNER: Do you want to tell us about that, getting married?

DR. HODGMAN: I'll get to it later, okay?

DR. GARTNER: Okay.

DR. HODGMAN: Actually, I'd really prefer to skip it. I married a guy who was in the class ahead of me. He took a year off and he was an instructor in anatomy while we were freshmen. That's where I met him. I married him for a couple of reasons. One, of course, he was sexy. The other is he had an apartment in San Francisco, and apartments in San Francisco — This was in the middle of World War II, and you stepped out your front door and you stepped on scrambled eggs all over the place. Getting an apartment was difficult, so I figured, well, if I married him, I'd have an apartment. It's not the best grounds on which to marry. I mean, he was a nice enough guy, but it turned out he was very controlling, and I don't control very well, as you've probably noticed, and it just clearly did not work. So we were married for a year, and then we decided to split, fortunately. He was very anxious to raise a family. Well, I wasn't going to raise a family until I got through school. We didn't mesh well. Fortunately, I had sense enough to get out before we had children. I can barely — this is terrible — his name was Chuck, and I'm not sure I can remember his last name. [Laughs]

DR. GARTNER: Maybe just as well not being able to.

DR. HODGMAN: [Laughs] He went off and trained, and I went off and trained, and I haven't seen him or heard from him since. I have no idea if he's even dead or alive. But that cleared the way for me to marry the fellow I married second, who was the one I should have married in the first place. So I lucked out.

But when it came to interning, every service I was on in medical school, except for one, intrigued me. UC[Sf] [University of California, San Francisco] used to, and still does use the old [San Francisco City and] County

Hospital [also called City County (now San Francisco General Hospital)] for students' junior year and then the university hospital [University of California Hospitals, San Francisco (now UCSF Medical Center)] for their senior year, The OB service at the County Hospital was all kinds of fun, and I got to deliver a baby all by myself. During GYN in my senior year, one of the professors was doing some kind of study on body build and fat ratios and the students helped him. I mean, we were assigned. When we got a patient we had to measure them. We had to measure them from head to toe, around their neck, around, and I found this rather boring. [Laughter] So it kind of turned me against that. And then there was that crazy guy I told you about, the GYN.

DR. GARTNER: Pathology.

DR. HODGMAN: Pathology, yes. He was good. He was a wonderful, wonderful teacher. His house officers used to come to his lectures and sit up in the top rows because he really was good, except for his personality. He had a social meeting for the students at his home. I think this was a lunch or tea or something. His wife was a gorgeous sort of Matilda. She was as tall as he, and she had long braids she had wound around the top of her head, and when she said, "Jump," he went *boop!* [Laughter] The students loved it. We had a wonderful afternoon watching this gal put our gruff professor through his paces. So he did have some human side, but we didn't get to see very much of it.

I applied to intern at UC, and I applied for pediatrics. I forgot to tell you, when I started medical school, the reason I went to medical school is I wanted to be a neurosurgeon. Now, where did I get that idea? I had no idea. Thank heaven I saw the light because pediatrics has clearly been much more fun than I think neurosurgery would have been. But, anyway, I had, by this time realized that pediatrics was what I wanted to do.

DR. GARTNER: What made you realize that? What experiences or influences were there?

DR. HODGMAN: I'm not sure I can be really specific. Partly, perhaps, we had three or four really good women professors who were good role models. The whole pediatrics department related well to the students, and so you felt closer to your faculty than in most of the other departments. I found the children fun to work with. One of the things that's nice about kids is that they can be terribly sick but they get well fast. They make their doctor look good, unless their heart stops. So, I enjoyed the children. People say, "Oh, the children are wonderful, but you can't stand the parents." But the parents I got along with well. They were interested in their kids, and we were a team.

There is one thing I have to tell you. Surgery became uninteresting to me for me to do personally. In this era in medical school, we still had dog surgery and we were supposed to act like surgeons. We had the chief surgeon and the assistant and the anesthetist and, you know, the whole schmear. We did regular operations, laparotomies or whatever, then we'd sew them up, and then we had to visit our patients. You would go in and feel their nose and let them lick your hand and sign the chart. I was the best surgeon in our class. I don't think that's a good surprise ending because in my youth I made a lot of doll clothes. You know, hand-eye coordination.

But surgery kind of turned — maybe “turn me off” is too strong, but it didn't intrigue me. I thought medicine very interesting. I liked medicine. What really turned me off for medicine was that at the time the County Hospital in San Francisco had long wards with a connection. It had several wings and then a connection between the wings. But a long wing was all full at the time of mostly pretty elderly patients, and I could not stand the way those wards smelled. And people say, “Oh, children smell terrible.” They smell fresh at least, you know. I mean, the old folks now, after they've been sitting there a bit, that really did turn me off. I kind of liked the kids better.

Anyway, I applied for pediatrics. They took four interns, so I had one in four chances of being selected. And, bless their hearts, they took me, and I was very pleased. The internship was at UC Hospital in San Francisco.

DR. GARTNER: Was that the Moffitt [Hospital]?

DR. HODGMAN: Yes. Moffitt has been built since then.

DR. GARTNER: Oh, since then. Before?

DR. HODGMAN: Yes, yes. But the UC hospital was much smaller. You know, the campus has burgeoned and grown like mad. We had the wards, and our professors admitted their private patients to the wards, so we had ward patients and private patients, and the interns took care of all of them. We had clinics, and then we had the nursery, and then we spend a couple of months at an infectious disease service that was at Children's Hospital [of San Francisco] but run by UC faculty. I'm going to block on the name of the guy who ran it, but he was great.

DR. GARTNER: We'll fill it in later, if you think of it.

DR. HODGMAN: Yes, yes. He's since died, but I guess that's not surprising, he was my professor. But the first night I took call was very memorable. Now, I told you that in medical school I delivered a baby. You know how many newborn babies I saw in all of medical school?

DR. GARTNER: How many?

DR. HODGMAN: One, the one I delivered. Students were not allowed into the nurseries.

DR. GARTNER: Even the regular nursery.

DR. HODGMAN: They were worried about diarrhea epidemics. They would start, and they would go through a normal nursery, and a third to a half the babies would die. Now, remember, there were no antibiotics. It turns out that this was a specific strain of E. coli [Escherichia coli] that was responsible for this. So everybody was very, very [cautious]. They didn't even let the physicians in very much. There were nurseries that had a thing like a bread drawer, and they would shove the baby out, and the physician would examine the baby; then the nurse would retract him. But, when I was in medical school newborn babies were not given medical care, they were given nursing care. Obstetricians did not deliver babies, they delivered mothers. The baby was handed to the nurse, and she tidied him up and wrapped him up and put him in his little basket, and he made it or he didn't. So I had had zero contact with newborn babies, except for this one I delivered.

I was assigned to the clinics as my first rotation, and that was fine because as a student, I'd been in the clinics, and I was comfortable with the clinics. But I had to cover the nursery.

DR. GARTNER: We have to stop for a moment.

[Tape interruption]

DR. GARTNER: Okay, Joan, you were about to tell us about the nursery life.

DR. HODGMAN: Okay. Well, my first night on call I had to take over from the intern who was covering the nursery and I had never been in the nursery, as I have explained. He looked at me, and he said, "Oh, you've never been in the nursery? Well, let me show you around." So we walk into this anteroom, and he said, "There's the premature center. That's the normal nursery. Hope you have a good night. Good luck," and disappeared down the hall. And I'm standing there, with my chin on my chest and my heart going *ga-boomp ga-boomp ga-boomp*. But I didn't need to worry, which I didn't realize, because as I have told you, we weren't doing much medical care for babies, and the night nurses were very experienced. They knew exactly what to do, and anything I suggested, they had already taken care of it. So it turned out to be not nearly so crunchy as I had envisioned.

But, you know Larry, I was fascinated for years. Those night nurses were

probably my mother's age. They knew I wasn't dry behind the ears, and I knew I wasn't dry behind the ears, and yet, when I showed up, they seemed pleased and relieved, and I never suggested anything medical or nursing for them to do that they hadn't already taken care of. It finally dawned on me that it didn't matter whether I knew what I was doing or not, when I showed up, the responsibility was mine, not theirs.

DR. GARTNER: They were glad to have you there.

DR. HODGMAN: That's why they were pleased to see me. But fortunately, the night went smoothly.

Now, since this was wartime and since classes were being graduated so rapidly, our internship overlapped with the class ahead of us, and I only interned for nine months because six months of it was overlap between the previous class and our class. The war was over when I was a senior in medical school, and then after that everything got back to a more normal function.

But I have to tell you, after nine months of interning — and I have a fair amount of energy — I was tired. That's the most tired I think I've ever been in my life.

DR. GARTNER: I understand that.

DR. HODGMAN: Now, I was in San Francisco in immediately post-World War II. The veterans were coming back. There was not as much specialization before the war as developed after the war. Most of the residents had GI Bill money. They had had their careers interrupted, so it was a perfect time for them to go back and get additional training. Residencies were very, very difficult to get. I was in San Francisco and I wanted to come home. I would have been perhaps better off to stay in San Francisco because I had more medical contacts, but I came home for a very important scientific reason, I missed the beach. [Laughter] They have gorgeous beaches in San Francisco, but you put your foot in the water there, your toes fall off, whereas down south, you can actually go swimming in the water.

So anyway, I came home, and I spent six months getting entrée to anybody I knew or anybody my parents knew or anybody whom friends of my parents knew who could possibly help me in getting a residency. I remember thinking at the time that I've had all this schooling and my internship was a pediatric internship, which was unusual at the time. At the time, most people were taking rotating internships. I mean, it was all going to go to waste because I couldn't get a residency.

So I spent six months working for the health department [California State Department of Health] to have something to do and also to make a little money, and I visited anybody I could get my hands on. Now, they were all nice, they were all pleasant, but most of them were no specific help. But down the road it turned out to be very useful because these were people who now knew me and were interested in my progress, and I picked a number of them up down the road who turned out to be very useful.

But there was an Army hospital [Los Angeles Port of Embarkation (LAPE) Hospital also called "Station Hospital." In 1946, it was purchased by the county to create Harbor General Hospital. In 1951, it affiliated with UCLA [University of California Los Angeles] School of Medicine. In 1978, it was renamed Harbor-UCLA Medical Center.] down at the site of where Harbor-UCLA [Medical Center] is now. It was still a barracks hospital, but it had turned into a community hospital, and they were accepting children, so they needed pediatric residents to take care of the children. I got a job there, starting in January, I think, of 1948, though it was not an approved residency. There were two of us, and we were on a heel-and-toe schedule. The faculty at UCLA would come over and make rounds with us, and they were our attendings. But a good deal of what went on was really up to us. We weren't all that carefully supervised. The resident I worked with was good and was interested in medicine. He was a nice guy. We got along very well together. So I accepted the job down there.

I'm not at all sorry I did. It was good experience, but I was only there six months, because one of the residents at USC [University of Southern California], at County [Los Angeles County General Hospital], had decided he wanted to pull out of pediatrics and go into psychiatry. He was allowed to do that even though he had signed a contract because they realized, of course, they'd have no trouble filling the position. Fortunately, here I was, and I had not signed a contract because this was a non-approved residency. So in July of 1948, I showed up at the LAC+USC Medical Center [Los Angeles County + University of Southern California Healthcare Network], at the time called Los Angeles General County Hospital, as a first-year resident in pediatrics.

Now, this was not too different from the Harbor-UCLA [Medical Center]. There were zero full-time faculty in pediatrics. There was full-time faculty at Children's, which was also a USC hospital, but not at County. Our faculty were voluntary faculty, physicians who had practices in the area, who came in and made teaching rounds with the residents in the morning, and then disappeared to their offices. They were available to call up, but their own practice, obviously, had to come first, and we all realized that. They were good, and they were interested and committed, but it was different from having full-time faculty in the hospital.

DR. GARTNER: Even the chairman wasn't full time?

DR. HODGMAN: No. No, the service was covered by Loma Linda [University] and USC. Most of the county was divided. There was a Loma Linda service and a USC service. Pediatrics was combined, so we had a USC chairman and a Loma Linda chairman. At the time, we were running about 15,000 deliveries a year.

DR. GARTNER: I remember that was a huge service.

DR. HODGMAN: A huge, huge service. Now, this was not an era, as I said, when babies were given much medical care. We did, however, have a premature center, and we did accept babies from outside hospitals, which was very new at the time. Because of all the worry about infection and contamination, the outside ward babies were carefully isolated. But every hospital in town had been reviewed by our health department, and they had been given instructions as to what kind of premature babies they could keep in their nursery. Depending on their facilities and their staff, they could keep none or they could keep the bigger ones. All of the hospitals in town sent premature babies to our service. So in addition to our own huge deliveries, we had practically all the prematures in Los Angeles. So it was a big, busy, busy service.

DR. GARTNER: So Children's didn't take any of the —

DR. HODGMAN: Children's took babies referred, yes.

DR. GARTNER: Oh, they did.

DR. HODGMAN: Yes, but they had no delivery service. We had a huge delivery service. Now, as a resident, we had two rotating interns and a resident assigned half time to this huge service, but you can see how much medicine we practiced. My major job as a resident was to go by the chief nurse's desk in the morning and sign out the foot-high stack of charts of babies who had died overnight. Babies that weighed less than a kilo [kilogram] were clearly not viable, and nobody made any effort to keep them alive. It was just accepted that these babies were going to die, and they did. So that was a good deal of the stack.

DR. GARTNER: How did they take care of these very small babies at that time? Did they put them in an incubator? Did they leave them out in a bassinette?

DR. HODGMAN: No.

DR. GARTNER: What was the management?

DR. HODGMAN: We had incubators. The incubators were [The] Gordon Armstrong [Company, Inc.] [portable baby] incubators, which were a plastic box with a lid that you lifted up to get at the baby. When you lifted the lid, all the oxygen and the heat flew out, so the temperature and oxygen were not carefully controlled. We had thermometers that went down to 94 degrees Fahrenheit for rectal temperatures. When our pre-term babies were admitted, the reading was NR, not registered, which means they were below 94 degrees. The teaching at the time was that it didn't matter what the baby's temperature was, as long as it was stable, so we didn't worry about the fact that these babies had NRs for two, three days at a time.

We had, of course, no ventilators. If the baby was really in trouble and needed more oxygen than could be provided by the Gordon Armstrong, we would have a rubber mask we would hook up to an oxygen tank and it would sit there. There were no monitors to look at how much the baby was getting. There were no monitors for heart rate and respiration and all of that stuff. We didn't do much IV [intravenous] fluids. We did do clyses. We picked up the baby below his scapula, over his upper back, and infused, well, a fair amount of fluid, and then the baby would, of course, slowly absorb that over time.

DR. GARTNER: They gave the same care to the under-a-thousand-gram babies? Or did they just leave the under-a-thousand-gram babies alone?

DR. HODGMAN: No, they were put in incubators, and occasionally they survived. But there were no ventilators, and we didn't do mask and bag other than for resuscitation. For the tiny babies, there weren't great efforts made because they were expected to die, and they mostly did. That was pretty much the system at the time.

DR. GARTNER: Do you remember the names of the people who were your major teachers?

DR. HODGMAN: Names are my problem at this point. If I could look them up, or they may come to me. The USC chief was a pediatrician in private practice in my old hometown of San Marino, and he practiced with a fellow whom I do remember well. Art [Arthur H.] Hurd was his name. You know what really irritates me, Larry, is that the names are there.

DR. GARTNER: Of course they are.

DR. HODGMAN: And they eventually come to me. Why can't I pull them out when I need them?

DR. GARTNER: A little remote in the memory.

DR. HODGMAN: Yes, okay. But anyway, he was in practice in San Marino. A pediatrician called Bob [Robert S.] Cleland, who will come into this story down the road a little, was his partner. They were very committed to teaching, and they were excellent. Actually, Art Hurd, when I had my children, was my own pediatrician. He was really cute. He came in to see me after my first baby was born, and he was kind of shifting around. It was sort of clear he wasn't entirely sure what line to take with me. And I couldn't resist. I said, "Art, why don't you just consider me a mother?" And he gave a big sigh of relief and said, "Okay." [Laughs] They were very good.

The chief of pediatrics at Loma Linda was also chief of pediatrics at County, and his name was Robert [F.] Chinnock. There was a fellow by the name of — oh, boy. Now, I can insert him, can't I, when I remember him?

DR. GARTNER: He's a blank.

DR. HODGMAN: His name was Al. He and I both went to South Pasadena High School, and he was ahead of me, obviously, since he was pretty bald and gray-haired by the time I saw him. But in his youth, he had been a red-haired cheerleader at South Pasadena High School. He was very interested in the premature nursery, and he was instrumental in getting the county to set up a special premature section. He appeared at the board of supervisors, who were, of course, the final call as to what happened at the County Hospital. He appeared there so often that the media thought he was a member of the board. [Laughter] But he was very pervasive, and he did a great deal to get the hospital to underwrite special nursing and to underwrite equipment down the road. He was very helpful. From the standpoint of what I learned in general pediatrics, I probably learned more from my chief residents than I did from any of the attending staff, because they were there and I could get my hands on them.

But anyway, I spent two years being a pediatric resident. Then I had an opportunity to spend a last year as chief resident and I took that opportunity, so I had an extra year. Bob Cleland, who had been one of the voluntary attendings, had decided he wanted to go back full time into academic medicine, and they actually set up something they called a head physician. They had several of them. They had a head physician for pediatrics. They had a head physician for medicine. These were young, mostly young physicians who were kind of getting a post-residency — there were very few fellowships at the time — kind of in place of a fellowship, to get extra experience and training. The head physician was then somebody beyond a resident level, who was available for consultation and also who could help set up formal rounds and teaching. The head physician's main responsibility was the supervision of the residents.

So anyway, Bob Cleland came back as head physician, and I was his chief resident, and he was just absolutely wonderful to me. He took me to all the important meetings in town. There was a meeting called — and it's still around — called the Southwestern Pediatric Society. It had no women, no blacks, no Jews, just, you know, the male white crowd, but they did accept guests, of course, so Bob, bless his heart, took me as his guest. There was no Academy around here at that time, so that was the most important political pediatric organization in town. It was mostly run by people from Children's Hospital. Anyway, he took me to those. It gave me a chance to meet people. They had educational meetings, and they used to serve wine with their dinner, which was very forward looking.

A couple of important things happened. In the spring, or going into the summer, when I first arrived, or early in my residency, we had the last of the big polio epidemics in Los Angeles. This was 1948. Residents were pulled from medicine, from pediatrics particularly, to cover the infectious disease service. I personally saw 2,000 cases of polio that summer. We had, of course, iron lungs. There was a high incidence of bulbar polio. We had an old infectious disease building. There was one little girl who had bulbar polio and she was recovering. We were trying to wean her from the Drinker respirator. We would pull her out, and she would say [imitates sharp, gasping intake of breath], "I can't breathe," at the top of her lungs. [Again a sharp intake of breath], "I can't breathe." Clearly, she was breathing considerably in order to make so much noise. But the visitors all had fits. They thought we were torturing this poor little kid. But it was a concentrated experience in the middle of a big and exciting epidemic.

The other thing that was interesting, and one of the reasons I accepted being a chief resident, was that if I accepted being chief resident, I got to spend six months in pathology. As the only pediatrician in pathology, I got assigned all the pediatric cases as mine. That was really an excellent experience. Of course, I got to do the autopsies on the babies, and it was particularly useful because we didn't have a clue why most of the babies died, so it was a very, very good basic education.

DR. GARTNER: Yes, I can see that.

DR. HODGMAN: And the residents I worked with in pathology were fun. The patients weren't going to die because they already had. It was less crunchy than on the wards where you were handling desperately sick.

DR. GARTNER: A little bit more intellectual?

DR. HODGMAN: Yes.

DR. GARTNER: Less scholarly?

DR. HODGMAN: I think so. I think so. You had more time to sort of sit back and think than you did when you were on acute service, so I found that a very good experience. And interestingly enough, Bob Cleland, the head physician and mentor, at the end of our residency, decided to go back into a pathology residency, which he did. When he finished it, he came back to our pediatric service at County as our pediatric pathologist.

But anyway, I finished being chief resident. The residents were very close together and obviously very supportive of each other because all of us had way too much responsibility for our level of training, and I think all of us had sense enough to know it.

DR. GARTNER: Common at the time.

DR. HODGMAN: But we were a very close-knit group, and that was good. I was pleased that I had had my internship at a university hospital where you had to ask permission to breathe more than 15 times a minute. I mean, you were very carefully supervised. [I was pleased] I had had that background because then, when they let me loose, I at least had that to fall back on, to rely on. But my experience at the County was good, and it made me resourceful. You couldn't just go through a protocol. I mean, you really had to think about what you were doing. So I thought it was good training.

