



ORAL HISTORY PROJECT

**William
Oh, MD**

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

October 8, 2008
Barrington, Rhode Island

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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 William Oh, MD

DR. GARTNER: We are here in Dr. William Oh's home in Barrington, Rhode Island, just south of Providence. Thank you for agreeing to be interviewed for the American Academy of Pediatrics [AAP] Oral History Project. There are three major goals that we have for this oral history today. First, you're a major figure in American pediatrics. We want to know something about you personally — your early life, your education, your career and your family, and how you got to where you are now. Second, we want to record for future researchers your scientific, clinical and scholarly contributions to the field of pediatrics. Third, this is billed 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 are one of the creators of the field of neonatology. We want to know your role in this field, and your memories of how the field began and developed.

The interview process is a relatively simple one. I have a script, which we have used with some modifications, for all of the people who have been 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 by 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 is only an outline. You're free to wander off the topic if thoughts come to mind that are tangential. You can say anything you want. You will have the opportunity to edit the transcript for accuracy and content. We hope that you will not remove anything or make any changes except for reasons of accuracy. I will also be editing the manuscript, but only to make it readable and smooth. I will not change anything that you have said. We really want *your* words.

We are recording this interview both on digital audio disk for transcription and also on digital video with sound to have an archival record of this interview, including your image and the setting here in your home, so that we can show any artifacts or pictures you would like to share with us. We can expect the interview will take nearly the entire day. There is no time limit. We want this interview to be as complete and comprehensive as possible. Whenever you want to stop, just let me know and we will take a break. We should break for lunch as well, which I know you've planned. Please relax and enjoy this day of reminiscence. It's your day.

Now, what I'd like to start with is some personal history, a little background about you. So first, tell me about your origins. Who were your parents, ancestors, where were you born, do you have siblings, what is your family life like, what was your early schooling, all of that?

DR. OH: Okay, thanks, Larry. It's been quite an honor to be a member of this august group. It's very, very hard for me to express my feelings about this very, very large honor. I was born almost 77 years ago in a small town called Cagayan de Oro.

DR. GARTNER: Do you want to spell that?

DR. OH: C-a-g-a-y-a-n d-e O-r-o. It's a small town in the southern part of the Philippines. My parents are Chinese. They emigrated from China to the Philippines and, essentially, grew up in this small town, as well. They were of modest economic class. They owned a small grocery store and earned enough income to support, essentially, the livelihood and education of my ten siblings. It was a very loving family, very, very congenial. We all helped each other. My parents put education as their highest priority. All ten of us made some very major achievements. In fact, there are two of us who are MDs, one an internist and myself. I have several MDs in the family, not only my in-laws, but my spouse, and my brothers' spouses, my sisters' spouses, and also our nieces and nephews. At the last count, we had about 20 doctors in this huge family.

DR. GARTNER: Impressive.

DR. OH: We also have two PhD [doctor of philosophy] brothers. Both are engineers. In fact, they both work for General Motors [Corporation], very high in the hierarchy of the executive offices. And my sisters were all very successful. One was a teacher, the other a businesswoman.

DR. GARTNER: What does she do? What sort of business?

DR. OH: She and her family own a diversified business with great success. She is very well to do.

To go back to my parents, as I said they were of modest means. We didn't have a big inheritance. They made a living out of this little grocery store, but they put everything in our education. All of us went to colleges and were all successful, so we're very grateful to them. They both passed away, but they were very, very successful in raising all of us. I grew up during World War II, actually. I still remember the days when we were hiding in a mountain in this part of the Philippines. My dad was a member of an anti-Japanese committee, so when the Japanese soldiers invaded the Philippines and took over this town, they were looking for my dad, because he was considered a spy. They really wanted to get him and, essentially, execute him. In fact, there were five members in that committee. Three of them were executed. My father was a lucky one. The whole family moved to a mountainside,

essentially, hidden there for three years. It's a very interesting experience, and I'll never forget those experiences.

DR. GARTNER: I'm sure.

DR. OH: I was barefoot for three years. We couldn't buy shoes. In fact, that's one of the reasons that I have to have triple-E, quadruple-E shoes.

DR. GARTNER: [Laughs]

DR. OH: It's because I grew up at a time when I had no shoes to wear, so my feet grew wider.

DR. GARTNER: How old were you during this period, these three years?

DR. OH: I was around 12 to 14, really, a growing-up teenager. We had to farm in the little mountainside. I still remember helping my dad and my older brothers farming, planting corn and rice so that we could have something to eat. We had a little chicken farm in the back. I had to go out every morning and collect eggs so we could have eggs for breakfast. It was a very interesting experience. I don't think there are that many people who had that kind of experience during the war.

DR. GARTNER: The Japanese never found you?