In the middle of my residency, I got married to the guy I should have married the first time. I had met him in high school. He sat behind me in Miss Foote's public speaking class, and I was his first date. Poor baby, I got my hands on him when he was too young to know better. He took me to the junior prom. Our daughters are darling. They say, "Mother, that is so corny!" Corny isn't always bad.

DR. GARTNER: That's right.

DR. HODGMAN: So anyway, I went off to college, to Stanford, and he went to [University of California] Berkeley and then up to Reed [College] in Portland. When we came home for vacations, we would get together, but then, I was off in medical school, he was off in the Navy, and clearly we drifted apart, and in the process, I got married. But after a year of being married and a half a year getting divorced, I was free. I came home to Southern California, and he was now out of the Navy and was going to dental school. He went to dental school on purpose before applying to go to medical school because he wanted to do orofacial surgery. So he was in medical school when I was a resident at USC. Now, USC uses the County as its major teaching hospital. He was my student. [Laughter] An acid test, huh?

DR. GARTNER: Did you give him a good grade?

DR. HODGMAN: Well, he was a good student. Anyhow, we clearly got good. And, bless his heart, he waited for me while I messed around, and we were married. I was a resident.

Oh, and the thing I forgot to mention, when I got my residency at the County, I was a resident on no salary. The County had increased its residencies, but they didn't have money to pay us, so I was a resident on no salary. I got board and room and laundry, board in the women's section. Well, here I am, newly married, so board and room in the women's section is not that great a deal, obviously. Amos' [Amos N. Schwartz] GI Bill had run out the semester before we married, and we were poor. We didn't have any money. I had my family and he had his grandparents who supported him, paid his tuition through school and stuff. But he had his dental degree by then, and dentists start faster than physicians. He was a sophomore in medical school when we married, two years out of dental school. He would borrow one of his dental classmate's offices and go down about once a month and pull enough teeth to keep us solvent for the next month. [Laughter]

DR. GARTNER: That was resourceful. Now, were you the only one who wasn't salaried as a resident or were there other people?

DR. HODGMAN: Oh, there were a bunch. There were a bunch.

DR. GARTNER: But some were salaried and some weren't.

DR. HODGMAN: Right. And early on, it was the veterans who were salaried, and they didn't need it because they had the GI Bill, bless their hearts. I took the residency because my darling father, bless his heart, continued to support me through all this stuff. I mean, I was frantic to get residency training, so I was delighted to take it.

DR. GARTNER: And residency was at that time two years? Plus the chief resident?

DR. HODGMAN: Yes, two years. Well, you had to intern, so you interned, and then you had two years residency, and then if you wanted to stay on, you stayed on as the chief resident. There were no fellowships in pediatrics. Zero. Maybe that's not quite true. Maybe there was one in endocrinology probably.

DR. GARTNER: What year was this?

DR. HODGMAN: 1948. There were very few fellowships.

DR. GARTNER: Maybe cardiology.

DR. HODGMAN: There probably were a few.

DR. GARTNER: Cardiology was one of the early ones.

DR. HODGMAN: Well, cardiology was adult at that time. We didn't have any pediatric cardiologists. They came later. But at any rate, there were not many fellowships. But there was a big increase in the number of residencies to try to meet the demand with the veterans coming back. I mean, you know, you can't argue with that. I thought that was appropriate. So I was glad to get the residency. They didn't pay all that much, so the difference wasn't that great anyway.

I forgot to mention, during my internship at UC, they had no women's quarters so I had to live in an apartment within ten minutes walking distance from the hospital. But I had to pay for the apartment, and you know who paid for that, of course? Good old dad, bless his heart. But we got a 20 percent raise when I was an intern and that added up to \$5 a month.
[Laughter]

DR. GARTNER: Up to \$20?

DR. HODGMAN: No, no. We went from \$20 to \$25. You obviously didn't go into this business to make money, at least not starting out. Well, the main reason I did this pediatric residency was that I wanted to practice pediatrics. So at the end of my residency, I opened my solo office to practice pediatrics in South Pasadena, right next to the town I grew up in. I had a nice office on the corner of two busy streets. We had a little house. There was a parking lot and then a little house in the rear of the office. The house was vacant, so we rented that to live in. My first month in practice, in my hands, I had \$16.75. [Laughs] I had more than that on the books, of course.

DR. GARTNER: Cash.

DR. HODGMAN: Folded cash in my hand.

DR. GARTNER: You had no nurse or secretary or anything?

DR. HODGMAN: Of course I had a nurse. My outgo was rent for the facilities, nice facilities. I hired a nurse. One of the good nurses at the County I took with me when I left, bless her heart. I had made to order examining tables to outfit the office and I had to furnish the office. I mean, my expenses were thousands, from which I balanced \$16.75.

Now, I did take a job half time working for the health department [California State Department of Health], for two reasons. One, I wasn't busy

enough in solo, beginning practice to use up all my time, and the other was that the money was helpful in offsetting my expenses. And you know what you have when you first start practice that the better-established physicians don't have — you have availability. So if you're going to build a practice, you must be available. And this was in the era when people made house calls. I figured that if people called me out of office hours, they could take me in whatever I showed up in, and nobody ever complained. They were always pleased to see me. But I made house calls in a bikini bathing suit, I made house calls in —

END OF TAPE 1, SIDE B

DR. HODGMAN: My husband by now had finished school. He was in surgical training and he had to be up at the crack of dawn to get down to Long Beach, which is where his hospital was, for early surgery. And then he'd come home after dinner, exhausted, and I'd be running around making house calls. I didn't have to get up at the crack of dawn. Pediatrics doesn't start that early in the morning. Most of the house calls were after papa had gotten home and said, "Why haven't you called the doctor?" I mean, I know what my husband sounded like on the telephone, but I was having increasing difficulty recognizing him in person. And we wanted to raise a family. The way things were going, hey, I wasn't going to get pregnant.

So it became obvious that one of us needed not to work less hard, but to have more control of our hours, which was the main reason I went back full time to the County. I left practice after only two years. I missed my practice. By then, I was making more money. I could afford to practice, so it was going well. You know, it was going well. At the hospital, I took care of diseases. In practice, I took care of families, and I missed the taking care of families when I first went back. But I have to tell you, I really, over time, have never been sorry because the full-time hospital has been so much more intellectually stimulating and more interesting. The majority of my friends who started practice along with me are now retired, and as you know, at this stage in my old age, I'm still working. And I'm working what I consider a gift of the gods — I'm working for fun. I told you, in addition to that, they still pay me!

At any rate, I decided I needed more control of my time. Bob Cleland had left just after my residency, and another head physician had come into pediatrics. I don't know how he did this, but he managed to alienate everybody, including the drug salesmen. How can you alienate drug salesmen? So he worked a year and then left. So the position as head physician at County was open, so I went down. They had eight people signed up to be interviewed, so I had significant competition. They wanted me to start the first of July. Well, I pointed out to them that I couldn't start the first of July because in July I was going up to my Oregon cabin for the month, but I could start the first of August. I don't know whether they

admired my “chutzpah”. I don’t think so. I think they figured out I’d save them a month’s salary. [Laughter] That’s more kind of County Hospital thinking.

I got the job. So I came home from my month’s vacation and started out as head physician. I was the only full-time faculty. We still had our attending staff who came and made rounds. My major job was to supervise the residents, and I spent a good deal of my clinical time making death rounds. All of the residents, if they had a baby or child whom they thought was dying, wanted me to see the patient before he did. They wanted to be sure they were doing the right thing and they hadn’t overlooked anything. You know, they wanted reassurance their care was proper.

DR. GARTNER: As the child was dying, you’re saying?

DR. HODGMAN: When they began to realize the child was going to die. Yes, as they were dying.

DR. GARTNER: That the end was near.

DR. HODGMAN: Yes, as the child was dying. So I would go and make rounds. Almost 100 percent of the time — probably nothing’s 100 percent in life — but almost 100 percent of the time, they had done all the appropriate care, and there was nothing we knew to do that would make it any better. But my personal mortality rate in the service was unbelievable because I’d go and see the babies, and then they would die. Now, as head physician, I was responsible for the wards, the nursery and the clinics, so I had all three of them.

DR. GARTNER: How many beds on the inpatient service and the nursery?

DR. HODGMAN: Oh, a hundred or so.

DR. GARTNER: All together?

DR. HODGMAN: Yes, and then the nursery which was huge, and the clinics which were big.

DR. GARTNER: So the hundred was not the nursery. Just the regular beds were a hundred.

DR. HODGMAN: Yes, it was the pediatrics section, without the nursery.

DR. GARTNER: And the nursery was how large?

DR. HODGMAN: The nursery was separate.

DR. GARTNER: How large was [the nursery]?

DR. HODGMAN: The premature center was probably about 50 beds. We kept babies in the hospital longer than. They stayed in four or five days. So the normal nursery would be a hundred babies. We had about a hundred “normal newborns.” Now, with our high-risk population, the normals weren’t all that normal. Then we had the preemie center. Babies were admitted to the preemie center at that time based on weight. If a baby weighed 2,500 grams or more, he was term. If the baby weighed less than 2,500 grams, he was pre-term. We didn’t look much at gestation at the time. It was mostly based on weight.

DR. GARTNER: That’s true.

DR. HODGMAN: I made rounds in the nursery and I made rounds on the ward. I didn’t cover all the clinics. We did have attendings that came to the clinics. But I did have a couple of my own clinics I ran with the residents.

DR. GARTNER: General pediatric clinics?

DR. HODGMAN: Continuity clinics, mostly. You know, I was busy. Well, after I’d been there about three years, I think, the County decided to add a second head physician. They didn’t pay us all that much, so we were cheap labor, relatively speaking, and the head physicians had worked out very well to help bridge the gap between the residents and the voluntary attendings. So we decided to add a second head physician. Well, the service was going to be divided vertically into the wards as one part and the nursery and clinics as the other part. And since I was already there, I was there first, I had my choice. Until very shortly before I had to make a final decision, I was planning to take the wards because they were the most important administrative part of the service. But the gods were riding on my shoulder because it dawned on me I was going to miss the babies more than I was going to miss the wards. So I didn’t pick the wards, I picked the nursery.

The next thing I did was I got rid of the clinics and then I could concentrate on the nursery. That was, by then, my major job. And I must say, I’ve never looked back from that. It’s given me the opportunity to be on the cutting edge of something, and it’s been exciting. And I did it just at the right time, when interest was growing in care of the newborn infant.

DR. GARTNER: And that was what year you did that?

DR. HODGMAN: That would have been 1955. Now, we had started giving care to newborn babies earlier than that. When I was a resident, Rh[-induced hemolytic] disease [also called Rh incompatibility] was the third

commonest cause of death in the term baby. In Rh disease, there was the excessive jaundice, there was the anemia and hydrops [fetalis], there was something else. They were all parts of the Rh syndrome, but that wasn't understood until the very late 1940s, I think. Bob Cleland, who I told you was my head physician, and I, as his senior resident, did the first exchange transfusion in Southern California, in 1949. We read the [Louis K.] Diamond paper. He wrote the paper on umbilical exchange and published it. Bob and I read it, and with that experience, we set up and exchanged this little guy. We had beginner's luck because he did wonderfully. That was a big kind of first step into neonatal medicine our whole area had taken on. So I had an opportunity then to concentrate more. I could do daily rounds in the nursery. I had a half a dozen attending staff who were very interested in the newborn and would round with me. We had a committee that would meet once a month before rounds at 7:30 in the morning, god-awful hour, 7:00 maybe, 7:00, 7:30. When I took over the service, I changed that to 11:00 a.m.. [Laughter]

DR. GARTNER: This was a committee to do what? To set up policy?

DR. HODGMAN: It was an advisory committee primarily for the premature center, really, but for the nursery. It was an advisory committee to help establish our policies, to help encourage the County to come up with the money we needed to advanced care. It was a support group for the nursery, and very helpful.

Now, some important things happened along about that time. Our deliveries went from 15,000, they inched up, until finally, at our peak, we were doing 18,000. We were on the eighth floor of the big Unit One at the County. Bob [Robert L.] Spears was my second in command, so there was just me to start with, and then the head of Children's. I'm sorry — [Coughs]

DR. GARTNER: I'll cough at the same time. [Does so.] Shouldn't waste the time.

DR. HODGMAN: That's efficient. The head of Children's at the time, the fellow I was trying to remember a few minutes ago — you know, I tell you, the names are there, they just don't come when I need them — was Robert Ward. And he was great. He was the first head of Children's who was at all interested in the County. One of the first things he did when he took over the job as chief of the department of pediatrics and head of Children's was come and make rounds at County. Not a single head of Children's before that had hardly put a foot in the County Hospital. He was instrumental in getting a salary so we could hire a second in the nursery.

DR. GARTNER: In the nursery.

DR. HODGMAN: And that was Bob Spears. So now there were two of us full time. We were trying to establish an intensive care unit because we knew we needed one.

DR. GARTNER: And this is what year, now?

DR. HODGMAN: This would be about 1967, 1968. We would clean out a room in the premature center, get the babies all discharged or moved. We'd come back the next morning, and the room would be full of new deliveries, overnight. I mean, we were terribly crowded and we desperately needed more space. Finally, on the same campus as the medical center was another total hospital built for the osteopaths. About four-fifths of the patients were treated at the medical center, and about one-fifth were treated at the osteopathic center — and never the twain shall meet. I mean, there was no interrelation.

One night during my residency, I received an eight-year-old girl in coma. She had been a patient in the osteopathic service, but somehow had gotten into the medical service by error. She was supposedly retarded, and her family members weren't all that smart. They were not all that bright. She had been home in coma for two days. She supposedly had a history of epilepsy and a history of diabetes. I had no way of knowing what this was based on, and the family couldn't tell me. I think it is possible to have a post-epileptic hyperglycemic episode, right? So anyway, I had this very complicated, very sick kid.

I called up the osteopathic hospital to talk to one of the clerks and asked if they would send her chart up so I could get some background. This snippy voice on the other end of the phone says, "Oh, we don't send our charts." And I said, "What happens if you need one of our charts?" The voice said, "We never need your charts." Clunk. [Laughs]

DR. GARTNER: Terrible.

DR. HODGMAN: Anyway, that's in the past. The osteopathic service folded and moved out into the San Gabriel Valley, and California College of Medicine [(CCM). In 1967, CCM was incorporated into the University of California, Irvine (UCI) College of Medicine], the state, took over the faculty in the hospital, and obviously hired new medical faculty, but it formed the nucleus for UC, Irvine, and when they opened the medical school at UC, Irvine, they took this California College of Medicine and moved it.

DR. GARTNER: Oh. I hadn't realized that.

DR. HODGMAN: Okay. So now there was this hospital, billed as a general community hospital, empty, and OB and newborn moved into it.

DR. GARTNER: I remember that.

DR. HODGMAN: Yes, that was in 1968.

DR. GARTNER: Good move.

DR. HODGMAN: On the eighth floor, we kept the babies whose mothers were going to go home in two or three days. The ones who were going stay for a while were sent down to Women's [and Children's Hospital at Los Angeles County Hospital (LAC+USC)] in the first batch. I arranged to go with the first batch and swore I was never going to put my foot on that eighth floor of that hospital again. Nor did I for a long time. But here we had an eight, no, a ten-story hospital with room for all of the OB and the GYN, and we had the nursery that had been built for the hospital, and that became our NICU [neonatal intensive care unit]. We remodeled it, and finally we had quarters where we could try to do adequate care of babies. We did the first ventilator in 1968 in our new NICU. Bijan Siassi, who is still on our faculty, set that up and supervised it.

DR. GARTNER: What machine did you use?

DR. HODGMAN: The Bird [Mark 7 respirator].

DR. GARTNER: The Babybird or regular Bird?

DR. HODGMAN: No, it was a regular Bird. There was no Babybird [pediatric respirator] yet. [Forrest M.] Bird was a Southern Californian. You know, he came out of the [inaudible], and so we used a modified — modified by us, obviously — Bird. But finally we had space, and we could develop. We brought the nurses, of course, who were mostly the nurses from the premature center. So we could finally actually set up. By then we had Gordon Armstrong incubators, and we started to have ventilators, cardiorespiratory monitors, oxygen monitors and blood gases and microchemistries. We had Victor [G.] Mikity, who was one of my husband's classmates in medical school, who went into radiology. He did his training at County and stayed on the faculty and put together our pediatric radiology service, which we hadn't had before.

One of the reasons nobody took X-rays of newborns previous to this is that the machines weren't good enough to stop their rapid breathing, so all you got was a blur. Everybody knew X-rays were no good in babies, and you never took any. Well, with better machines, Victor spent about a year — you couldn't do it these days, I don't think — taking X-rays of every premature who came through the center. He established a whole file of what a newborn is supposed to look like. That was important.

It all kind of gathered steam, and by, oh, the end of the 1960s, early 1970s, we were ventilating babies. Not as well as we do now, of course, but we were ventilating babies. We were keeping track of their oxygens. We knew that they were supposed to be kept warm, and we had radiant heaters in incubators that would servo-control a baby's temperature. We had microchemistries. We had blood gases connected to the nursery so we could get immediate answers or rapid answers.

DR. GARTNER: You had technicians to run the blood gases?

DR. HODGMAN: Yes.

DR. GARTNER: Or did the residents run them?

DR. HODGMAN: No, we had technicians to run them. When we first put in the blood gases, I did a fair number of them. Technical research, laboratory research, I think is very important, I just discovered it's not for me. I found that boring. I much preferred to work with the patients than with the machinery in the laboratory. But I didn't have to, because we added technicians.

We got a grant from our California State Health Department for our first blood gas lab, so they underwrote it. It was not to keep it going forever. It was to get it started.

Well, at the end of the grant, the County, in its "wisdom" decided that we hadn't had blood gases before, and they didn't see any reason why we needed to maintain this lab. I stood up and said, pleasantly, I could not be responsible for running the nursery if I didn't have blood gases available. They were either going to give me a lab or I was resigning. And bless their heart, to a man and a woman, my entire neonatal faculty stood up and said, "We're going with you." So of course we got the lab.

I have to say, there was Bob Spears and me. Then we added Annie [Annabel J.] Teberg, who was interested in child development. She started the first premature follow-up clinic in the state of California, also with a health department grant of \$25,000 to get her going, which it did, and it's still running. And then we added Dr. Siassi, and then we added Dr. [Paul Y.K.] Wu, and so our division was growing. Now, actually, I think we have 14 full-time physicians in our in our division of neonatology.

DR. GARTNER: All neonatologists?

DR. HODGMAN: Yes. That's a long way from half a pediatric resident, huh? Yes. But we finally had, as I said, the space where we could start that.

And Bijan was trained in cardiology as well as neonatology, and so he got involved in imaging of the heart. He also got very involved in fetal cardiology.

There's one other thing that happened that was very important: When we moved to Women's Hospital — it's now called Women's and Children's Hospital — our chief of OB retired. Our dean at the time, Roger [O.] Egeberg, bless his heart, realized one of the guys in line to be chosen for chief was a good gynecologist, but not interested in OB. Well, gynecological surgery at the County Hospital was not a big deal. OB, 18,000 deliveries a year, was a big deal. So he went after two guys from New England, [Edward J.] Quilligan and [Edward H.] Hon. The reason they accepted this position was they had developed this fetal monitoring system, and they wanted a clinical population on which they could try it out. So they came and put together probably the best perinatal unit in the country at the time.

DR. GARTNER: What year was that?

DR. HODGMAN: It would have been about 1968.

DR. GARTNER: I remember them there.

DR. HODGMAN: Yes. So we had a good, active perinatal unit and an increasingly active neonatal unit.

[Tape interruption]

DR. GARTNER: Okay, we're back on. Where were we?

DR. HODGMAN: Quilligan and Hon.

DR. GARTNER: That's an important piece.

DR. HODGMAN: Yes. We now had an active perinatal section, and Ed Hon became chief of the maternal fetal section under Quilligan. That was important.

DR. GARTNER: Yes.

DR. HODGMAN: They were primarily interested in the fetal heart rate monitoring, but they were interested in the fetus, and we could meet. You know, the obstetrician had quit just delivering the mother and was now delivering a fetus. The fetus was going to be the baby's history, so we could meet in the fetus. That improved our ability to care for the babies dramatically.

DR. GARTNER: When you say “meet,” did you physically meet? Did you discuss this individually about patients before they delivered? How did that evolve?

DR. HODGMAN: We had weekly meetings where we discussed issues of interest to both groups. We still do. We took our residents and fellows. We consulted with them about individual patients, and they would ask us to come and review the maternal history and talk to the mother if there were issues about early delivery or whatever. This was very useful because it got us into a relationship with the mother before the infant was born and all the crisis of that. We did some mostly clinical, but research projects together, and that was useful. Hon and Quilligan came from — and I’ve forgotten, now, which one — Yale, I think, I’m pretty sure.

DR. GARTNER: I think Yale.

DR. HODGMAN: Yale. A well-respected eastern school, and that was helpful in helping us get into the academic milieu.

Now, I have to tell you — this may not fit right into this — but when I first came home to Los Angeles from San Francisco, medically speaking, I was coming to the last of the cow counties. I mean, there really wasn’t any academic medicine down here. USC turned out good, practicing physicians. They had the County Hospital to train their students. It was popular as a practicing physician’s training ground, but there was very little research going on, nor were the students or the house doctors encouraged to do research. When I was a resident, not a single member of our faculty had ever had an NIH [National Institutes of Health] grant, not a single member belonged to the APS [American Pediatric Society], not a single member belonged to the SPR [Society for Pediatric Research]. That wasn’t the focus. I’ve always been amazed I managed to do as well as I did, considering, really, I had very little stimulus to get me started. But anyway, so Quilligan and Hon were a distinct advantage.

The other thing I have to tell you is that — and you probably know this — but for a lot of years — and it’s changing, but it hasn’t quite completed its rotation yet — there was the East Coast, and then there was the West Coast. The people on the East Coast thought the people on the West Coast were still wearing feathers in their hair.

DR. GARTNER: [Laughs]

DR. HODGMAN: As an example, I’d finished my training, and early on in my career I was at the APS/SPR meeting. At the time, they were traditionally held in Atlantic City, before the season, so the hotels were cheapest. Anyway, I was back there for this meeting, and they had a

discussion as to where the meetings should be held. Should they continue to meet in Atlantic City or should they consider moving? And one guy actually stood up and said, “Oh, I think we ought to continue to meet in Atlantic City because it is so centrally located.”

DR. GARTNER: [Laughs]

DR. HODGMAN: I’d just flown 2,500 miles.

At the time, the neonatologists used to have a dinner every year at the meeting.

DR. GARTNER: I remember it well.

DR. HODGMAN: When it first started, I think there were probably ten or 12 of us. It did grow, and it finally, of course, grew to a stage where it got so big you couldn’t meet everybody because there were too many of us. But at one of the early meetings, here I was a moll from out of the West at this fancy academic meeting, and at the newborn dinner I was sitting next to Bill [William A.] Silverman.

Bill Silverman was chief resident at UC, actually, the year before I started there. But he came out of the West, at least, and by now he was well established at Columbia-New York [Columbia University in the City of New York]. He was just very nice to me. He was very, very, I don’t know, not just polite, but welcoming and supportive. We were sitting, chit-chatting before dinner was served, and in those days I smoked. I was smoking a cigarette, and Bill pointed out to me that he had given up smoking, and how glad he was he had given up smoking and blah, blah, blah. I said, “How long did it take for you to lose your urge to want to smoke?” I was sitting there, holding a cigarette with the smoke coming out, and he looked at my cigarette, and he said, “Well —” [Laughter]

But he was important to the field of neonatology because he did some of the basic research. I mean, all his stuff about humidity and temperature are really basic. He was the one who showed that in a tiny baby, temperature was literally life and death. That NR on the thermometer is not acceptable. He was a big indirect influence on my career.

Now, I think one of the things I haven’t mentioned is that we started having fellows in neonatology early, because we started in the 1950s, late 1950s. They were research fellows. We started with one, but one was not going to take the calls for this 18,000 yearly delivery service. The fellows, again, were interested in the clinical part of the babies’ development, but they were also interested in the questions as to why things happened, so they were helpful. At first, we took them for a year, and then finally the fellowship program got

gelled. Now there are rules and regulations, and you have to have your program evaluated, and you have to pass, which I think is good. I have no objection to that at all. Next year, I think we're going to have 10 fellows in our department.

DR. GARTNER: Who was your first fellow?

DR. HODGMAN: His name was Sami [B.] Elhassani. He's still around. He's in South Carolina and has been running a nursery there for a long time, and he does publish. He keeps track of me. I get a card from him every year telling me what he's doing. And when I got the [Virginia] Apgar Award [for Perinatal Pediatrics], bless his heart, he came up to the meeting and was in the audience, which I thought was really nice.

DR. GARTNER: How did you fund the fellows? How did you pay their salaries the first year, the first few years? Did you have an NIH grant?

DR. HODGMAN: We didn't fund them. They funded themselves.

DR. GARTNER: So you didn't pay them any salary or research stipend?

DR. HODGMAN: We didn't have any money. We didn't have any money.

DR. GARTNER: So they just came on their own.

DR. HODGMAN: Yes. We fed them, but they had to be able to support themselves. We didn't have money for fellows. Now we have clinical fellows, and they're hired by the hospital, but these were research fellows, and they were academically supported by the school. They got certificates for completing the year's training and all that good stuff, but there was no money attached. I was laughing at Audrey [K.] Brown, who turned out to be a good friend. We were on our way from one of the meetings in Chicago to the airport. She thought I was younger than I am, I think, because she said, "And where did you get your fellowship training?"

DR. GARTNER: [Laughs]

DR. HODGMAN: And I looked at her and smiled pleasantly and said, "In the nursery." [Laughter]

DR. GARTNER: As I did.

DR. HODGMAN: So I guess the whole structure became more complicated as we started providing medical care for newborn babies, and also became more regimented, which I'm not using critically. I think that's normal development. For example, I took my neonatal boards in 1975. Well,

that's the first year they were offered. I have to tell you, that was a terrible day. I went with half the fellows I'd trained. If I had had any difficulty, it would have been impossibly embarrassing. I did my pediatric boards in 1957. The best correlation of grades on the boards — and the boards look carefully at this sort of thing, of course — is on the one hand here are grades, and on the other one is time out of training, and the correlation is inverse. So here I am, 20 years [laughs] out there. I had forgotten how to take an exam. In school, I was good at taking exams, fortunately, because I needed the grades. Fortunately, I passed the neonatal boards. Now, this was a written, proctored exam. Shelly [Sheldon B.] Korones was sitting right behind me in San Francisco, and one of the questions was a postage-stamp-sized reproduction of an X-ray and then the question, and you were supposed to look at the X-ray.

DR. GARTNER: I remember the exam. I had the same exam.

DR. HODGMAN: Okay. I was having a terrible time with this miserable little postage stamp. And, of course, you can't say anything in an exam. But Shelly leans over, taps me on the shoulder, and hands me his magnifying glass. [Laughter] And I thought, "By God, you ought to be through with this sort of nonsense before you need a magnifying glass to interpret the questions!" [Laughs]

Well, I think we're kind of into the development of neonatology.

DR. GARTNER: Yes. You can go on in that direction. Are there more things about you that you want to talk about? You've got a lot more history after that, about your role in neonatology and what you did. What fields, what aspects?

DR. HODGMAN: One of the things that for all the gals, the medical students gals, all of them, was the number one question on their hit parade — is it possible to have a family and a career? They're still asking me that. This year's class was interested in that. I think it's perfectly obvious that, yes, it is possible. Almost all of my women colleagues are married with children, and most of them as successfully as anybody else. The very best answer I ever heard, Larry, to the question can a woman have her cake and eat it too was from a gal who answered it in one of the throw-away medical journals. She said, "Of course a woman can have her cake and eat it too. All she has to do is be willing to bake two cakes." [Laughter]

DR. GARTNER: That's true.

DR. HODGMAN: You know, I think it's truly, perfectly possible. Annie Teberg, whom I mentioned, a good friend, has 6 kids. You know, she's a good Catholic girl.

But there are some things that are necessary, and one of those things is that you need to marry the right guy. You need to marry somebody, as was fortunately true of my husband, he was secure enough in himself that my success in no way threatened him, so we could relax and enjoy it. I was invited to give the staff speech at the evening private hospital staff meeting at the hospital where he was chief of staff. He took me out to dinner ahead of the meeting. He was cute. He said, "Now, if I don't introduce you tonight, please don't get upset. Don't be offended. It's not that I don't want to acknowledge you, it's that I don't know the other guy's name." [Laughter]

Well, I suppose, energy and good health are helpful no matter what kind of field you're in, so energy is useful. But the other thing you need is a supporting background. I had a housekeeper who came to work for me when my first daughter was born. She worked for me for 21 years. She graduated cum laude from the University of California in her youth. I paid her twice as much as any of my friends were paying their household help. She was worth pearls and rubies. Now, if I'd stayed home, I would have gotten a young girl with a strong back who would have done what I told her, but that wasn't what I needed. I needed a mother substitute. She drove her own car, so she could take the kids to appointments and lessons. She was a very effective mother substitute. The other thing that was really nice about her was that never, even if she thought she wouldn't do it that way, did she undercut me.

DR. GARTNER: That's the way to do it.

DR. HODGMAN: Yes, she always stuck to what I wanted. We celebrated her 80th birthday. She was a widow when she came to work for me. She didn't live in the house. She had her own house, but she came when I left and left when I came. It also made it possible for me to travel with my husband, because when we'd go traveling, she'd move into the house. You know, she knew how to do it all. Also, since we were hometown kids, both our families lived in town. Now, they were all busy doing things, and they weren't available for daily babysitting, and I'm not sure daily babysitting would have been a good idea. But they were available for backup. They were available for emergencies.

Well, I have to tell you one anecdote about my darling mother. I had Ann [V. Schwartz] in June of 1953, the last day of May of 1953. Then I had Susan [DiPietro] in November of 1954, so they're not quite a year and a half apart. Not quite respectable for a Protestant.

DR. GARTNER: [Laughs]

DR. HODGMAN: They were reasonably close together, but they were a year apart, I guess two years apart in school. When they were [Girl Scout]

Brownies scouts, in the two classes, there was only one working woman — me. One working mother, me, and the Brownies is all run by volunteer mothers. Well, there wasn't any way I could volunteer to run the meetings because I was busy. But I thought, well, we had a swimming pool at the time, and that was still a little unusual. So I thought we could have a weekend swimming party at the end of the year, to celebrate the end of the year, and then we could have lunch under the trees in the back yard. Lunch was easy because we could put up makings for sandwiches. Kids that age have all these food fads, and that way they could select what they wanted to eat. I thought that would work out well. So we set that up for Saturday morning.

END OF TAPE 2, SIDE A

DR. HODGMAN: Anyway, at 8:00 in the morning the phone rang. It was the hospital. I was not supposed to be on service, but as the head physician for the department, there was some administrative problem that I had to go down there and straighten out. Well, it's very difficult to turn off a little kids' party an hour before they're supposed to come. And even if I could, I really couldn't because I didn't have the leader's phone number so I didn't know whom to call. So I called my mother. I said, "Mom, I'm stuck. I'm having this swimming party and they're due to arrive in the hour. In the meantime, I've got to go to the hospital. I don't think it'll take me long. It's just some stupid administrative thing. But I've got to go, and I've got to have somebody here to look after your granddaughters and to greet the guests." And my mother is this darling. She said, "You know, dear, when my grandmother was my age, she was sitting in the chimney corner with a shawl over her head, and you're asking me to come to your house and be a lifeguard." [Laughter] Following which, she hung up the phone and came. So, you know, you need supporting troops.

DR. GARTNER: You need the supports.

DR. HODGMAN: Right. And fortunately I had those. We celebrated Mrs. Fultz's — my housekeeper's name — we celebrated her 80th birthday. We got her a cake with gorgeous yellow roses on it, and we put 80 candles on the cake. We lit them all, and all the roses melted. [Laughter]

I was bragging at the hospital about my well-behaved kids when they were little, and one of my colleagues looked at me and said, pleasantly, "Oh, I'm not surprised you have well-behaved kids. After all, you had sense enough to leave and leave it to somebody else all the time. [Laughter]

DR. GARTNER: While we're on the subject of women in pediatrics, what changes have you seen over the time you've been in pediatrics?

DR. HODGMAN: Fifty years.

DR. GARTNER: Fifty years.

DR. HODGMAN: At least.

DR. GARTNER: What's changed for women in pediatrics?

DR. HODGMAN: Let's see.

DR. GARTNER: The numbers have changed.

DR. HODGMAN: I started out as an intern in pediatrics in 1946, so over 50 years, yes. Well, pediatrics has always been receptive of women, so I never got much of a feeling of prejudice. This was true at the hospital, but it was also true in, oh, things like the Academy of Pediatrics, which was, I think, ahead of most of the organizations in looking at the needs of women and trying to support and encourage their women. But clearly one of the major things in the 1950s, 1960s, my time sense is kind of sloppy, but back then, we had zero women in our medical school class that year. Zero. Last year, we had 47 percent women in our medical school class. Last year.

But the important thing is that both years, USC accepted the same percentage of women who applied to the class. Back in the 1950s and 1960s, women were not applying to medicine. In that year, you were supposed to get married, move to a split-level suburban home and raise four kids. That's what women were supposed to do. I had a good friend who belonged to an organization which — I'm going to block on the name, but it was a group of college graduate women.

DR. C. GARTNER: AAUW [American Association of University Women]?

DR. HODGMAN: University Women?

DR. C. GARTNER: American Association of University Women.

DR. HODGMAN: Yes, I think so. Anyway, she was a mover and shaker in this group, and they regularly had a career day for high school, college-age girls to attend. She asked me if I would appear at their career day, and I said yes. I tend to do that, because I think that's important. Well, they had a whole bunch of different kinds of people there and we each had a little booth. The girls attending this meeting were very accommodating and very polite. They came back by to talk to me so I wouldn't feel lonesome, but not a single one of them was interested in medicine for herself. So one of the big changes I've seen is a drop in interest of women in medicine, and then a dramatic increase. But a lot of that depends on the women, not just the system.

DR. C. GARTNER: At the time, you said they were accepting the same proportion. Was it the same proportion as were being accepted among the men?

DR. HODGMAN: Yes.

DR. C. GARTNER: So you didn't see any difference in the acceptance percentage?

DR. HODGMAN: No. The difference was in the women applying. Now, because, it wasn't the *au courant* thing to do, society influenced the women's reactions, clearly. Society has become much more accepting of first working women, and then I think if you're going to have working women, then you need to have well-trained working women, not just maids and waitresses and stuff, but the professionals. And it wasn't just medicine; it was law and dentistry. I mean, all of them were not very accepting. I think possibly medicine was better than the other professions. You know my mother's experience. She had to be a nurse or she had to be a teacher, and that was it. Of course, that was a long time ago.

DR. GARTNER: What do you think about the fact that now, apparently, obstetrics and gynecology has almost no men, that it's almost all women? Is that a good thing or can that happen in pediatrics?

DR. HODGMAN: It is happening to pediatrics. Our fellows in neonatology are predominantly women. Our residents in pediatrics, predominantly women. Our faculty must be at least half women these days. So I think it's gone more slowly in pediatrics. Although pediatrics is way ahead, it's been more gradual. But OB has turned over dramatically. A few years ago, we had, on this big OB faculty, one woman, and she wasn't even regularly at the hospital. She was farmed out to a clinic somewhere. So on the teaching staff at the hospital, there were no women. There were no women residents — one or two here and there — but essentially no women. And in the last, what, maybe ten years, that has almost totally turned over. Now at least half our faculty are women, and the majority of the residents are women. I think a good deal of that, again, is societal because women are insisting on women physicians to take care of them.

DR. GARTNER: That's true.

DR. HODGMAN: But that wasn't true. I have to tell you, for all my professional life, if I needed a lawyer or a doctor or a dentist or whatever, I have always, if I could, picked a woman, and you know why? Because they're smarter. You know why they're smarter? They had to be to get there. [Laughs] Now, I think that's leveling out because there are plenty of women lawyers and there are a reasonable number, I think, of women dentists these days. But there are still some areas. For instance, there are

not a lot of women surgeons. I don't know a single woman neurosurgeon. I was going to be the first. I'm glad I had better sense than that. I don't think surgery is an area that is kind to their women. I think it's tough for women in surgery.

DR. GARTNER: That's true.

DR. HODGMAN: That may be improving as more and more hit the field. But medicine, radiology, dermatology, pediatrics number one, certainly, and OB now are all fairly open to women.

DR. GARTNER: Would you advise women now to go into medicine?

DR. HODGMAN: Of course.

DR. GARTNER: Do you think it's still a good field?

DR. HODGMAN: Of course. What do you think I spend half my time doing? [Laughter] You know, these guys say, "Oh, I wouldn't encourage my kids to go into medicine. Medicine has gotten to be such a mess." Well, there are problems with medicine, and I agree we need to do our best to improve them, and I'm not sure we're doing the best job we could. I honestly don't think so. But medicine has been wonderful for me. I have had not only a great career, I've had a wonderful time. I think I contributed and have done a good job. But it's been very rewarding for me, so it's been mutually compatible. My darling husband died when he was 47, and he came from this long-lived family. He knew his great-grandparents. He was an only child, but his uncles all died in their 90s. He had a lymphosarcoma which there still is no treatment for. I'm still kind of mad at him for leaving me by myself so early.

DR. GARTNER: Did your daughters go into medicine at all?

DR. HODGMAN: No.

DR. GARTNER: They didn't go into medicine in any aspect?

DR. HODGMAN: My older one was seriously thinking about medicine. In fact, she was ready to apply to medical school in her senior year in college. She went off to Stanford. She followed me to Stanford. She started in 1970. There was a switch then. There was an opening of the door for women, and women were being encouraged by the 1970s to go into medicine. She had good grades, so she probably could have gotten into medical school with no trouble. But her classmates, mostly guys, had to work hard to get into medical school, and then she discovered causes. So she had a biology background as a pre-med, but she didn't go on to school. She got involved in

causes. I mean, these were important causes. I can't tell her she was wrong, but she got involved in an anti-imperialist movement out of New York. This was during the Nicaragua episode. I kept telling her if she really wanted to do this, she ought to go to law school and figure out how to make a bigger impact, but she didn't.

But then, along the line, after about 20 years of this, maybe, she got intrigued again with going back to school. She spent a year as a — I hate this problem with words — she was responsible for helping to run a grant at Cook County Hospital, which was close to where they were living at the time.

DR. GARTNER: In Chicago?

DR. HODGMAN: No, no, in Brooklyn. Not Cook County, Kings County. Kings County Hospital [Center] in Brooklyn. She was still kind of in causes, but the physician involved had a grant to improve breast care for disadvantaged women. She was not the PI [principal investigator], that was the doctor, but —

DR. GARTNER: She was the administrator.

DR. HODGMAN: The administrator, right. And she did that kind of on purpose to see if she liked it. Then she went back and got a master's [degree] in, I guess, epidemiology. She did that in New York, at Columbia [University in the City of New York]. Then they encouraged her to go on and do a PhD [doctor of philosophy] By that time, she had moved with her family back to Northern California, so she went back to Stanford 20 years later and got a PhD in epidemiology.

DR. GARTNER: Well, good for her! So she is involved in medicine.

DR. HODGMAN: Yes. Well, she's an assistant professor at my old medical school, at UCSF. They have a big department in epidemiology, which they didn't have when I was there. But even though it's a good-sized department, there are only a handful of faculty appointments. Most of the crowd are PIs on a grant or administrators, but they don't have faculty positions. But, bless their hearts, she went there. PhDs now have to do a fellowship. It's kind of like resident training. They're cheap labor. So she had a two-year fellowship at UCSF, and bless her heart, they asked her to stay on the faculty, which I thought was great.

DR. GARTNER: Yes, that's very good.

DR. HODGMAN: But, of course, she has to raise her own money, you know, grants. I mean, she's busy, and she's got a 15-year-old and a 7-year-old, almost two families. But she's at least in an academic, medical field.

DR. GARTNER: That's very nice. Is she interested in perinatal or neonatal issues?

DR. HODGMAN: No, she's interested in diabetes, and that's wonderful at the moment because that's where the money is. She's interested, actually, in bone disease.

DR. GARTNER: You have how many granddaughters and how many grandsons?

DR. HODGMAN: I have three grandsons and one granddaughter.

DR. GARTNER: One granddaughter. Is the one granddaughter somebody who is interested in going into medicine?

DR. HODGMAN: I don't know. She's only 7.

DR. GARTNER: Oh, well. [Laughs] How about the boys? Are they interested in medicine?

DR. HODGMAN: I don't think so. They haven't shown any evidence of it. One of them is interested in politics, the other is interested in cars and mechanics, and the last one is interested in art, although whether that's going to be permanent or not, I don't know.

Apropos to nothing much, I have to tell you that two years ago, the oldest one, Chris, graduated from high school. He has ADD [attention deficit disorder] that he gets from his father. He's bright, and he tests very well, but he has difficulty, not with spoken, but with written English, and that means history is hard for him and English is hard for him. He's great in math and he's wonderful with computers. I mean, that all comes easy to him and he does very well. But he does things like he'll do his homework, and then he'll forget to take it to school. You know, classical ADD symptoms. So we were crossing our fingers whether he was going to get out of high school or not, and, bless his heart, he made it. The two little ones, the younger ones graduated from eighth grade, so as a graduation present, Granny took them to London for a week. I had friends who said, "Oh, you mean you went all the way to London and just spent a week?" With three teenage boys, a week is plenty. [Laughter]

DR. GARTNER: Feels like a year. [Laughs]

DR. HODGMAN: I came home raw. But we really had a good time, and they're cute. When I get them away from their family, we have a very different relationship. And, bless their hearts, they like to travel with

Granny.