DR. OH: Well [chuckles], they came to this mountainside, actually, once a week, almost every Monday or Tuesday. We had some sentinels out there, so when they saw the Japanese patrol coming by, they would run and warn everybody that the Japanese were coming. So we would pack up and hide in the river in the back of the mountainside town. The whole family would move into the riverside to hide from them, but they only patrolled on the highway. I still remember that every one of us had a responsibility. I remember my responsibility was to carry a bag of rice and a bag of clothing that I owned. Everyone was prepared. So whenever the sentinel came and said, "The Japanese are coming," we would each pack up our things and run until the sentinel come back and said, "They're all gone." Then we could come back and stay in the house. So it was a very interesting experience. The kind of experience that actually built your character, because you learned to be organized, you learned to be alert and you learned to take care of each other. It really was a character builder, those three years. I was very, in a way, fortunate to have that kind of experience.

DR. GARTNER: As long as you survive.

DR. OH: Right. After the war I went to school. I was very lucky to go into an American Jesuit-run high school and junior college [Xavier University – Ateneo de Cagayan]. I remember I was number one in the class, actually, graduating high school class. I still remember my mentor, a Jesuit priest from Janesville, Wisconsin. His name was Father William Masterson. I was so impressed with him. He was such a kind, motivating person that I wanted to be like him. So at one point, when I was graduating and trying to figure out what to do with my life, I thought maybe I had a vocation to be a priest. I went home to tell my mom about it. My mom was a Buddhist.

DR. GARTNER: [Chuckles]

DR. OH: She looked at me, and she said, “You’re not going to be a priest. I want a grandson from you.”

DR. GARTNER: [Laughs]

DR. OH: And she cried, and she cried. She cried three days and three nights. She wouldn’t stop. I was a middle child. I was number six in the family, but I followed three girls. You know how Chinese are. They’re very pro-male, so I was the first boy after the three girls. I was very close to her heart, I think. So anyway, I couldn’t take it. I couldn’t let my mom down. So I went back to Father Masterson, and I said, “Father, I can’t do this. I can’t let my mom down like that.” And he was very understanding. He used to call me William, not Bill, and he said, “Well, William, if you cannot save souls, you might as well save bodies.” He was encouraging me to go into medicine, and so I did. I went into medicine partly because of this experience. That’s a verbatim quote that I made from him. “If you can’t save souls, go and save some bodies.” He helped me a lot in my med school application. I got into this Catholic university. It was called University of Santo Tomas in Manila, where I went to medical school. He wrote a strong letter for me, and I got in. As I said, our family was very modest, so I didn’t really have much money to pay for tuition, so I studied very hard to get scholarships, and I was very lucky. I didn’t pay a dime through my four-year medical school, quite frankly, because I was on a university scholarship throughout the four years. I didn’t pay anything.

DR. GARTNER: Good. [Laughs]

DR. OH: I got a free education.

DR. GARTNER: [Laughs] I think you earned it with your mind.

DR. OH: I remember another thing about my career while in the medical school. I was very fascinated by children. Pediatrics was my favorite subject. It was a third-year clinical preceptorship. So I decided I

wanted to go into pediatrics, and that's how it started. I really love children. That's what my love is. When people ask me what they should do for their career, my advice always is, "Go with your passion. Whatever your first love is, go for it. You will never go wrong."

DR. GARTNER: Right.

DR. OH: Am I being too long-winded?

DR. GARTNER: No, no. Not at all. It's perfect.

DR. OH: Interrupt me any time.

DR. GARTNER: No, no. I don't want to interrupt you. I want you to continue on.

DR. OH: So following the graduation from medical school, I tried to establish a practice in this small town back home, and I couldn't make it. In a small town, they don't have enough people to support a doctor, actually. I had a lot of chickens and eggs people brought in when they couldn't pay.

DR. GARTNER: [Laughs]

DR. OH: I decided maybe I should go into teaching, perhaps go into academics. I went back to my medical school and asked them if I could get a faculty appointment, and they said, "No, we don't have any slots." So I decided that maybe I should go abroad. That's when my plan to come to the United States came up. I thought that I should try to go abroad, because I had heard so much about America. It's a land of opportunity. If you want to fulfill your dream, go there, you know? Those were the days when a lot of people from foreign countries had that kind of feeling, and I was one of them. I applied, and I got an internship appointment at a hospital called Deaconess Hospital in Milwaukee [now part of Aurora Health Care]. In fact, a few years ago I went back. One of my friends had a wedding in Milwaukee. I went for the wedding, and I drove around with Mary trying to find this hospital. I couldn't find it.

DR. GARTNER: [Laughs]

DR. OH: It's gone.

DR. GARTNER: It's gone.

DR. OH: It's now replaced by a little gas station.

DR. GARTNER: Oh, dear.

DR. OH: It was sad to see it.

DR. GARTNER: Let me ask you before you go on, did you have any pediatric residency or internship training before you tried your hand at being a pediatrician?