DR. GARTNER: That's nice.

DR. HODGMAN: They take good care of me. They lug my luggage, they help me upstairs and help me downstairs. We really had a good time. So last year, I thought, well, that worked out well, so I called up this Trojan Travel. It came across my desk as a family trip, so it was all scheduled for multigenerational and very well done. The guides were excellent, and we had adequate free time, but it was well organized. You know, you felt supported but not herded. So I called Trojan Travel up to see what they were doing this last year, and the guy said, "Oh, we're planning a trip to Paris." I said, "Wonderful. Sign me up." So several weeks went by and I don't hear from the travel agency. I don't get any blurb about the trip. So I call them, and I said, "Do you know what's going on?" Well, this was right after the big flap about "liberty fries."

DR. GARTNER: Oh, yes.

DR. HODGMAN: Not French fries due to the lack of support of France for our crazy war in Iraq. So how many people do you think signed up for this trip?

DR. C. GARTNER: Very few.

DR. HODGMAN: Just me.

DR. GARTNER: You.

DR. HODGMAN: Yeah, just me. And so they canceled the trip. But the travel agency that did the planning for them agreed to plan a trip for me and my three grandsons. It wasn't as complete as the one we would have gotten with the other trip. We had a lot more free time. But they got the plane for us, a great hotel in Paris, a guide a couple of days and passes for the museums and the Metro, but I had a lot more responsibility than I had had on the London trip to keep us organized. And I was a little worried about Paris because Paris is more art and history than London, but we had a great time. And the kids loved the art museums. They'd all studied Impressionists in school and here they were.

On the last day, there's the chapel, Sainte-Chapelle on the Ile-de-la-Cité, St. Louis IX built for the palace. This was back in the 13th century, I think. This thing is a gem. It's not that big and it has some of the best stained glass windows in the world in it. But it has the world's best acoustics. I had been to Paris on another hostel trip, and they had taken us to Sainte-Chapelle for an evening performance, so I told this travel agency I wanted to go to Sainte-

Chapelle. Now, they only do classical music, and one of the kids plays the piano and the trumpet, so I knew he would like it. The older boy is into heavy metal, and the middle one likes guitar, so I didn't know whether they'd like it or not, but I thought, "Oh, it's the sort of thing your grandmother is supposed to expose you to." Don't you think so?

So our last evening in Paris was this performance at Sainte-Chapelle, and they played [Antonio] Vivaldi and [Johann Sebastian] Bach. It doesn't have a whole orchestra because the place is too small. It was a small string orchestra. But we had dinner in the outdoor restaurant, café, and then it was late sunset. I had taken them to Sainte-Chapelle in the daytime because I wanted them to see the daylight through the glass, the stained glass. In June, it stayed light very late, so when we got there, it was still light outdoors, and we could watch the twilight come on through the stained glass. It was just gorgeous. I don't know, there's something about the acoustics. When the first notes, the violin, they just exploded. And they played happy music. There wasn't any dirge-like stuff. It was all upbeat and gay. It was a very lovely performance. So anyway, on the way home I couldn't resist. We were on the plane, and I said, "Okay, guys, what did you like best about Paris?" Bless their hearts, all three of them said, "Sainte-Chapelle."

DR. GARTNER: Wonderful.

DR. HODGMAN: So I thought that was good. So this year I'm planning to take them to Rome. [Laughs]

DR. GARTNER: Those are lucky grandchildren, let me tell you.

DR. HODGMAN: You only have so many windows of opportunity, and very soon they're going to be out working and involved with girls, and they're not going to want to travel with Granny anymore. And who knows how long Granny is going to be up to taking three grandsons. So I figure, while I have the opportunity and while they like to go — and obviously I like to go or I wouldn't bother — I should do it.

Okay, now, there are a couple of things I need to tell you, and I don't know quite how to fit them into this story.

DR. GARTNER: That's all right. While they're in your head.

DR. HODGMAN: There's a lot of discussion these days about evidence-based medicine, which I'm strongly in favor of. I really don't know if it's the same in other areas or not, but there's a huge amount of opinion in newborn care not supported by any data. I would hope that's getting better, and I think it is getting better, but there are still opinion. I mean, here's science and here's practice, and sometimes they overlap and sometimes they're

separate. This was early on in my tenure as director of the newborn division. I don't think we even had a division of neonatology. I think we just had newborn service at the time. One example is that at the time, babies stayed four or five days in the hospital, term babies. There wasn't much breast feeding going on. This would have been middle 1960s, maybe. Even our patients didn't breast feed. We had fewer Hispanics and more Blacks at the time, so breast feeding wasn't big.

Babies were fed glucose water the first day. Now, these are healthy, term babies — glucose water the first day. They were fed half-strength formula the second day, and then finally by the third day they went on the full-strength formula. Now, the reasoning behind this was that the babies would vomit or spit up and aspirate. Well, how many normal term babies have you ever seen spit up and aspirate? Big fat goose egg. None. I mean, all our reflexes are designed to keep that stuff out of our tracheas. The milk may not come in for a couple of days, but Mother Nature starts out with colostrum, which is in the breast and is very high caloric, easily digestible, so she doesn't leave these babies with nothing. It's a time when they need calories. They have to support their own temperature; they have to support their own breathing.

So I looked at this, and you know when you go against Mother Nature, you get in trouble. Mother Nature goes for the jugular. I decided this was foolish. Nobody had any data to support that this was appropriate. Some interesting data came out later saying that if the baby aspirates glucose, he gets in just as much trouble as if he aspirates milk. I thought that was a marvelous study.

DR. GARTNER: Unless he aspirates breast milk, in which case he gets no reaction at all.

DR. HODGMAN: Yes. Well, no, we're talking about the bottled variety. Anyway, so I announced at one of these meetings I told you I had with my faculty that we were going to start babies out the first day on full-strength formula. We weren't going to go through all this nonsense. They had a fit. You'd think I'd suggested we were going to decapitate the Pope or something. I mean, they really were upset. Now, they could tell me not to do it, which they did, but they couldn't prevent me from doing it because I was in charge of the place. I thought about it, and I decided they had no science behind them, only opinions, and I was going to give it a try, so we started out. The nurses were all with me. They were tired of listening to these poor starving kids yell. So the nurses were all in favor of it, which is important.

But anyway, we started feeding the babies from the word go, their first feed if they weren't breast feeding, with full-strength formula. The guys were just sure I was going to have all kinds of trouble. They told me all about all the trouble I was going have. Do you know how much trouble I had? Big fat

goose egg, exactly. There wasn't a single baby who didn't gulp that stuff down with enthusiasm. So that was kind of a start for me at tradition versus using your head. You've got to be careful, obviously, but I think it's important to try to use your head and not buy into the traditional stuff that's based on opinion without any supporting data. I think that's been one of my planks that has governed a good deal of my practice. I do a ton of things for which there's no supporting data, all of us do. But I try to be thoughtful as best I can.

DR. GARTNER: To what extent did the nursery service, the neonatology service, attempt to base what they were doing on clinical research studies? In other words, when you didn't know the answer to something, did you then go to doing studies to try to test your thoughts or hypotheses?

DR. HODGMAN: We tried to. Starting out, as I told you, there was very little academic stimulus. Our pediatric department still isn't very academic. It's still pretty much practice. I'm not sure "academic" is the right term, but all of the members of the neonatal division belong to the WSPR [Western Society for Pediatric Research] and try to get into the WSPR and the APS. I mean, that's a goal. We all try to have abstracts in to the research meetings. We insist that our fellows, who have to be approved now, be involved. For years, we didn't have much bench research, so we have mostly clinical research. We have this gigantic clinical service. I mean, you can ask clinical questions and answer them in two or three months. So, yes, the whole crew was interested in getting answers. We weren't against bench research, we just didn't have much opportunity. At the County Hospital, I had a PhD on my staff, and I had a horrible time getting her funded because the County Hospital, which paid our salaries at the time, was not into funding research. They were into funding the doctors who were doing the care. So I can't tell you it was actively encouraged, but it wasn't discouraged. I mean, if you wanted to do it, it was there.

DR. GARTNER: You could do it.

DR. HODGMAN: Yes. And, yes, most of my early stuff and most of my colleagues' early stuff was clinical. My earliest paper was the one on chloramphenicol. I think I have to tell you about that.

DR. GARTNER: Please do. It's an important piece of neonatal history.

DR. HODGMAN: The idea for this came from one of our residents, so I have to give him full credit. At the time, and here again, we're talking about opinion without data, we were giving antibiotics to premature babies born after premature rupture, rupture well before delivery, so the baby was born after a period of ruptured membrane. At the time, you were supposed to give those babies antibiotics. Now, nobody had ever done a study to show

that it did any good, and nobody had really looked at what kind of antibiotics. The early ones were penicillin and streptomycin because that's what was available.

Chloramphenicol came along, and chloramphenicol is a very effective antibiotic, more effective than others, so we were giving chloramphenicol. But nobody had looked at doses for pre-term infants, and, hey, half the drugs we are using this day, we don't know what the right dose is, you know. But nobody had looked for doses, so we were using the dose that chloramphenicol recommended in the prestigious *British Medical Journal* [BMJ]. Now, what we didn't realize and what really wasn't known at the time is that chloramphenicol is glucuronidated just like bilirubin, okay? Of course, the pre-term babies were not capable of glucuronidating the chloramphenicol and desensitizing it, detoxifying it. So we gave the babies penicillin and streptomycin, and we added chloramphenicol when it came along.

Now, in those days — this is before we were ventilating babies — if the baby survived 48 hours, he was likely to live, because the babies who died, died in the first 48 hours either of immaturity — and I don't believe babies just die of immaturity, but they were too little — or they had RDS [respiratory distress syndrome] and we couldn't support them. But if they survived into their third day, they practically all made it. Well, these babies whom we were treating were dying on their fourth and fifth day, and it was all wrong.

DR. GARTNER: And that was new? You hadn't seen that before you starting using the chloramphenicol?

DR. HODGMAN: No. They weren't supposed to do that. Now, I didn't have good data on this. I just had experience, but one of our residents, a bright fellow, pointed out that these babies were dying at the wrong time, so we started to look at it. There were no tests for chloramphenicol levels or anything at the time. Those came along just when we were finishing this study. So we developed a study in which we set up a no-treated group, a group given penicillin and streptomycin, a group given chloramphenicol, and a group given all three. My attending staff had a fit. You know what they objected to? The untreated group, because treatment was what you were supposed to be doing, so they had a fit. We put this untreated group in there. But we pursued, and we put the untreated group in. We pursued it, and we treated the same kind of babies we had been treating except we left a quarter of them out.

We didn't stop it until we had statistically significant data. We were afraid to stop it too early because it wouldn't do any good to do it. But it became quite obvious that the babies given nothing and the babies given streptomycin and penicillin had one mortality. The babies given chloro, in either group, had a 20 percent mortality, which is what we were having at the

time in preemie babies. The others had a 50 percent mortality.

DR. GARTNER: The ones with the chloro.

DR. HODGMAN: With chloro. One thing that came out of that study that never got much attention because the chloro overshadowed it was that antibiotics didn't do these kids any good. The untreated ones were doing as well as the treated one, which I thought was important. But it became obvious, and the babies died with the so-called Gray syndrome. But the Gray syndrome looked like sepsis. You read the babies' charts, earlier, before we started the study, and, I mean, they make you sit down and cry because it would say, "Baby not responding to treatment," so then they'd double the dose. Which was a reasonable thing to do, maybe. But at any rate, when we got our figures and we knew we were onto something, I called the drug company that made it.

DR. GARTNER: Parke-Davis [& Company, now part of Pfizer].

DR. HODGMAN: That's right, Parke-Davis, back in New Jersey. I knew I'd hit pay dirt because I had a guy from the company flying out to see me on the next plane. They had just developed a blood level. I think we hadn't quite finished the study because we did blood levels, and we wouldn't have given the babies chloramphenicol just to get their blood levels, so I think the last handful of babies. The blood levels, of course, were sky high.

DR. GARTNER: Was that the first report of the Gray baby syndrome?

DR. HODGMAN: Yes.

DR. GARTNER: The chloramphenicol? It started with that?

DR. HODGMAN: The first publication. Now, a couple of other people were working on the same thing, and I think — here again, you know my memory — but somebody else had presented something similar as an abstract at a meeting, but ours was the first publication. Clearly, everybody backed off of chloramphenicol. Because there weren't all that many antibiotics at the time, we actually did do some studies and we established the appropriate dose of chloramphenicol for pre-term babies. But then other drugs came along, and we stopped using it in preemies, certainly. But one of the exciting parts about it is my first paper.

DR. GARTNER: That was your first paper?

DR. HODGMAN: Yes, and we published it in *The New England Journal of Medicine*, which took it on fast publication. I mean, we sent it in and I think it came out in about three months. That was my first —

DR. GARTNER: Hold that thought.

[Tape interruption]

DR. GARTNER: All right. You were saying, you were finishing the chloramphenicol story?

DR. HODGMAN: Well, there's a codicil to the chloramphenicol story. I think about 20 years later, Ted [Massachusetts Senator Edward M.] Kennedy, on the floor of the [United States] Senate, in the Congress of the United States, brought up several research studies in which Black patients had been involved. One was the Tuskegee [Study].

DR. GARTNER: Syphilis.

DR. HODGMAN: The syphilis story. One was the chloramphenicol newborn story from Los Angeles. Anyway, he was raising serious concerns about minority patients being taken advantage of in research studies and research practically being limited to minority populations. He made a big flap about it. It hit all the newspapers. I was not that upset about our study. Now, that study figured out the LD50 dose [median lethal dose] of chloramphenicol for pre-term babies. I mean, that's what we did. But at the time, other people were killing half their preemies with chloramphenicol and not appreciating it. But we did it carefully, and we had permission from our research committee. We didn't have permission from all the families because we were giving them standard doses, but we did get permission from the untreated group. Anyway, this came out as poisoning minority babies.

I spent a whole day on the phone with one of his staff, a young physician, during which I tried to point out that the experimental group at the time had been the untreated babies, but he didn't want to hear that. I got an interesting phone call and an interesting letter. I got an interesting letter from Josh [Joshua] Lederberg at Stanford. He happened to know Sarge [Robert Sargent] Shriver, and so he had met Senator Kennedy. Lederberg wrote back to Shriver, and then he got a letter from Kennedy explaining why he was doing this and why we didn't need to do studies. Kennedy felt we could look at it retrospectively and, you know, blah, blah, blah. Anyway, Lederberg sent him a letter, straightening him out. He sent all of the copies of all of this stuff to me — which I thought was really sweet of him — defending experimental medicine just to figure out what you're doing.

And the other thing that was nice was that at 6:00 in the morning one morning, the president of the Academy called me up. Now, I'm sure he was back on the East Coast, so he was calling me at 9:00 a.m., and it hadn't occurred to him that it was 6:00 a.m. and he was waking me out of a sound

sleep. But nevertheless, I thought it was very sweet of him to call to tell me that the Academy was in total support.

DR. GARTNER: That is nice. Who was that? Do you remember? Which president?

DR. HODGMAN: I don't. It was too early in the morning.

DR. GARTNER: Laughs]

DR. HODGMAN: I appreciated that. But one of the local press wanted to interview me, and I agreed. He interviewed me in my boss's office, and my boss at the time was Paul [Francis] Wehrle, a well-known guy, a president of the Academy and all that stuff, and a great boss, for me. So he was sitting behind his desk, with his mouth shut, and the reporter and I were talking. The reporter said, "What do you think Senator Kennedy's purpose was in bringing up this information?" And I said, "I thought it was perfectly obvious. He was doing it to make political clout." I phrased that a little better, but the reporter said, "Do you mind if I quote you?" And I said, "Of course not." My boss was convulsing at his desk. [Laughter] But that was my first paper, and it created considerable interest at the time. Of course, it created a considerable interest later on.

The first studies that we did were really looking at clinical situations. For example, I had a paper with OB on hydrocolpos in the newborn. We had a couple of papers on trisomy 18, which was newly described at the time. One of the internists was interested in that. We had papers on thyroid levels in the newborn, which had not previously been described. Again, one of the interns was interested in the area.

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DR. HODGMAN: At any rate, our earliest research — I'm not even sure you could call it research, it was more describing clinical situations, either a specific attribute or a particular disease. But then we started to get a little more sophisticated, and we did the second United States study on phototherapy at our place. Jerry [Jerold F.] Lucey did the first one, and we did the second. We got interested in the issue of bilirubin. At the time — and here again, we're talking about science and opinion and how they interface — pre-term babies were considered to develop kernicterus in a high incidence and at very low bilirubin levels. Now, our service, and we had a good pediatric pathologist at the time, I think, was the first to point out that most "kernicterus" in those pre-term babies was yellow staining, postmortem yellow staining of the brain, and those same babies had yellow hyaline membrane disease, yellow hyaline membranes in their lungs, and that most of that was actually post mortem.

DR. GARTNER: Not ante mortem.

DR. HODGMAN: Yes, not true kernicterus. For years we treated pre-term babies with bilirubins of 10. We put them under phototherapy. I don't know if it did them any harm or not, but these observations that weren't that carefully done spawned this whole system of treatment, which turns out to be hopefully not harmful, but clearly not necessary. And I suspect that being rather fragile, anything unnecessary you do to premature babies is probably not all that good for them. But anyway, we got involved in that.

And then Paul Wu and I got involved in insensible water loss and the response to temperature. Pretty basic stuff, but none of that had been described yet. Then about in 1972, so pretty early on, sudden infant death syndrome [SIDS], which had been a pathological disease up to then, started to become interesting to pediatricians.

I have to backtrack just a minute. I think one of the reasons people started getting interested in newborn care is that infant mortality in the 1940s and 1950s had been dropping dramatically, all except the neonatal part of infant care, which had stayed up, essentially unchanged. And so as pneumonia and diarrhea and the things that used to carry off infants came under control with more antibiotics and better fluids and all that stuff, then the neonatal mortality kind of stood out there and really looked at you. So I think that was one factor.

People say, "What has the space program ever done for us?" Well, I think the space program made it possible for me to monitor my babies because monitoring became popular and it became miniaturized. So not only could you put it on astronauts, but you could also put it on pre-term babies. And the X-rays got better. You could stop the 60-, 80-times-per-minute breathing so you could see what the lungs looked like. I think it was partly the fact that neonatal mortality was a significant, unchanged problem and the improving technology that gave you a chance to get your hands on it that stimulated the interest in newborn care at that time. And, as I said, I had positioned myself to be right there on the cutting edge of it, which turned out to be exciting.

DR. GARTNER: Yes.

DR. HODGMAN: Yes. Okay, now, back to SIDS. I think one of the reasons SIDS became of more interest to pediatricians is that, with the improvement in pneumonia and diarrhea and communicable diseases and all that stuff, SIDS is now the most common medical cause of death in infants beyond the neonatal period. So, again, it started to stand out as a significant problem. There had been important parent groups made up of parents who

had lost an infant to SIDS. The parents of SIDS babies have a terrible time accepting the SIDS death. They have much greater difficulty than parents who lose other infants. It seemed to me the reason is that we can't tell them why the baby died, and this leads them to horrible guilt trips — if they had done this or they hadn't given him a cookie, he wouldn't have died. But it's so unsatisfactory that it's just very difficult for them to accept.

But anyway, there were strong parent groups, and one of these parent groups lobbied Congress and got Congress to insist on NIH setting aside money to study SIDS. I got involved in this because I had this big premature center, and pre-term babies are more susceptible to SIDS than term babies. Anyway, NIH came after us, and the crowd at UCLA who had a sleep center [Psychiatry and Biobehavioral Sciences Center for Sleep Research]. SIDS occurs when babies are asleep. So the UCLA sleep group and the USC neonatal group got together.

SIDS is almost impossible to study unless you're a pathologist, because you don't know the baby is going to have SIDS until after he's dead. But we started to look at defined risk groups, and one of the risk groups was, of course, the premature baby. There was what at the time was called the near miss for SIDS — the baby who had a serious apneic episode but got resuscitated. There were also questions about subsequent siblings and whether they were at greater risk. So we started out doing studies. Nobody had done this, believe it or not, at the time. There was no data about heart rate variability or bradycardia. There was some of this from the nursery, but almost none on the infant after discharge from the nursery. So we started out doing sleep studies and monitoring infants, both in the nursery and after discharge.

DR. GARTNER: At home.

DR. HODGMAN: You know, talking again about science and practice, with this increased interest in SIDS, there was a big meeting. I think it was devoted to SIDS, but at least SIDS was a part of it. A fellow by the name of [Alfred] Steinschneider was doing respiratory recordings on infants, not necessarily newborns, but young infants, and he came out to this meeting with a theory of causation of SIDS called sleep apnea. He had five whole patients he had recorded as young infants and all of them had periodic apnea. These were babies who had gone on to die "suddenly of SIDS."

So he presented this, these five babies, and this took over the country like a storm. One of the reasons it became so popular — the parents picked it up immediately, but most physicians picked it up also — is that it gave you an opportunity to intervene. You could put a baby on a monitor, and if he had apnea, you could record his apnea, and then if he had an apneic episode, you could intervene in it. It just swept the country. Now, the amount of science

under that?

DR. GARTNER: Zero.

DR. HODGMAN: Goose egg, practically zero. But it spawned a whole entrepreneurial home monitoring program. I have to tell you, I never did buy into the home monitoring, and I do have an article dating from very early on, which is entitled, “Home Monitoring [for the Sudden Infant Death Syndrome]: The Case Against.”[Hodgman JE & Hoppenbrouwers T] But, oh, the crowd at Harvard [University] were into this up to their eyeballs. They had patients referred to them from all over the country. They supported their whole respiratory department charging people to monitor their babies. And that died a hard death. Finally, finally, last year the [American] Academy of Pediatrics, in one of their repetitive policies, came out saying there is no indication to monitor babies for risk for SIDS.

But there was an interesting corollary to this as well. Of the five babies [presented by Dr. Steinschneider], three had been in the same family. This was in upstate New York. The police had been interested in this family because the family had had six children and all of them had died suddenly. There were only three who were involved in this [SIDS study]. Varying policemen worked on this case. They’d work on it, and then they’d be transferred, and then somebody else would pick it up. I think close to 20 years later they actually came up with proof the mother had strangled these three kids. So of the five babies that had produced this popular, important and expensive treatment, three of them were infanticides.

DR. GARTNER: As are most of the “familial SIDS.”

DR. HODGMAN: Yes, so there’s a big question now of whether, really, the subsequent sibling really is at risk or not.

DR. GARTNER: Did you read the book written about that whole story?

DR. HODGMAN: I was quoted in it!

DR. GARTNER: Yes.

DR. HODGMAN: Yes! Yes.

DR. GARTNER: Me, too.

DR. HODGMAN: It was a very interesting book.

DR. GARTNER: It was a good book. It was well done. It was a good piece of research.

DR. HODGMAN: It was well written, and it really had a wonderful moral for those of us engaged in trying to take care of the ills of the world. No, I thought it was an excellent book.

DR. GARTNER: I agree.

DR. HODGMAN: But at any rate, it took 20 years. I have to tell you something terrible. That whole monitoring has now been transferred, lock, stock and barrel to pre-term babies, and you know how much data there is for that? [Makes dismissive sound] Same big fat goose egg. And it turns out, if you follow your babies, perfectly normal babies have bradycardia, have apnea, have periodic breathing. That all those things are perfectly normal.

DR. GARTNER: Right.

DR. HODGMAN: It's the lack of variability that's bad. I've never gotten it published, but I'm still going to try to do it. We looked at cardiac variability in our babies in our preemie center. All of the babies who had lost cardiac variability, had fixed heart rates for at least 48 hours, every single one of them died. Yes.

DR. GARTNER: These were fixed heart rates at what age?

DR. HODGMAN: They were in the nursery.

DR. GARTNER: You mean in the first few days or in the second or third week?

DR. HODGMAN: Whenever, whenever.

DR. GARTNER: Whenever?

DR. HODGMAN: Whenever. We looked at all of the babies in the nursery. We looked at them the first two weeks, and then again. If they got stable, we quit, but then if they got sick again, we started looking at them again. We had no infant who had a fixed heart rate for 48 consecutive hours who didn't die.

DR. GARTNER: Really?

DR. HODGMAN: Yes. Well, that's the definition of brain dead, all right? I sent that to *JAMA* [*Journal of the American Medical Association*]. I wrote it up and sent it to *JAMA*. They didn't like it. I got busy doing something else, and I didn't pursue it.

DR. GARTNER: You ought to go back to it. It's an important observation.

DR. HODGMAN: I think I'm going to go back to it because cardiac variability is raising its head again.

DR. GARTNER: Okay, what other aspects of the research have you done or other scholarship in the field? Did you already talk about the collaborative NIH phototherapy study? Is that what you were referring to originally?

DR. HODGMAN: Yes.

DR. GARTNER: That we all participated in?

DR. HODGMAN: We were interested and had done this study on phototherapy. We were interested in jaundice because we had so many babies. It was one of Paul Wu's particular interests, as well as mine, so we worked together on it. They had a five-center NIH study on phototherapy early on, which was an effort to prove it was effective and safe. We were involved with that. I have to tell you a story about that. We used to meet at the SPR meetings.

DR. GARTNER: The study group?

DR. HODGMAN: The principal investigators for the 5 units, and a gal — she was at Emory [Healthcare] and then she moved back to New York; she just died recently.

DR. GARTNER: Audrey?

DR. HODGMAN: Audrey —

DR. GARTNER: Audrey Brown?

DR. HODGMAN: Audrey Brown. She was PI of one of the groups. Paul and I were PIs of our group, and I've kind of forgotten who the others were.

DR. GARTNER: I was one.

DR. HODGMAN: You were one, and —

DR. GARTNER: Long Island Jewish [Medical Center] was another. That was — oh, I'm blocking the name. And then Richmond, Richmond, Virginia.

DR. HODGMAN: You recall we used to meet in Audrey's room at the SPR, in her hotel room. She always had a lovely hotel room. The reason we

met in Audrey's room is she always had the best room of the bunch of us. And you know how she got that room?

DR. GARTNER: No.

DR. HODGMAN: At meeting hotels, before the meeting there would be lines of people waiting to check in, in the lobby of the hotel, and a lot of them would be people Audrey knew, of course. But anyway, she would wait until there was a significant line at the desk. She'd already checked in. She would come down, and she would pass by and say hello to her friends and get up to the desk, and say, "I need to see the manager." And they would produce the manager. Nice young man, who had no idea what he was getting into. She would look at him and say, in a carrying voice, "I assume the reason you have assigned me this room behind the elevator is not because I am a woman traveling alone."

DR. GARTNER: [Laughs]

DR. HODGMAN: And right in front of this whole crowd, of course, the manager would say, "Come with me, madam," then put her on his arm and take her up and show her the best room in the hotel.

DR. GARTNER: [Laughs]

DR. HODGMAN: That's how she got them. I used to call her my pediatric Auntie Mame.

DR. GARTNER: [Laughs]

DR. HODGMAN: I still just recently wrote a policy for our nursery and for one of our local groups, on management of kernicterus. There was a period when we over-treated jaundice like mad. It was easy to do when babies stayed in the hospital because whether you lit them up or whether you didn't probably didn't make that much difference. But when you send them home at two days, it starts to be a different issue. It's now become an outpatient, not an inpatient problem. But there was a period when physicians were not aware perfectly healthy, normal babies could get kernicterus. You know, you read the histories of the kernicterus days. The mother had called up the clinic or the doctor's office and been told pleasantly, "Oh, don't worry. Most babies get jaundice." You read those, and ewww, your skin crawls.

My job, obviously, is to get the current crowd who are now being trained to be aware they have to worry about jaundice and manage it as an outpatient illness, to prevent. We don't see, honestly, that much kernicterus. I mean, 60 percent of term babies are jaundiced, so it's rare. But it's preventable, and

it's either lethal or gives you long-term, terrible, preventable problems, so there's no excuse. That's what a physician is supposed to do, prevent that stuff, right?

DR. GARTNER: Absolutely.

DR. HODGMAN: So anyway, part of my job is to be sure our house officer is aware jaundice is a significant problem they need to pay attention to.

DR. GARTNER: Good. Glad to hear you're doing that.

DR. HODGMAN: I think everybody's come around to that, haven't they?

DR. GARTNER: I think in many places, but there are still a lot of physicians who are not managing jaundice properly.

DR. HODGMAN: I talked to a nice guy down from Ventura, and you know, that's not back in the beyond. It's a very sophisticated area. He was fascinated with this kernicterus stuff and this is a guy in practice! He had no idea healthy babies could get kernicterus. So I sent him off a copy of my protocol, obviously.

DR. GARTNER: Good.

DR. HODGMAN: Yes, and I hope he passes it around.

DR. GARTNER: Yes, we do need to do much more educating the pediatricians now. A big problem. Okay, anything else about the research or scholarly work?

DR. HODGMAN: The SIDS turned out to be long and we're still, would you believe, still working on it 20 years later. NIH finally supported a CHIME study. It's an acronym for [Collaborative Home Infant Monitoring Evaluation]. This is monitoring babies beyond the neonatal period. They looked at 1,000 babies, again, I think, in five or six centers throughout the United States. They looked at normal infants. They looked at babies who had had what's now called an ALTE, Apparent Life Threatening Event. They don't call it near miss for SIDS anymore.

So they looked at normal babies as one group, they looked babies who had an ALTE as one risk group, they looked at subsequent siblings as another risk group, and they looked at pre-term babies. So they had three risk groups and normals, and they got about 1,000 babies. This was a fancy monitor that had a memory so it would get heart rate and breathing, and it had both chest and abdomen motion. So you could get obstructive breathing, as well as

central apnea, and then you could get position and motion of the baby. The machine would remember, I don't know, a minute and a half before the episode and a minute after the episode, as well as the episode. So you could get all of these. The episodes were defined as apnea more than 20 seconds, heart rate less than X and, you know. Oh, and they had an oxygen sensor so they could get drop in oxygen saturation.

They defined what they thought were serious events that would get the baby resuscitated if he were in the nursery. Normal babies have those all the time, and so do all the other babies. Once the preemie is 43 weeks old, he has it at the same rate as all the rest of them. But they've got tons and tons of data. This machine would memorize so many minutes every hour or so, so they had all-night, and there is just tons and tons and tons of data buried in that. One of the centers was doing the retrieval of the data and they now have it pretty much on a computer system so it's accessible. That has been released now to all of the principal investigators in the studies. Toke Hoppenbrouwers, you've met Toke, haven't you?

DR. GARTNER: Yes.

DR. HODGMAN: She's a PhD. She is a PhD in psychology who worked with me. She was at UCLA, just finishing her PhD when we started these studies, and she's worked for me through the last 20-plus years. But anyway, she went back east and got the data, and got them to explain it to her, and how to retrieve it and everything. She presented it to a group of us who are still interested. I just got all excited. There is just a ton of stuff.

DR. GARTNER: So your center was a participant.

DR. HODGMAN: Yes.

DR. GARTNER: In contributing patients to this collection.

DR. HODGMAN: Yes, yes. And we have our own sleep study on the preemies. One of the reasons I got involved in all this is because our premature center provided us with a lot of the patients. We now have fellows and students who are working on digging out the data, because finding the etiology of SIDS may or may not be in that data. None of the babies died. They had alarms, so when the babies had these serious events, the alarm went off and wakened the babies. They wouldn't have awakened if it hadn't had an alarm. Well, who knows? But you can't look at the etiology of SIDS in this study.

DR. GARTNER: The biggest problem in SIDS, I think, now, at least in our experience in Chicago, is the issue of infanticide and how many of those were murder.

DR. HODGMAN: Yes, and how do you differentiate?

DR. GARTNER: It's very difficult. We had some cases where the parents admitted it afterward, and so that's how we found out, but no, it's very difficult, and that's one of the problems in doing those studies.

DR. HODGMAN: Southall, in England, put TV monitors in patients' rooms of patients admitted after an ALTE. He filmed —

DR. GARTNER: Episodes of attempted murder.

DR. HODGMAN: Filmed the mothers when they were visiting, and a startling number of those mothers were interfering with their infant.

DR. GARTNER: Yes.

DR. HODGMAN: And that's still not very well accepted in lots of circles. I think it's a significant issue, certainly.

DR. GARTNER: I think Kings County also reported similar data. What percentage do that they don't know.

DR. HODGMAN: It's quoted as 3 to 5 percent of sudden infant deaths.

DR. GARTNER: It's probably more.

DR. HODGMAN: I suspect that's a little low.

DR. GARTNER: Right. I think you're right. It's higher. But I don't know what it is.

DR. HODGMAN: Yes. Well, anyway, I'm still involved with at least looking at monitoring of infants and trying to understand what's normal, what's abnormal and when we should get excited. Here again, we talk about science and opinion, but for all of the "severe episodes," there's no data behind any of those. That was all opinion. There was an opinion early on, and people were reporting two-second apneas, for heaven sakes. That was Steinschneider. He was big on two-second apneas. It's an intriguing area, and there aren't any easy answers even yet.

DR. GARTNER: That's a tough field, sure.

DR. HODGMAN: Yes.

DR. GARTNER: Now, you're still working.

DR. HODGMAN: Yes.

DR. GARTNER: Tell us what you're doing.

DR. HODGMAN: What am I doing?

DR. GARTNER: Besides this. I mean, you're obviously involved in this research in the SIDS. What else?

DR. HODGMAN: I'm working half time. I'm not working nearly as hard as I used to. I actually stepped down in 1986 from being director of what by then we were called our Division of Neonatology. I have a little trouble deciding when our division started. I took over the nursery in 1955, and it kind of just grew. But at any rate, from 1955, 1965, 1975, 1985, I've been 30-plus years now as director of the division, and I thought, "Eh, it's time for somebody else to have a crack at it." Also at the time, the physicians at County were paid by the county. We had to have USC Medical School appointments in order to be hired, but our money came from the county. If I stepped down, I would free up my county salary, and I would collect my significant county pension, because I'd been working in the County since I was a resident. County was great because salaries started relatively high for new faculty, but then they didn't go much of anyplace. They didn't advance, so there was a point at which the school would start adding the supplement to their faculty salaries in order to maintain the older members at a decent income. I had a school supplement and, bless their heart, they're still paying me that.

DR. GARTNER: Oh, that's very nice.

DR. HODGMAN: Without any financial problems, I could step down, and that left, then, a position free, so we could hire an associate director for Paul Wu who took over as director. One of the reasons I stepped down was to free up a position, which we needed, and probably the most important reason was I figured I'd had enough administration and I could spend my time doing some other things.

DR. GARTNER: Excellent.

DR. HODGMAN: I didn't go half time for a while. Paul was director for four years. The guy we appointed as his associate director turned out to be a disaster. I mean, it was terrible. He finally resigned, bless his heart. But Paul decided that he did not want to be director. He just didn't like it. He wanted to stay on the faculty. So he was director for four years, and then he resigned. They asked me to come back as acting director, and that was 1990, 1991, so I did that. This jerk fortunately left or my first job would have been

to can him, of course [laughs], but I didn't have to do that. He had gotten the message and had gone elsewhere.

My job was to kind of pull the department back together, and that was easy to do. I mean, that year we had, oh, I think we had 11 abstracts in to the research meetings. I mean, the whole crowd pulled together. But you can't take it ahead. Long-term plans, new hires, and going after people you'd really like to have on your faculty has to be done by not an acting director but by a director. I could glue it together, and it was easy, partly because my faculty wanted to run a decent outfit.

DR. GARTNER: They wanted to succeed.

DR. HODGMAN: And they were very cooperative and very helpful. But I couldn't take it into the next century, so I agreed to be an acting director while we looked for a new full-time director. Well, we found three perfectly competent guys, and the school by now was paying the salaries, not the county anymore. And the school was dragging its feet about finding the money to hire a new director, and so finally I resigned again. I figured as long as I sat in that chair and as long as the place was running, the school would never find the money to hire a director, so I resigned, and I refused to sign a piece of paper or do anything because I wasn't director anymore. So they found the money, and they hired Bob [Robert] deLemos.

Since then, — well, someplace along in there — I started cutting back to about half time. I find I need more down time than I used to. I don't have the energy I used to have. I was complaining to Istvan Seri, who is our current director. He said, "What do you mean? You've got more energy than half the faculty." [Laughs]

DR. GARTNER: I'm sure you do.

DR. HODGMAN: It's mostly a façade. It really is. But at any rate. I gave up rounds in the NICU. Now, I did that very reluctantly, because that's where I spent time with the residents and the fellows in the NICU, but you can't do NICU half time. I mean, you either do it full time or you don't do it. Rounds twice a day and on call every other night and on call every other weekend. I'm really not up to that anymore.

DR. GARTNER: That's hard work. That really is hard work.

DR. HODGMAN: Yes. So anyway, I'm not doing it, and I do miss the NICU, that I'm not doing it, but I still do the normal nursery. I do it every now and then. I take a week and I make rounds in the normal nursery because I enjoy the normal nursery. A lot of our crowd are not that excited, but you know, our normal nursery is not all that normal. I mean, there isn't

a baby in there who doesn't have something you can discuss. We don't give the tiny babies, the less than 750 grams, to our residents who go through the NICU. They go to nurse clinicians and fellows. Our residents aren't going to need to know how to take care of those babies because anywhere they go, except the wilds up upper Wyoming or someplace, there are going to be neonatologists taking care of those babies. But the pediatricians are going to take care of the "normal babies," so they need exposure to jaundice and all that good stuff. Anyway, I like the normal nursery.

DR. GARTNER: The last five years, I've been attending in the normal nursery and loved it. It's a great teaching place.

DR. HODGMAN: Yes. So anyway, I do the normal nursery, kind of keep my hand in, and to a large degree, they let me do kind of what I want to do, which is sort of nice. And I suppose I have to tell you, probably they've been doing that for years. [Laughter]

DR. GARTNER: Maybe forever.

DR. HODGMAN: We have grand rounds once a week, and one week the newborn division puts on grand rounds. We have new lectures for our pediatric residents, and one day a week those are Neonatology.

Oh, I have to tell you this. One of the things I have been interested in, and still am interested in, has been the bioethics issues. When I was trained — I think all of us, my era, were trained likewise — we were trained to do everything you knew how to do right up to the patient's last breath, and there was nothing about backing off. Well, of course, we weren't ventilating babies. We weren't giving them parenteral nutrition. IV fluids, yes, parenteral nutrition, not. So you couldn't keep a dying or a dead body going for hours, for days, weeks, maybe a month. In 1979, just before the Baby Doe flap, we were starting to talk about withdrawing care. The country was starting to talk about it, and we were starting — not so much then, but a little later — we started to talk about withholding resuscitation from the baby who is really too immature to have a decent chance to survive and be normal. And I have to tell you parenthetically, I think we're still too hot on. I think we're going after too many, too small.

I walked into our nursery one morning, and we had had a pre-term baby born to a diabetic mother who had been very bad about taking care of herself during her pregnancy, so the baby was born too early and in trouble, and the baby had severe RDS [respiratory distress syndrome]. She was being ventilated, and she was edematous.

In the old days, before ventilation, the premature baby would be in respiratory distress, and he would become edematous, or at least he'd gain

weight or he wouldn't lose, and then sometime between 36, 48 hours, he'd start to diurese, and you knew he was going to get well, okay? All right, well, here's this kid. She was days old by now. She had had two previous cardiac arrests, and this poor little cookie was doing her very best to die. And I walked into the nursery, and she was having her third cardiac arrest. One of my good junior faculty — he's now in charge of the department of pediatrics at Irvine, a darling guy — is there, pounding on her chest. This poor little edematous thing, bouncing up and down in the incubator, and he's pounding on her chest to try to restore her heart rate. I don't know where this came from, but I looked at him, and I said, "Stop!" and he jumped. I said, "What are you doing?" There was this big group of people around this exciting moment, and they all disappeared into the woodwork. [Laughter] We finally looked at each other, and he said, "Yeah, I think I shouldn't be doing what I'm doing," and so he backed off and the baby died.

Well, the two of us got together and decided we needed an ethics committee that could be available to review cases because nobody was ready to discuss this openly. I mean, I'm sure people backed off on patients they thought were going to die. They must have. But it was not discussed. So we figured we needed to start to talk about it. So anyhow, the two of us put together a bioethics committee. This was 1979. My administration had a fit. They were very worried about this. They couldn't tell us not to do it, but they said, "For heaven sakes, keep it under wraps." Now, I know what they were worried about. They were worried about the headlines in the *LA [Los Angeles] Times* saying, "Minority babies being done in at the County Hospital," right?

DR. GARTNER: That was one of the things they were worried about.

DR. HODGMAN: Yes.

DR. GARTNER: Lawsuits, I'm sure, was another.

DR. HODGMAN: Our families don't sue all that much, but yes. So anyway, we did keep it low key. We now have a Fetus, Infant and Child Bioethics Committee for Women's Hospital, which has been going on since 1979. Last year, JCAHO [Joint Commission on Accreditation of Healthcare Organizations, now called The Joint Commission] was very interested in patients' rights and ethical issues, and our administration was able to sit back, smile pleasantly, and tell JCAHO we have had a bioethics committee since 1979. [Laughs] So it's come around full circle. But as you get better at what you do and as you are able to prolong dying, then I think you've got to start to look at what you're doing.

Bob deLemos was an interesting director. He was an excellent doctor. He was the best teacher in our whole faculty, but he liked to hold all the cords

together in his hands. He had no idea what to do with me, as a director. Pretty much he left me alone. But if it twitched, he would go for it. He's a good Catholic. Well, I don't know how good, but he was a Catholic. And so we became very aggressive. Well, I had a medical student — we'll get to medical students in a minute — who as a project under my direction looked at all the babies. We picked 600 grams to give a reasonable number he could get around in a summer's project. We looked at two-year follow-up. Of the survivors, we had follow-up on 93 percent of them, which for a county hospital is spectacular. We had some we could talk about.

He put this together and he presented it at the WSPR, and then, bless his heart, he wrote it up with my assistance, and we finally got it published. He was a freshman when he started it and he was a senior when we got the paper published. But he found 25 babies less than 600 grams who had survived, and 24 of them we had follow-up on. Two had died of respiratory problems after discharge from the nursery. One, we had seen at a year. She appeared normal at a year, but we couldn't get her back at 2 years, so she was a bit of a question mark. But she was the only one of the 22 babies on which we had data who was potentially normal. The rest of them were all seriously retarded, with cerebral palsy, blindness and gastric tubes because they couldn't swallow. You know, awful. And not a single normal one except this maybe one. This was less than 600 grams.

This did actually change our policies, although I don't think they changed them far enough. We now are not routinely resuscitating babies less than 500 grams or less than 24 weeks gestation. Then we have a gray period where we leave it up to the family. If they want the baby resuscitated, we will, and if they don't, we don't. Then 26 weeks and 600 grams, I think over that, we routinely resuscitate them, which I think is probably pretty standard across the country. I still think it's too low, personally. You know, these babies, the ones that turned out so badly, half of them were SGA [small for gestational age] at birth. All of them were SGA when we discharged them from the nursery, and they were proportionately SGA. Their weight was down, their length was down and their head circumference was down. I think we starved those babies in the nursery. During a time when their brain was developing rapidly, they didn't get enough food. I truly feel that until we know better how to support those little cookies, we ought to be a little more careful about what we're doing.

DR. GARTNER: You're right. That's a good point.

DR. HODGMAN: I got part of the way with my crowd. I haven't truly convinced them. I probably won't. At least I keep them thinking about it. So the bioethics issue has been interesting.

I got involved both with CMA, California Medical Association, and with Los

Angeles Medical [County] Association, LACMA, on committees, some of which were joint bar [The State Bar of California]-medical committees, and some of which were just medical committees, in looking at these issues of life support and withdrawing care and all that kind of stuff. I think as you get better at what you're doing —

END OF TAPE 3, SIDE A

DR. HODGMAN: The other thing on which I've been spending a fair amount of time is mentoring. I have four groups I can mentor. I can mentor students, I can mentor residents, I can mentor fellows and I can mentor our young faculty. All the faculty is younger faculty for me. Our school has a Salerni Collegium, it's called, SC. It's a support group for the medical school [Keck School of Medicine of USC]. It was started back in the 1960s, I think. I'm a charter member of it. It was started by several of our alumni faculty. [U]SC is a private school. UCLA is a public school. If you live in California, until recently, at least, UCLA was very cheap. They used to tease that it cost you more to park your car than it did to pay your tuition at UCLA. [U]SC, on the other hand, is the level of most private schools. So every year, we would lose good students to UCLA because they couldn't afford us. So we started this support group for the students, called Salerni Collegium, whose major job is to raise money for scholarships for the medical students.

A few years ago, we started a student chapter for the medical school, with the hope that, if we could help the students young and get them involved in the organization, then they'd stay with it after they finished their schooling and their training and then become active, supporting members. Whether that's worked or not, I'm not too sure, but the student chapters have been fun. I'm the chair of the liaison committee, from the parent organization to the student chapter. We have mentoring programs where we sign students up with physicians in specialties in which the students think they'll be interested. We have a career day. We also have a resident day for heads of resident programs to come to the medical school and present their program to the students, looking, obviously, for potential residents. So we have a lot of mentoring programs.

This puts me in contact with a good-sized group of students. Our school now insists each medical student do a project. They all have to finish a project in order to graduate from school. This, now, has given me access to students who need to do projects. We have this huge database from our nursery, although our deliveries are dropping, but we have it pretty much on computers, which is accessible for the students. They can come and make rounds in the nursery because they need to see what the babies look like, and I send them to the follow-up clinic, because I think they need to see that. Then this computer program is accessible, and they can print out what they need and take it home and work on. That's been very effective.

In fact, I've gotten a bunch of abstracts and two papers from students' progress. These, particularly the young ones, freshmen and sophomores, need a fair amount of input because it's too soon for them to really know what they're talking about. Now, I have only a couple of the residents I've mentored. The residents mostly are busy learning residency, and there are not very many of them who are interested in doing even clinical research. But all of our fellows must produce a project. They have to produce something publishable. We can't approve of them finishing their fellowships unless they do. So that's another source.

DR. GARTNER: But it doesn't have to be published, it just has to be publishable?

DR. HODGMAN: I think if they present it, if they get it accepted as an abstract at a research meeting and present it, I think that's acceptable. But that is published, actually, because the abstract lists are published.

We have — Bob DeLemos brought him to us — a PhD by the name of Parviz Minoo, who is a microbiologist, a darling guy, very bright, very interested in medicine. He comes on all our grand rounds, which he wouldn't have to do, but does because he's interested. He does, of course, bench research. He's been particularly interested in cytokines in chronic lung disease. All of the fellows go through his unit so they get exposed to what real research is like. Some of them get hooked on that and some of them don't. For the ones who don't, we have then this clinical information, and this CHIME study I told you about, which is a gold mine. I already have two fellows and a student signed up to work on specific areas of looking at data from the CHIME study. I've been doing a fair amount of that. I have one of the fellows who's assigned to me as, you know, I am her mentor.

Then the younger members of our faculty, if they're going to progress academically, need to present abstracts. They write papers. Again, we have this great clinical database. We have a good pediatric pathologist. Our obstetrician sent every placenta on a baby who weighs less than 1,500 grams to pathology. I mean, it's huge and needs to be investigated and massaged a bit. So we've got lots of potential data there for people to work at different levels. That's where I've been spending a significant amount of my time.

DR. HODGMAN: That's very worthwhile. What are your thoughts about the current sort of content and quality of fellowship training in neonatology? Do you think it's where it ought to be? Do you think the research orientation is a waste of time or a good thing? What do you think we might do in the future? Should we change it? I mean, there's a lot to talk about.

DR. HODGMAN: I think a little depends on how you define research.

There are certainly people — I'm clearly one of them — who did not get hooked on bench research, but was interested and am still interested in asking the clinical questions and trying to get decent answers on those. I don't think that's less worthwhile or less important than bench research. I think they all have their place. I think there are going to be residents and fellows, particularly fellows, and I think it's going to be the majority of them, who are not that interested in bench research, but are more interested in asking and trying to answer the clinical questions, and there are plenty of those around.

DR. GARTNER: Do you think they all should have exposure to or be required to do research?

DR. HODGMAN: Yes, but all of us have to keep educating ourselves after we get out of school and training. I mean, as we've talked about this afternoon, things are certainly a lot different today than they were when I finished medical school and my residency. That's going to continue going. I see no change in the future. The kids are going to have to continue to educate themselves once they get out of school and training if they're going to be adequate physicians. Whether they're going to be academicians or practicing or whatever, they're going to have to do that. And you educate yourself by reading the literature. Well, half of what's in the literature turns out to be wrong, okay? I mean, that's appropriate, because it's cutting edge. If it was well established, it wouldn't be in the literature, it would be in a textbook. So it's okay to read the textbooks, but really to keep up with what's going on, you've got to read the literature.

I think if you're going to educate yourself through the literature, you need to have some grasp of how the literature happens, some way to evaluate a project, a program, some way to decide if the author really is coming up with the proper conclusions. I think that's an essential part of you being able to continually stay up to date in your profession. I think a little taste of what it takes to put together a project is good for all physicians, no matter where they end up. There's no reason why that can't be done at a level where it is acceptable at a research meeting. The whole country has Southern Research [Southern Society for Pediatric Research (SSPR)], Western Society [for Pediatric Research (WSPR)], which is mine, New England [Eastern Society for Pediatric Research (ESPR)] — I mean, there are —

DR. GARTNER: Midwest [Midwest Society for Pediatric Research (MWSPR)] has one.

DR. HODGMAN: All around the country. The primary reason for having these is to give young investigators an opportunity to present their work. I think getting to present at a research meeting is not all that difficult, and I think that's good experience. I don't think it matters if you decide you're

going to spend your life in research or if you're going to spend your life taking care of patients. I think you need some exposure in order to be able to properly understand what you're doing, so I'm in favor of forcing.

DR. GARTNER: You'd continue the fellowship in its current structure. You're happy with the way —

DR. HODGMAN: Well, no. I think there's too much emphasis on research. Our fellows are supposed to have — is it one clinical year and two years of research?

DR. GARTNER: Something like that.

DR. HODGMAN: I think so. I think there's too much emphasis on research at the present time. I think to require some research effort and understanding for the fellows is important. I think to be able to offer research exposure to the fellows — and I think they're in the minority — who are really interested in that is wonderful. But I think a year's clinical and two years' research is out of balance for most of our fellows who are going to be clinicians.

DR. GARTNER: Do you think they get enough clinical training in the one year, or do you think they need more clinical training?

DR. HODGMAN: No, I think they need more. I think there's a lot out there.

DR. GARTNER: I think there is some discussion now about shifting.

DR. HODGMAN: I would say two years of clinical and one year of research. I would be comfortable with that. And I think if you want all but maybe the exceptional fellow to do research, you're going to have to give them time to do it.

DR. GARTNER: More than two years.

DR. HODGMAN: Because during their fellowship, you want them to at least get their feet wet. You're going to have to give them the time, because when you're assigned to the NICU or any busy service, you don't really have time. I have to tell you, all my original papers, I wrote between the hours of 1:00 and 3:00 or 4:00 a.m.. My kids were in bed, my husband was asleep, the dog was asleep, the telephone didn't ring. That's when I had time. But not everybody's going to do that. Not everybody has the energy to do that.

DR. GARTNER: Not everyone functions well. That's unusual. I think you're unusual in being able to do that.

DR. HODGMAN: Well, I have to tell you, I don't do it anymore. [Laughs] Now during those hours I am fast asleep.

DR. GARTNER: When did you first have the self-recognition you were a neonatologist, or at least that you were a newborn specialist, if not the term neonatology?

DR. HODGMAN: That's a good question. I suppose, in a teaching institution, the stage where I became responsible for teaching the residents what they needed to know about the newborn was probably the point at which I could say, "Hey, I am a neonatologist." I'm not sure I did that, as a matter of fact. I think it just kind of all grew. But I would think that would be one defining point.

DR. GARTNER: When do you think that happened?

DR. HODGMAN: Where I was taking my knowledge and passing it on to the next crowd coming up. When did that happen? I think it happened probably about two or three years after I started spending most of my time in the nursery.

DR. GARTNER: Did it coincide with having your first fellow, or did it occur before you had a fellow?

DR. HODGMAN: I think it coincided more with training the residents than the fellows, but we had our first fellow about the same time, so maybe a little later. Early on, I was the one who made rounds in the nursery. It was just I. We had our voluntary attendings, and they were very helpful, but I was the only full-time person, so when the residents had problems, I was the one they came to. And I was very close to the residents. I wasn't that much older than they were, either, so we were very collegial, and it was good. I think that was probably the point at which I began to really feel I had special knowledge.

DR. GARTNER: Were you the one who encouraged the first fellow or the development of the fellowship program? How did that come about? Was it because you consciously realized you needed to train people as neonatology fellows, or was it the fellows or the residents who came to you and said they wanted the training in neonatology?

DR. HODGMAN: We started out with research fellows who contacted us, so our first fellows had the interest, and also, as we discussed, they had to have the financial backing. They had to be able to live and eat. Most of our first fellows were foreign. Either their family or their school would pay them to come. We could not give them clinical responsibilities because they had to

have a California license in order to take care of patients at the County Hospital. But they could help with research, they could make rounds, they could use the library, they could get educated. And, of course, they could examine babies. We didn't make them keep their hands off, but they couldn't do procedures.

DR. GARTNER: They were approaching you rather than you deciding you wanted to have a fellowship program.

DR. HODGMAN: They approached us.

Now, the other thing I have to tell you is that I really encouraged Central and South Americans. I sort of figured we're all Americans in this together, and of course increasingly, as our hospital became Spanish-speaking, it was a big advantage to have Spanish-speaking fellows. In order to be fellows, they had to speak English well because they couldn't go around and get anything out of it if they couldn't understand what's going on. So I really consciously encouraged fellows from Central and South America. And we had a bunch. One, who became an important faculty member, was Luis [A.] Cabal, who grew up in Cali, Colombia. He went to medical school in Cali, but he came to the United States for his pediatric training. He was training in Detroit, as I recall, and he came out to us for an elective month while he was a resident because he was interested in the newborn and he wanted to see if he liked it.

Now, somewhere along the line, our first three or four years of fellows were research fellows only, but then the unit was growing and was getting more complicated. We now had babies on ventilators. We now needed somebody in the hospital full time to supervise the babies' care. That's when we started getting clinical fellows, most of whom, I guess, found us.

DR. GARTNER: But you made a conscious decision you wanted a clinical training program.

DR. HODGMAN: Yes.

DR. GARTNER: That you needed to train people.

DR. HODGMAN: Yes, because we had to go to the county and get the money to support our fellows, and the county, bless their heart, came through with it.

DR. GARTNER: And that came from you. That was your solution to the clinical problem.

DR. HODGMAN: Yes, the county didn't think that up.

DR. GARTNER: Or anybody else. I just wondered if it came from other people on the staff or from you or all of you together.

DR. HODGMAN: It came from the department. I can't tell you it was just my bright idea. It came from the department, and it was supported by our whole pediatric department or we probably wouldn't have had enough pressure to get it accomplished.

DR. GARTNER: What do you see or know about the role of neonatology in the economics of the hospital and of the department?

DR. HODGMAN: Years ago, all of the NICUs, except for one in Southern California, started in county hospitals. None of the private hospitals had NICUs. The reason the private hospitals did not have NICUs was that OB and newborn were considered loss leaders. They didn't make money, they lost money. But the hospitals supported them because they were hoping the families who came would then have some loyalty to the hospital and come back for their surgery, and their heart attacks and the things that did pay money. But there was no high-risk OB-newborn care. Children's had an NICU, but all of the other ones besides Children's were in the county hospitals.

We were really regionalized in those days. We had a lot of voluntary faculty, I told you, that came into the nursery. They would go back to their own hospitals, and they would stimulate improvement in newborn care. Several of them actually established secondary intensive care units. They were on our faculty, so they would come in and make rounds. Then each member of our faculty was primarily responsible for one of these hospitals. We would go out to their mortality reviews and programs and stuff, so it was really very collegial.

Now, along there somewhere, the private hospitals discovered you could make money on intensive OB and newborn care, and then NICUs cropped up all over the place. A lot of them were just signs in the window that said "NICU," but without very much behind it. That took care of regionalization locally. When hospitals figured out intensive OB and newborn care brought in money, then they became interested.

DR. GARTNER: Now, is that true at County as well, that the neonatal unit is bringing in a large amount of revenue?

DR. HODGMAN: Oh yes. The neonatal unit gets CCS [California Children's Services] money on all those babies in the neonatal unit at NICU rates, and our rates are cheap compared to most of the private hospitals. Even so, they're \$1,000-plus a day. Sure, our pediatric unit, primarily the neonatal unit, supports half the hospital, yes.

DR. GARTNER: That's true in many.

DR. HODGMAN: Yes.

DR. GARTNER: Interesting.

DR. HODGMAN: It's true. Well, children's surgery is a very strong support, but the NICU brings in a lot of money.

DR. GARTNER: That's true in Chicago also.

DR. HODGMAN: And one of the reasons the NICU does bring in money is that those babies all qualify for CCS.

DR. GARTNER: CCS is?

DR. HODGMAN: California Children's Services. Babies with RDS qualify, babies on oxygen qualify, you know, sick babies. Now, once they're stabilized, no, then they don't qualify.

DR. GARTNER: They go back to Medi-Cal or?

DR. HODGMAN: Yes, or private.

DR. GARTNER: Private insurance.

DR. HODGMAN: Or whatever. And we're having a fair amount of problems. We have a serious problem with follow-up because the mother of the baby in our hands is, mostly, an undocumented immigrant. She does not get her prenatal care paid for, but since she is delivering a United States citizen, she gets her OB care paid for, and, of course, the baby gets well-baby care paid for. There was a period of time when no private hospital in town would touch a Medi-Cal mom. They didn't want them. With some changes in the Medi-Cal funding, they have now discovered they can make money on Medi-Cal moms, and they're chasing them. They actually set up a recruiting service in our parking lot! And since we're public property, we couldn't throw them out. [Laughs] It really interferes with our being able to follow our babies, because the HMOs [health maintenance organizations] do not want to pay for the baby to come back for evaluation at the County, and the County won't see them for free. The only way we can see them, other than in the county system, is if we have grant money to pay for them, which is very hard to find. So it's really made it very, very difficult.

DR. GARTNER: And the HMOs are not willing to share their follow-up data with you, if they're seeing a patient?

DR. HODGMAN: They don't have it.

DR. GARTNER: They don't have it.

DR. HODGMAN: They don't have it. I mean, try to find out from the HMO if the baby's breathing.

DR. GARTNER: That's a big problem. Do many of your patients go back to Mexico?

DR. HODGMAN: Yes, but they go back and come back. They tend to not go back and stay. And increasingly, I think, the babies born here tend to stay here because they're citizens.

DR. GARTNER: Which is why they came here to deliver in the first place.

DR. HODGMAN: No, they came here to work. That old bit about how they come over the border to get —

DR. GARTNER: Pregnant women are not coming over just to deliver.

DR. HODGMAN: No. Oh, there may be a few, but not many.

DR. GARTNER: Not the majority.

DR. HODGMAN: Yes. They come to find work.

DR. GARTNER: Good reason.

You wanted to get back to the issue of women. You said there were more things you wanted to talk about, about women in medicine or pediatrics or —

DR. HODGMAN: Yes. We were talking about women in medicine, and I was saying that I had not felt discriminated against, and I haven't. I've been active in a bunch of societies. I suppose there are joiners and abstainers, and I tend to be a joiner. I don't see much point in belonging to something unless you get active in it. I mean, why should you pay dues to something you don't pay any attention to? So I've been reasonably active. Now, I have to tell you, when I was in high school, I didn't take typing. I didn't learn how to type. Now, for a woman of that era, that was a statement. It said I didn't want to be a secretary, I'd rather be president. [Chuckles] And I want you to know I have made it. I have been president of every single local organization I belong to.

DR. GARTNER: Well, good.

DR. HODGMAN: So I haven't felt any particular prejudice. I think the Academy has been good and ahead of most of the organizations I belong to, but if you look at the list of Academy presidents. Okay, it's 75 years now, and there are 73 guys and two gals up there. Well, there's going to be a third one next year. And the fourth one is at least nominated. So that's beginning to change. And I can see the guys saying, "Oh, if we elect Eileen [M. Ouellette] we'll have two women in a row."

DR. GARTNER: From California.

DR. HODGMAN: No, no, Eileen's from —

DR. GARTNER: She's not from California.

DR. HODGMAN: No, Eileen's from Boston. But the president and the president-elect will both be women? Oh, boy! Well, we've been doing that with the guys for 75 years, practically, and nobody's brought it up. Part of it is society's acceptance of women in professional and dominant positions. Part of it is women wanting to be in professional and dominant positions. I think people are going to make great strides. People ask me why am I still interested in women's issues, which I still am, and my answer is, look at the Congress of our United States. It does have women, and they are increasingly obvious, but the proportions are all out. It should be 51 percent women if they're going to be really representative. But even worse than that, look at my dean's committee. My dean's committee is automatically made up of the chairmen of the departments — the chief of pediatrics, the chief of surgery, the chief of OB, and there are about 25 departments in the medical school. How many women do you think sit on the dean's committee? One, chief of pediatrics. And there has been one, I think rarely two, off and on. So the higher levels of academia are still pretty well dominated by the fellas.

DR. GARTNER: Now, do you think that's because the men have kept the women out, or is there some other — I mean, why is this?

DR. HODGMAN: I think there are two things. One is I think the guys have kept the women out, whether consciously or not, but I also think if you want to end up as president of something, you've got to go get involved. So I think part of it is that the women have been more reluctant than the men at getting involved in being chairmen and getting involved in being president of an organization. I think it's a two-way street.

DR. GARTNER: Why have women chosen not to?

DR. HODGMAN: Well, see, it's hard for me to answer because I didn't choose that, so I don't know why they're so stupid. [Laughs]. I don't know,

some may be hesitant of their reception. You know, I did a lot of this while I had little kids. I found I had to stay home. I could be gone one night a week. It was okay. My family would run. If I was gone more than one night a week, it started to become unglued. What was I doing? I was coming home and yelling at the kids. But I had to come home and yell at the kids a reasonable amount to keep the place running. But that still gave me ample time to be involved with the local Academy and to be chair of a committee and work my way up through the ranks.

And partly, of course, I enjoyed doing it. I found it rewarding and fulfilling for me. That's most of the reason I was doing it, I'm sure. These are all do-good organizations, interested in child advocacy, interested in improving physicians' positions, interested in improving care and making it more accessible, so it's sort of a double okay. You're doing something that's approved by society and by your own internal morality, but you're also doing something that puts you in contact with your colleagues and that's enjoyable. I have enjoyed the organizations I belong to, and I still go to a ton of them.

DR. GARTNER: Let's see. I've asked everyone two sort of related questions: Not just here, but say, globally or at least in the US, when do you think newborn medicine, as a concept, began, and where? Do you have any idea where our subspecialty began? Where does it come from?

DR. HODGMAN: That's a very good question.

DR. GARTNER: I'm not sure there's an answer to it.

DR. HODGMAN: Yes, I don't think I can give you any single, cataclysmic sort of a discovery because I think it grew slowly. But I think it grew from people who were mostly, but not exclusively pediatricians, because they were the ones who were handling newborns. I think it grew to increasing interest in and curiosity about newborns and how they functioned, and I think early, probably more than in normal newborns, in specific diseases. I point out Rh [incompatibility] as one of them. I think that was early, one of the techniques, the development of exchange transfusion. That you could do that really turned around an important problem, because with exchange transfusion you could keep those babies alive and healthy, and they didn't get kernicterus. But they were a big challenge, those exchanges. The babies were anemic and hydropic, and you didn't save them all, but you had a chance. You had a chance. So I think that was one big first.

DR. GARTNER: The technology, in a way, drove development of the specialty.

DR. HODGMAN: Yes, yes. And I'm sure, when you come to the intensive

care — and that’s really the heart of neonatology — it was not totally driven by technology, but it was the technology that led us into areas we couldn’t go before. So I would think it was the ability to ventilate babies, it was the ability to catheterize their vessels, it was the ability to intervene that stimulated the approach. I think looking at normal infants and the behavior of normal infants came after that, not before that. I think people first got hooked on the technology and then got interested.

DR. GARTNER: I think you’re right.

DR. HODGMAN: Now, I don’t think that’s true in child development. I think there were people interested in child development, but they didn’t start in the immediate newborn period. They started a month or six weeks or something, looking at when the babies started to become social beings.

DR. GARTNER: I think there were some who were interested in neonatal behavior.

DR. HODGMAN: Oh, sure.

DR. GARTNER: In the 1960s.

DR. HODGMAN: Of course there were.

DR. GARTNER: Early 1970s.

DR. HODGMAN: There was a gal — I’m blocking her name again — she was very instrumental in getting people interested in newborns, and she wasn’t into technology. She was interested in the behavior. She came out of England.

DR. GARTNER: Oh. There was also the one in France.

DR. HODGMAN: Yes.

DR. GARTNER: Claudine Amiel-Tison.

DR. HODGMAN: There was a group in France, but there was this gal, and she visited here. She visited our unit, and she had a big impact. She was really interested in babies and babies’ behavior.

DR. GARTNER: Do you think that generated, or really had an impact on developing the specialty neonatology?

DR. HODGMAN: I don’t think so.

DR. GARTNER: I don't think so.

DR. HODGMAN: I think it was the technology that did it.

DR. GARTNER: Yes, I think so. I think you're right. How about the naming of the subspecialty as neonatology? Where did that come from?

DR. HODGMAN: Well, that's easy. That comes out of Latin.

DR. GARTNER: Well, yes.

DR. HODGMAN: Neo is new, and natal is birth, so newborns.

DR. GARTNER: Right, but who put that label on us?

DR. HODGMAN: I don't know.

DR. GARTNER: Anybody?

DR. HODGMAN: I don't know. I have no idea.

DR. GARTNER: I always thought Phil [Philip] Sunshine was the one who gave it the name. When I asked him that —

DR. HODGMAN: He said no?

DR. GARTNER: He said no.

DR. HODGMAN: Yes.

DR. GARTNER: So I don't know. I've been asking that. Nobody seems to know who first used that term.

DR. HODGMAN: Phil Sunshine wasn't that early on in the business, because Marshall [H.] Klaus preceded Phil Sunshine at Stanford.

DR. GARTNER: That's correct.

DR. HODGMAN: And Marshall Klaus at the time was into oxygen and ventilating. His interest in behavior came later, so he was a technician first and behaviorist second.

DR. GARTNER: Right, but I can't seem to find out where the name neonatology came from.

DR. HODGMAN: I don't know. I have no idea.

DR. GARTNER: It just popped up one day.

DR. HODGMAN: Yes, I have no idea.

DR. GARTNER: But obviously somebody put it in.

DR. HODGMAN: For a long time, we were “the newborn service.” Yes, and now we’re the division of neonatology.

DR. GARTNER: The premature service suddenly had sick babies.

DR. HODGMAN: Yes.

DR. GARTNER: I would guess the answer to this question is yes, but —

DR. GARTNER: Do you think it was a good thing that neonatology developed as a separate, sub-discipline?

DR. HODGMAN: No. You know, we are the division of perinatal and neonatal medicine, okay? When the concept of perinatal medicine came up, which was in the 1960s, I think, when obstetricians were getting interested in more than just the mother and neonatologists were taking care of babies, the whole concept of that, as I understand it, was to put together a department of obstetricians and pediatricians who were interested in care of the fetus and newborn. That’s what I think should have developed. If you read the early literature of OB and pediatrics — well, the early literature of OB — they tell you how much the baby weighed and whether it lived or died, period. The early literature of pediatrics, you’d think the stork dropped the baby through the window. That division, there are a few places that seem to have bridged it. I think Denver is one of them, where [Frederick C.] Battaglia was on the OB service. I think they were truly perinatal.

But it never happened in our service. We talk to each other, but we’re not really as intermeshed as I think we ought to be for the good of our patients. Not just for the patients, but also for studies of the babies, because increasingly, people are now talking about fetal events and what influence they have not only on the development of the newborn but on the adult after they grow up. So I think that division has been very detrimental and I would personally love to see it bridged because I think it would be helpful.

DR. GARTNER: How do you see that developing? How would you develop a really integrated perinatal service or perinatal discipline?

DR. HODGMAN: I would take the maternal fetal as separate from the rest of GYN and the neonatal as separate from the rest of pediatrics, and I would

put them together in a single department. Now, you'd have to figure out —

DR. GARTNER: You'd have to train people in OB and neonatology, as opposed to OB/GYN [obstetrics and gynecology] and pediatrics.

DR. HODGMAN: I don't think, to be a good maternal fetal medicine you need to spend much time in gynecology, do you?

DR. GARTNER: No.

DR. HODGMAN: No. But I think to be a good neonatologist, you need to have some pediatric background. And I'm sure to be a good maternal fetal medicine, you need to have some obstetrical background, but you could easily go through your routine pediatric OB training and then do this at a fellowship level. Our fellows spend very little time with OB, and I think that's too bad. And their fellows spend very little time with us, and I think that's too bad too.

DR. GARTNER: I agree with you. I actually proposed a residency at [Albert] Einstein [College of Medicine of Yeshiva University] years ago that would be just what I described. That is, just the OB training and just the neonatology training, and the rest of it would be truncated. Much of it would disappear. We actually had an obstetrician, Harold Schulman of OB, who was very interested in this. And then people pointed out to us that nobody would take this as a residency because for obstetricians, when they get old and don't want to look at babies anymore —

DR. HODGMAN: They go into gynecology.

DR. GARTNER: Gynecology.

DR. HODGMAN: Of course. Of course.

DR. GARTNER: And the thought was that neonatologists would also burn out and get tired.

DR. HODGMAN: And some of them do.

DR. GARTNER: That hasn't happened as much.

DR. HODGMAN: Some of them do, but it hasn't happened —

DR. GARTNER: It hasn't been as much as was predicted.

DR. HODGMAN: Yes.

DR. GARTNER: And therefore it was sort of talked down, so we never pushed it ahead, but we actually wanted it.

DR. HODGMAN: But anyway, you'd have the problems with who's going to run this? Are they going to report to the chief of OB or are they going to report to the chief of pediatrics? That would have to be [decided].

DR. GARTNER: We thought it was going to be a separate department.

DR. HODGMAN: Okay. Well, they'd have their own chief.

DR. GARTNER: Perinatal medicine.

DR. HODGMAN: Yes, they wouldn't have to have, but why not? There's a department of cardiology, there's a department — all that stuff, you know. So I truly think until we get the obstetrician interested in the fetus and the neonatologist interested in the newborn together — but we haven't done it.

DR. GARTNER: But you think you could do it at the fellowship level, that you could have a more integrated fellowship training?

DR. HODGMAN: I think so. I think so. And most of our fetal maternal crowd go on into fellowship, and all of our —

END OF TAPE 3, SIDE B

DR. HODGMAN: Rather than having a neonatal fellow spend a year in clinical neonatology and two years in research, we might have him spend a year in neonatology, a year in OB and a year in research. I think that might turn out some very interesting people. I would think most private hospitals these days are into high-risk obstetrics, and most private hospitals these days, as we've discussed, are into high-risk newborn. There would be a clinical, as well as a research place for people like that. It might be most attractive to the researchers, and I think that would be fine, because there are plenty of questions we still haven't answered. We need the input of both.

DR. GARTNER: I agree with you. I agree. It might be a good move.

What about the role of pediatric surgery in the development of neonatology? What contributions have they made?

DR. HODGMAN: Well, two of the major complications of the premature infant are surgical, or could be surgical. One is the PDA [patent ductus arteriosus] and the other is the NEC [necrotizing enterocolitis]. And there are, of course, a long list of congenital problems that have surgical implications. We have pediatric surgeons who operate on our babies who

don't respond to medical care for their ductuses. They come in our nursery and operate on them in their incubators in the nursery, and very successfully. So I think that's a definite plus with very little down side to it. NEC is a tougher problem. I mean, what causes it and how do you diagnose it, when should you intervene, and when should you cut down on the feedings? I don't think any of those questions have been very well answered. They certainly haven't.

DR. GARTNER: I don't think they've really been answered. I would answer that NEC is, to a great extent, caused by not giving human milk.

DR. HODGMAN: Okay. All right.

DR. GARTNER: Because if you give human milk to preemies, they basically don't have it.

DR. HODGMAN: We don't see much NEC and we use formula.

DR. GARTNER: Are you using human milk?

DR. HODGMAN: No, we use formula. Well, we use human milk if the mothers will bring it.

DR. GARTNER: It's tough to get it.

DR. HODGMAN: And we encourage the mothers to bring their own milk. So I think to run a decent place, you need some knowledgeable consultants. Pediatric surgeons are one of them. Pediatric neurosurgeons are another. You need them less often, but when you do need them, it's critical, and they need to know what they're doing. We find we need either neonatologists trained as cardiologists or cardiologists to help us with certain problems. We certainly use geneticists a good deal to look at all of the various permutations of differences in inheritance. And I'm just hitting the ones closest to the top.

DR. GARTNER: The consultants you need.

DR. HODGMAN: You need the whole stable of people who take care of the ills of the newborn. The ills of the newborn are peculiar to the newborn, but they're not different ills. I mean, the babies are human. But you don't need just the cardiologists, you need a cardiologist who knows something about fetal shunts and adjustment to extrauterine life. And we need a cardiologist who knows something about the fetus and the fetal heart, and what to expect and how to anticipate problems.

One of the areas we haven't even talked about is, of course, the whole area of fetal investigation and fetal surgery, and that's beginning to open up a bit.

Again, when I was in training back in the dim dark ages, mothers weren't manipulated. Amniocentesis was rarely if ever done. I don't remember a single one the whole time I was in training. To me, intrauterine was conceptually kind of a dark hole.

DR. GARTNER: The uterus.

DR. HODGMAN: Yes. Well, I know that's not true.

DR. GARTNER: [Laughs]

DR. HODGMAN: Number one, it's 99 plus sonograde. Number two, the baby does get light through the mother's abdomen. I had considered it silent. I mean, consider a gas rush going by the uterus. That must be pretty exciting, huh? [Laughs] There are all kinds of genetic and environmental influences, and we know very little about that. We try to cope with them when the baby's born. You have to be careful with manipulating the fetus to be sure you're not doing more harm than good. Fetal surgery that's been proposed and been tried up to now has not been all that successful, as far as I know. That doesn't mean we shouldn't keep trying, but we need to be careful. But I think that whole area is almost unplumbed.

DR. GARTNER: That's true.

DR. HODGMAN: And important.

DR. GARTNER: I'm sure it is.

DR. HODGMAN: Yes. I mean, I don't think you need to get worried that, hey, we're going to have it all figured out because there are plenty of questions out there, right?

DR. GARTNER: I agree.

I don't know whether you can answer this off the top of your head, but if I asked you what were the three most important advances in neonatology over the last hundred years, what three in particular, do you think you could name those?

DR. HODGMAN: Let me try. The incubator. I think next I'd have to say the ventilator. I mean, in my youth, when we couldn't ventilate babies, babies died. We did an interesting study, one of my younger colleagues and I. I told you I was in the process of mentoring my faculty. We looked at the withholding and withdrawing of care in our nursery, and we looked at all the babies who died and whether they were taken care of right up to the time of death or whether either they were not resuscitated or their care was withdrawn. And what percentage do you think of babies who died in our

nursery had their care withheld or withdrawn?

DR. GARTNER: I'd guess it was pretty small.

DR. HODGMAN: Try 80 percent.

DR. GARTNER: Oh, really?

DR. HODGMAN: Yes. Okay, now, we don't resuscitate babies who are too small. We don't resuscitate babies who have lethal congenital malformations. We don't resuscitate babies with trisomy 18 if we recognize them. Down syndrome we do because that's a different issue. We don't resuscitate Down syndrome cephalics. So lethal congenital defects, we don't resuscitate. And too-small babies, we don't resuscitate. And if the baby is responding very badly and not improving, we may reevaluate after 24, 48 hours and decide to withdraw care because the baby's not responding. And there's an occasional baby, like the one I told you about, that we were resuscitating for the third time. Clearly the baby was not going to make it. But if you don't have a congenital defect and you're over 600, 700 grams, in our nursery you don't die.

DR. GARTNER: Well, that's true. Mortality rates have plummeted.

DR. HODGMAN: So 80-plus percent of the time, it's a decision. Now, something got me started on this, and what was it?

DR. GARTNER: Well, let me just follow up with a question: To what extent do you involve the parents in that decision making on withholding or withdrawing care?

DR. HODGMAN: Oh, we do it thoroughly. If the parents refuse withholding or withdrawing, and we feel that it's a total waste of time, we still try to go along with the parents and discuss it. Usually we do manage to come to an end, but sometimes it'll take us several days to arrive at a conclusion.

[Tape interruption]

DR. GARTNER: You were answering a question about — I think we started out with —

DR. HODGMAN: I was answering the question about the three most important advances.

DR. GARTNER: Three most important.

DR. HODGMAN: Yes, and I said I thought the incubator was number one, and the ventilator I think would have to be number two. And number three's going to be tougher for me because I don't think we're there. I would like to tell you number three was good parenteral nutrition, but I don't think we're there yet. I truly don't think we know how to support these babies. You know, for years nutrition wasn't sexy. Ventilation was sexy, and everybody was into how to breathe for a baby. But recently nutrition is becoming sexy.

DR. GARTNER: Yes, it certainly is.

DR. HODGMAN: It's hugely important, but I don't think we're there yet, but at least I do think we're starting to.

DR. GARTNER: So number three is still off in the future.

DR. HODGMAN: I think so.

DR. GARTNER: We have to get there.

DR. HODGMAN: I think for me, number three is when we learned how to appropriately nourish these tiny babies during a period of dramatic growth. We're beyond the time when organs evolve, but we're in the time when they're growing. And, you know, the brain growth from 28 to 32 weeks is practically a straight line up. To me, the biggest problem at the moment in neonatology is not being able to nourish our babies properly. That would be very important, but I think that's in the future.

DR. GARTNER: We have to come back to you ten years later to find that.

DR. HODGMAN: Yes, yes.

DR. GARTNER: Okay. So that actually answers one of my other questions, which is what are the needs in terms of future developments in neonatology, and obviously parenteral nutrition or good nutrition in general is one of them. Are there some others we are in desperate need of and really ought to be paying more attention to?

DR. HODGMAN: Mortality rates have dropped all along, up to 500 grams. I don't think they changed much under 500, except in Japan, where they chuck it all at all these 300-gram babies. But our follow-up has gotten better. Long-term outcome has gotten better because we're now looking at smaller babies, long-term outcome in smaller babies, so we have improved, but the total poor outcome has not changed. It's just as bad as it used to be. We're just moving it down.

DR. GARTNER: Pushed the age at which we keep the baby.

DR. HODGMAN: I truly find that very discouraging. We have a mother wheeling a child through the lobby of our hospital, and the child is in a grown-up baby carriage. The child clearly has athetoid cerebral palsy and is clearly seriously retarded. Every time I see one of those, I say to myself, “Oh, God, I hope that’s not a graduate of my nursery.” I really think our producing tiny babies where more than half of the infants are not going to be normal, I consider that —

DR. GARTNER: Hold that important thought. That’s a very important issue.

[A technical discussion about recording issues was not transcribed.]

DR. HODGMAN: Okay, listen, we’re an hour and a half away from our dinnertime. Aren’t we almost done?

DR. GARTNER: I think we’re almost finished.

DR. HODGMAN: I think so too.

DR. GARTNER: I have just a couple of more questions, and then I want to —

DR. C. GARTNER: One question we missed earlier.

DR. GARTNER: What was the question? What did we miss?

DR. C. GARTNER: Honors and awards.

DR. GARTNER: Oh, yes. I guess I did miss that, yes.

DR. HODGMAN: I’m sorry, what question did we miss?

DR. GARTNER: I wanted to ask you about honors and awards.

DR. HODGMAN: Oh, yes.

DR. GARTNER: And now I’ll end by asking if there’s anything I left out that you want to say.

DR. HODGMAN: At this point, I’m not sure.

DR. GARTNER: Okay. Well, maybe you said it all. That’s okay. I just wanted to make sure you had.

DR. HODGMAN: It's impossible to say it all.

[Tape interruption]

DR. GARTNER: All right, we're back on. What was the thought we were hanging onto? How small can we go with babies?

DR. HODGMAN: Yes. My problem, as we try to take care of the smaller — and it's not really smaller and smaller. I think we have now learned an important message, which is that maturity is more important than size. We have gone now to spending much more time on dividing up babies by maturity than we do by birth weight. We no longer think if they're over 2,500 grams they're mature. Particularly as you get down into the smaller crowd, maturity is number one on the hit parade that influences outcome. But as we get less and less mature babies, unless we can give them a decent crack at a normal life or at least a reasonably normal life, I don't think we have any business going to huge efforts to resuscitate them and maintain them in the nursery. I truly believe that's immoral, and I feel that way very strongly. I think we really do need to look not just at what we can do but what we ought to be doing. The Netherlands is much more sensible than we are. They looked at their outcome, and their outcome wasn't good, and they raised their gestation and weight limits because they didn't want to develop all these seriously abnormal babies.

DR. GARTNER: Do you think we can get away with that in this country?

DR. HODGMAN: Sure. All we have to do is decide we want to.

DR. GARTNER: I think there might be some —

DR. HODGMAN: Now, will we ever decide we want to? I don't have strong feelings about that.

DR. GARTNER: No, I don't think so. Well, I think it's a tough area, and exactly how you implement it is hard.

DR. HODGMAN: Most of our families want everything done. When you leave it up to the families, the families want you to go. If the baby is too small and I don't want to go, but the family really feels strongly that they want the baby resuscitated, but the baby's probably going to die no matter what I do, my problems is that the family is going to have to accept the death and mourn the baby. If I can't do much for the baby, at least perhaps I can help the family. So I would like the family not to feel that if the baby had been resuscitated it would now be valedictorian of its high school class. I would like them to feel the baby had been appropriately treated. Consequently, if the family is adamant, I go ahead and I do resuscitate the baby. You can

play games, you can pretend to resuscitate him and not do it. But I can't do that. I think that's a very slippery slope.

DR. GARTNER: I agree.

DR. HODGMAN: So I have problems with meeting the parents' expectations so they can mourn. They'll mourn a 500-gramer just the same as they would have mourned a term baby. It's still their baby. Maybe they're mourning the baby they expected and didn't have, but they're still going to mourn. I know they have to, but I would like that to be at least a decent, reasonably healthy process. I get caught in that conundrum, and when I do, I tend to go with the parents. Not happily sometimes. Again, I think it's another reason I have a perinatal service where everybody is involved in talking with the family and everybody is involved with whether you resuscitate the baby or not. It seems to me that would help in that kind of problem. The families would get the same information and same support from everybody.

DR. GARTNER: That's a good point, a good reason for having that.

One thing I wanted to go back to that we missed earlier is we didn't ask you about your awards and honor you've received.

DR. HODGMAN: Yes. I've had —

DR. GARTNER: You did mention the Apgar Award.

DR. HODGMAN: Yes. My most prestigious honor was the [Virginia] Apgar Award, and I received that in 1999. Mel [Mary Ellen] Avery asked me if she could propose me for the Apgar Award, and what could I say? Of course I said yes. I was pleased and flattered she'd even asked me. I have to tell you, I did not expect to get it, for a couple of reasons. One is still this east-west sort of [thing]. It's much better than it used to be, but there's still a little bit of that there. I don't know, I suppose I really didn't consider my career all that prestigious. But anyway, I wrote up the stuff you have to write and sent it in. I was both astounded and extremely flattered and pleased to be the 1999 recipient, because I joined a very —

DR. GARTNER: Great honor.

DR. HODGMAN: Important. Well, it's the peak of my career. There was no place to go from there but down.

The one preceding I think I'm probably most proud of is that for years the *LA Times* had a Woman of the Year. Now, one of the marks of women's progress is they've given that up. They feel they no longer need to single out

prestigious women. I think that's probably progress. But anyway, in 1976, they were still giving out Women of the Year awards, and they had one for the arts and one for science and maybe half a dozen of them. I was the one they picked in 1976 for medicine, so I was selected as a Times Woman of the Year in Science in 1976.

Then I have a bunch of more local. We have a Flower Guild, Charities for Children that used to support our pediatric department and they made me an honorary member, which I thought was very nice. And then we have a — I'm forgetting the name of my own honors. We have a museum here that gives out a woman's award. They're probably all written down in there [refers to a document]. I think it was maybe 1974 when I was selected for that. That was nice, my being presented with [inaudible] with a fancy lunch. There were a sprinkling of them. The Muses of the California Science Center Foundation was what I was trying to remember.

DR. GARTNER: You're an official muse?

DR. HODGMAN: I'm a muse, yes. The muses thought I may be one of them and presented me with this nice honor. And the National Foundation. I don't know if they still do, but they used to have an annual Healthy Baby Day, and I got a Meritorious Award from them. And the B'nai B'rith Women have a Cameo of Commitment [Award], and I got one of those. I mean, these were nice. The American Cancer Society gave me a Certificate of Appreciation. They're all very nice, but the best one, of course, was the Apgar Award.

The other thing I have to tell you is that I was selected to be one of the doctors on a program called "Lifeline," which was developed for NBC. It was started by a doctor from the East Coast who got bored with being a doctor. He was always interested in media and all that stuff, so he put together a one-hour program on a pediatric surgeon from Washington where he showed the surgeon's professional life and also his home life. Now, at the time, people were very interested in doctors' home lives, so he took this to some guy in charge at NBC. It was very well done. NBC liked it, but he said, "I can't do anything with an hour. I need a series." So then the guy got started collecting doctors about whom he could make an hour's program, combining their family life with their professional life. I was the only woman on the program. They very much wanted a woman. They didn't want to see me just lecturing my medical students, they wanted to see me in business, in my nursery.

So they came out to see me to see if I would do this, and I said no. I mean, academically it cut no ice at all. They were really asking me to sort of let it all hang out on national TV, and I wasn't at all sure I wanted to do that. But home birthing was big in California at the time, and NICUs were still all

mysterious. The public weren't allowed in NICUs yet. And it dawned on me that if I did an hour entertainment program, that might have much more impact than an hour on PBS entitled, "Education." So I finally said okay, I would do it. And they said, "Oh, we won't take any of your time. We'll just follow you around and shoot what you're doing." That was totally a bunch of baloney.

At any rate, they shot me in my nursery, looking at X-rays and looking at the baby, and I discovered that when I was busy working, I became totally unconscious of the fact that they were there. They just disappeared into the woodwork. When I was going down to lunch and they were following me with their camera, I was supremely conscious of the fact I was being filmed. They also wanted personal stuff, so they took pictures of me flea spraying, not this dog, but a previous dog. I grew up in Southern California and I do like to body surf. I still do that in my old age. So they took pictures of me at the beach, at Laguna [Beach]. And actually, it really came out pretty well.

The reason I'm telling you this is that I have a place in Hawaii on Kauai, and I don't know if you saw "South Pacific," but it was filmed on Kauai, and the Bali Hai part where the natives are swimming in a pool is there. There's a stream that runs down among some rocks and it goes over a little waterfall, maybe about six, eight feet high into this pool. You can go down the stream and go over the waterfall, you know, dive into the pool and come up. I had my daughters with me, and we were playing around. I was in my bikini, and at that point, I had my hair long to look [clears throat dramatically] more mature.

Anyhow, I went down the stream, I went over the waterfall and I went down in the pool. I came up with my hair hanging in my face, streaming water, and this little kid looked at me, and he said, "Aren't you a doctor?" [Laughs] And I said, "Yes." It turned out he'd seen the show. [Laughter]

DR. GARTNER: He recognized you even with your hair in your face.

DR. HODGMAN: Right. Anyway, that was neither an honor nor an award, but it was an interesting experience.

Now, in answer to these more philosophical questions, people say if you're going to make an impact, if you're going to have a distinguished career in a field like medicine, you need to be selfless and you need to put your own feelings aside and empathize with your patients or whatever you're trying to do. I have never found that true, because I have really enjoyed what I do, and I think I have made a contribution as I went along. But I wasn't doing it for that, I was doing it because I was interested in what I was doing, and I enjoyed what I was doing. I got all the kudos and the good feelings and the strokes out of being successful — I wasn't always successful, but being

involved in what I was doing. And as I told you, hey, I'm still working, because I'm still caught. I don't think you have to be so selfless and martyred to contribute and to make an impression on whatever field you decide you want to stay in. And I think maybe the fact you like it and you get strokes out of it is not all bad and encourages you to keep going, don't you?

DR. GARTNER: I think so.

DR. HODGMAN: Yes.

DR. GARTNER: It's an important part, that's for sure. But I'm sure you also get satisfaction, personal satisfaction knowing you're doing something that's important.

DR. HODGMAN: Of course. Of course. Of course. Of course. Sure. Personal satisfaction comes in lots of sizes, fortunately.

DR. GARTNER: That's true.

DR. HODGMAN: But, yes, I enjoy working with my students. Some of them pick up better than others, but the fact I'm there and can offer to them, I think that's important.

DR. GARTNER: Now, is there anything more, anything you'd like to add, anything we've missed? About yourself, about family, about your work?

DR. HODGMAN: You know, I don't —

DR. GARTNER: The world scene?

DR. HODGMAN: I think we've covered it pretty well. I really do.

DR. GARTNER: Then I want to thank you very much. This was a wonderful interview. I enjoyed it.

DR. HODGMAN: Maybe there is something more I need to add. I have had a small experience in taking medicine to other countries, and the most important one is that there is a Children's Medical Care Foundation, which was started by a bunch of ex-Poles in Los Angeles who raised money for pediatric care in Poland. They started doing this shortly after World War II. Now, Poland needed help at the time. When the Germans left Poland and retreated, I've seen pictures of Warsaw, and there was barely a brick standing on another brick. I mean, they just decimated the place. So to provide medical care, to help, was important. I have no Polish background, but I got hooked into this some 20, 30 years ago now when the group became interested in newborn care. The reasons they became interested were two.

One, there was a Polish doctor by the name of Janusz Gadzinowski, a perfect Polish name, who had trained as an obstetrician but became interested in care of the newborn. He had a sister who lived here in Santa Barbara, whom he was visiting. He was introduced to Dr. Stefan [P.] Wilk who was the president of this organization, and sold him on the importance of newborn care.

Now, at the time, I think Poland's neonatal mortality was something like 25 per 100? That had to be too high. Twenty-five per 1,000, maybe. But it was three or four times, four times ours. It was higher than East Germany and all the surrounding countries. Newborn care in Poland really didn't exist. It was sort of at the same level as ours had been 20 years before. The babies were given nursing care, but they weren't being given medical care. Pediatricians didn't come into the hospital to see the newborns. They saw the babies after they'd been discharged. Obstetricians didn't pay too much attention to them. They were left to the nurses.

Anyway, this fellow and a pediatrician, old enough to have been trained, I think, just post-World War II, a pediatrician and a physician interested in newborns, were working in an OB hospital and they were trying to establish a newborn care department. So this organization was bought into this, and they got me hooked. They sent me to Poland, which was fascinating because it was still behind the Iron Curtain. It was never a Communist country but it was Communist dominated, Russian dominated. When I got home, first thing everybody wanted to know was, "Do the Poles tell Polish jokes?" And the answer is, "Of course they tell Polish jokes. They tell them on the Russians."

DR. GARTNER: [Laughs]

DR. HODGMAN: But at any rate, I spent a couple of weeks. I stayed a week at the hospital in Poznań and I made daily rounds and saw the babies and saw the X-rays and reacted with the staff and the faculty. Then Janusz took me on a trip around Poland visiting other centers in Kraków. Anyway, I came home with a pretty good idea of what was available in Poland and what they needed. We started off by bringing already-trained Polish doctors to Los Angeles to spend three months in either our nursery or UCLA which was involved also. They spent some time at UCLA and time at USC. These were already-trained physicians who spoke English well. They would spend three months, and then they would go back. Then we put on several seminars in Poland where we sent faculty from here to present regionalization and all of the various concepts.

Now, the high-risk newborn care in Poland was mostly done by anesthesiologists who had gotten interested in ventilating babies, but they had a very narrow view. At any rate, we started this, and it took off. Last

year, Poland's neonatal mortality was the same as ours. They have a newborn training program, neonatology training program for their pediatricians. They have a neonatal society with certificates and all that kind of stuff. Of course, they're out from under Russia so the country is doing better.

So I think this worked very well. Now, Poland had help from other places. I mean, this is just a small organization I'm talking about, but I do think it had an imprint. Now, this wouldn't work in some other countries because Poland had an infrastructure. It had well-trained physicians. They weren't up in technology, because they didn't have the technology, but their basic training was good. These were smart, smart people, and they could pick up a good deal in a short period of time because they had the basic stuff behind them. And now Poland is taking physicians from Ukraine and teaching them. That's important because the Ukrainians don't speak English, but they do speak Polish.

Anyway, I've been progressed to being a vice president of this organization. Wilk was funny. He looked at me and said, "You may not have any Polish background, but you have a Polish heart." [Laughter]

DR. GARTNER: That's very nice.

DR. HODGMAN: We may have an opportunity to go into Baghdad [Iraq]. Maybe. I don't know.

DR. GARTNER: Be careful.

DR. HODGMAN: Yes. Well, you know, we'll see. I promised Wen Qiu [unable to verify], who takes a group of pediatricians to Thailand twice a year, that next November I'll go along with her and see what I can do about helping them set up proper care for newborns in Thailand. Now, Thailand's a little different because we're talking about the mountainous areas where there isn't much infrastructure, so it's a different approach. But this Polish experience for me, again, has been very rewarding.

DR. GARTNER: That's very nice.

DR. HODGMAN: And I feel, in our small way, we really have done something. I mean, there are lots of opportunities to make an impression or fulfill your wishes or your dreams, even, if you just keep an open mind. Don't you think so?

DR. GARTNER: Oh, yes. I agree.

DR. HODGMAN: Yes. The other thing I have done is I've done a People

to People [International]. You know, the [President Dwight D.] Eisenhower program?

DR. GARTNER: Oh, yes.

DR. HODGMAN: Of People to People ambassadors?

DR. GARTNER: Yes.

DR. HODGMAN: He figured this out. It's privately funded. It's not government. But he felt the best ambassadors were ordinary people who were sent to talk to other ordinary people with similar interests in the various countries, and I agree with that. I went with one with [Dharmapuri] Vidyasager from [University of Illinois (UIC)] Chicago. He was our leader. There were about eight of us neonatologists who went to Czechoslovakia and Russia. Perestroika was in the air, but this was before the [Berlin] Wall went down. It was very interesting. It's impossible to measure what you do in something like that, but the Russians were wonderful to us. They took us to their homes, they entertained us. They love dirty jokes. They laughed at all our dirty jokes. But we had an opportunity to visit their hospitals and to talk to them about what they were doing and what was possible. It can't hurt, can it?

DR. GARTNER: Can't hurt at all.

DR. HODGMAN: No. I think that's the only other professional thing I had to add.

DR. GARTNER: Thank you again very much. This was a wonderful interview.

DR. HODGMAN: Well, thank you.

DR. GARTNER: You're great. I mean, I didn't have to prompt you very much. So you did all the work.

DR. HODGMAN: Well, you have to realize, I have a reputation.

DR. GARTNER: Thank you very much.

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JOAN E. HODGMAN, M.D.

Degrees

- University of California San Francisco School of Medicine; 1946 MD

Internship

- Pediatric Internship, University of California Hospital-San Francisco; 1946-1947

Residency

- Pediatric Residency, Harbor General Hospital Torrance, CA; January - June, 1948
- Pediatric Residency, Los Angeles County General Hospital; 1948-1950

PROFESSIONAL BACKGROUND

Practice

- General Pediatrics - solo practice, South Pasadena, California 1950-1952
LAC+USC Medical Center
- Head Physician - Pediatrics 1952-1957
- Director Newborn Division 1957-1986
- Acting Director Newborn Division 1990-1991

Attending Staff: Pediatrics: Neonatology

- Los Angeles County-USC Medical Center 1950-present
- Rancho Los Amigos Hospital 1953-1975

Consulting Staff:

- Huntington Memorial Hospital - Pasadena 1972-1984

UNIVERSITY ADMINISTRATION

- Medical Faculty Association 1958-
- Faculty Senate 1967-1970
- President's Advisory Council-Executive Committee 1976-1978
- President's Advisory Committee on Appointments and Promotions (Main Campus) 1977-1983
- Appeal Committee for Faculty Appointment and Promotion (Health Sciences Campus) Chairman: 1980-1983
- Health and Safety Committee (Main Campus) 1982-1983
- University Panel on Faculty Tenure and Privileges Appeals (Main Campus) 1983-
- Ad hoc Committee on Modification of Academic Units (Main Campus) 1983-1985
- Long Range Curriculum Planning Committee (Health Sciences Campus) 1983-1986
- Faculty Appointments and Promotions Committee: Dept. of Pediatrics (Health Sciences Campus) 1989-1992
- Special Committee on Promotion and Tenure Policy (Main Campus) 1991-1992
- Fetus, Infant & Child Bioethics Committee 1979-

- Chair 1979-1984
- USC Medical Faculty Women 1981-
 - President 1982-1983
- MFWA Research Fund
 - President, Board of Directors 1986-1988
 - Member, Board of Directors 1995-

SOCIETY MEMBERSHIPS

- American Association for the Advancement of Science 2000
- American Pediatric Society
- Amer. Academy of Pediatrics:
 - National:
 - Committee on Women 1984-1986
 - Committee on Career Opportunities 1986-1991
 - Chairman of ADC's 1995-1996
 - District IX (California):
 - Alternate District Chairman 1991-1996
 - Task Force on Violence Prevention, Chair 1992-1998
 - National Nominating Committee 1998
 - Representative for Pediatric Subspecialties 1999-
 - Section of Perinatal Medicine – District IX 1994-
 - District representative 1994-
 - Chair: Nomination Committee 1994-1997
 - Chap. 2, District IX:
 - Fetus & Newborn Committee: Chairman 1968-1975
 - Women in Pediatrics 1983-1991
 - Bioethics Committee: Chairman 1984-1990
 - Ad hoc Committee; Relations with CCS 1984
 - Ad hoc Committee; By laws revision 1989
 - Executive Committee 1983-1984
 - Nominating Committee 1986-1988
 - President 1990-1991
 - Violence Prevention Committee: Chair 1999-
 - Senior Section
 - Co-editor News Bulletin 2003-
- Amer. Association of University Professors
- American Thoracic Society
- California Thoracic Society
- California Association of Neonatologists 1994-
 - Organizing member
 - Chair: Membership Committee 1994-1997
 - Perinatology Liason Committee 1997
 - Committee on Discharge Criteria 1995
 - Committee on Bioethics 1995
 - Committee on Level of Care 1995

- Committee on Guidelines for Prevention of Kernicterus 2001-2002
- California Perinatal Association 1994-
- California Medical Association: 1952:
 - Maternal Child Health Committee 1970-1982
 - Subcommittee on Perinatal Mortality: Chairman 1970-1975
 - Subcommittee on Alternative Birthing: Chairman 1978-1982
 - Committee on Evolving Trends in Society 1976-1993
 - Chairman: 1981-1984
 - Task Force to review maternal, fetal, neonatal mortality in Calif. 1982-1990
 - Advisory Panel on Pediatrics: Chairman 1983-1988
 - Scientific Board 1983-1988
 - Executive Committee of the Scientific Board 1986-1988
 - Committee on Women 1984-1990
 - Advisory Committee on Neonatal Brain Injury 1984-1994
 - Council on Judicial Affairs 1986-1994
 - Chair 1991-1994
 - Young Physicians Committee: Advisor 1987-1990
- Diabetes Assoc. of Southern California 1956-1972
- Los Angeles County Medical Association 1952
 - Joint Comm. on Bioethics with LA Bar Assoc. 1981-1989
- Los Angeles Pediatric Society 1952
 - Vice-President 1961-1963
 - President 1962-1963
- Los Angeles Academy of Medicine 1976-
 - Board of Governors 1982-1991
 - Treasurer 1986-1987
 - Secretary 1987-1988
 - Vice President 1988-1989
 - President 1989-1990
- Salerni Collegium: Charter Member 1959-
 - Executive Committee 1974-1984
 - Vice President 1984-1985
 - President Elect 1985-1986
 - President 1986-1987
 - Student Liason Committee: Chair 1994-
- Society of Sigma XI
- Society for Pediatric Dermatology
- Western Society for Pediatric Research 1957-
 - Executive Committee 1972-1976
- Southwestern Pediatric Society 1976-
 - Vice President 1980-1981
 - President 1987-1988
 -

JOURNAL REVIEW

- Journal of Pediatrics

- Pediatrics
- Journal of Perinatology
- Emirates Medical Journal

CONSULTANTSHIPS

- California State Department of Health, Consultant Maternal Child Health 1963-
 - Committee to evaluate Hemolytic Disease due to rh in California 1967-68
 - Committee on management of RDS 1971-72
 - Committee to Study Alternatives in
 - Maternity Care 1977-1978
 - California Children Services, Consultant 1974-
- Chairman, Medical Advisory Committee for the Joint Committee for Siting of Teaching Hospitals, California State Legislature 1973-1974
- Med Advisory Comm, Nat'l Found., March of Dimes 1965-1982 Los Angeles Chapter
 - Chairman 1968-1975
- UNICEF: Advisory Committee, Western Section 1977

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ABSTRACTS

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RESEARCH GRANTS

Inactive:

- 1) Respiratory Distress Syndrome - Controlled Therapy NIH: HD 00650-02, 1964-1967
- 2) Prevention and Management of Perinatal Problems (Joint project with Obstetrics) Hartford Foundation: 1964-1967
- 3) Study of RDS in Prematures California Health Department No. 459, 1968-1969
- 4) Feeding Studies in Prematures Ross Laboratories
- 5) Problems of Infection and Use of Antibiotics in the Premature Eli Lilly & Company and Parke Davis & Company
- 6) Bacteriuria in the Premature Infant NIH: HD 02282-04, 1972-1975
- 7) Development of Sleep and Cardiopulmonary Regulation within sleep: Clinical Studies of a Functional Mechanism for Risk of SIDS NIH: NO1-HD-2-2777, 1974-1979
- 8) Safety and Efficacy of Phototherapy NIH: Contract NO1-HD-4-2823, 1974-1982
- 9) Respiratory Function During Sleep and Risk for SIDS NIH: 1-RO1-HD-13689, 1980-1982
- 10) Brain Death: Diagnosis in an Infant on a Ventilator American Lung Association: PSA 7-362-0-0, 1985-1986

RESEARCH ACTIVITIES:

- Sudden Infant Death Syndrome - Development of Cardiopulmonary Reflexes During Sleep.
- Respiratory Function During Sleep and Risk for SIDS
- Brain Death - Diagnosis in Neonate on a Ventilator