DR. OH: No, no. I came straight from medical school. I didn't have any pediatric residency training. I just came directly to Milwaukee for the rotating internship. In those days, you needed a one-year internship, and then two years of specialty training. I still remember, in Milwaukee I hung out with a pediatrician all the time. His name was Dr. [Joseph E.] Vaccaro. He was an excellent pediatrician. He was at St. Michael's Hospital. He was such a nice person, and I enjoyed working with him. I followed him all the time. When I was in pediatrics, he was almost like Father Masterson to me, in religion. He was my mentor in pediatrics.

DR. GARTNER: That's great.

DR. OH: About six months into my internship, I had to apply for a residency program, so I applied in several places. One of the places was Chicago, Michael Reese Hospital. I was really lucky. I was accepted there, and Dr. Jack Metcoff, who was really the most important mentor in my life, told me afterward, "Do you know why we took you in?" I said, "No, why?" He said, "Well, you came to the interview in a ten inch snowstorm. If you did that, we thought that you must be a very determined young person that will succeed, so we took you."

DR. GARTNER: [Laughs]

DR. OH: That was a very important move in my career. Dr. Metcoff was really my mentor. He taught me how to take care of patients. He taught me how to deal with people. He instilled culture on all of us. I still remember one experience I had with him. Every Wednesday afternoon between 4:00 p.m. and 5:00 p.m., he would sit down with his residents in a conference room with tea and a few cookies, and he would talk about painting and music, classical and otherwise. No medicine. He just wanted to talk about art. And that was really an experience. He was a very cultured person himself, and he wanted his residents to be real, cultured, compassionate doctors. And that's how Dr. Metcoff was. You knew him.

DR. GARTNER: I met him many years ago.

DR. OH: Wonderful person. One more experience I've got to tell. It's a very important experience for me. I was in the newborn nursery rotation, and one night I was on call about 7:00 p.m. or 8:00 p.m. I got a

frantic call from a nursery nurse, the head nurse. She said, “Dr. Oh, come over. We have this baby who is pale, in severe respiratory distress. Just born.”

I ran right over, and I took a look at the kid. I said, “This kid is anemic.” He had a pale color and was in distress, obviously in failure. So I immediately told the nurse, “Go down to the blood bank and get a bag of O-negative blood. Never mind the crossmatch or typing, just give me the blood.” I put a catheter in the umbilical vein right away. It was a just born baby. I transfused the kid, and within half an hour that kid was perfectly normal — pink and breathing normally. I was so proud of myself. The next morning, I got called to Dr. Metcoff’s office. He wanted me there with two of the most senior pediatricians in town. I’m not going to name names. They were sitting very sternly, and Dr. Metcoff was sitting there. I was so nervous! I didn’t know what I did.

So I just walked in, and Dr. Metcoff said, “You took care of a baby last night with anemia and you gave a transfusion.” “Yes, I did,” I said. “The kid probably had a fetal maternal bleed. He was just born and pale, and I immediately transfused the baby. He was okay.” He looked at these two pediatricians, and he said, “And you didn’t call these two pediatricians before you did it?” I said, “Dr. Metcoff, I had no time to waste. This kid was going to die on me.” And I didn’t call them afterwards. That was a mistake. That was the big the mistake I made.

DR. GARTNER: Right.

DR. OH: But he looked at me and said, “That’s okay. I just want you to know that they’re not very happy you didn’t call them. You should have called them after you did the thing. And you did the right thing.” He was protecting me. He was very supportive. I couldn’t forget that. He was very compassionate. He always protected his people. But that one experience is always imprinted in my mind, because it further entrenched my desire to be in the newborn field. In those days, there was no such thing as a neonatologist, just newborn.

DR. GARTNER: What year was this that you started?

DR. OH: 1959.

DR. GARTNER: 1959, you started at Michael Reese?

DR. OH: Yes. There’s just one more person that I need to mention, actually a nurse. People ask me about why I went into neonatology. I say, “It’s because of a nurse.” They all look at me and say, “What do you

mean, a nurse?" I say, "I had this wonderful nurse. Her name was Evelyn [C.] Lundeen." You probably know her.

DR. GARTNER: Yes, I know her name well.

DR. OH: She was a marvelous person. She never married. She lived in the nurses' dorm, and she lived in the nursery, the premature nursery, at Sarah Morris Hospital [for Children] at Michael Reese, the fifth floor. You know that.

DR. GARTNER: Yes.

DR. OH: I had two electives during my first- and second-year residency. I took both electives with her method. I just sat there with her, learning how to take care of a preemie. I remember she used to do a lot of things we would call crazy today, but in those days it was a reflection of her devotion to these preemies. You know, she would put whiskey in the milk. In fact, I remember vividly that one of the jokes they told me was that every time I went up to write the order, she would say, "Now, walk on this white line to make sure you haven't cheated and drunk some of the whiskey."

DR. GARTNER: [Laughs]

DR. OH: But she would get me to write the whiskey order for adding into their milk. I had two other experiences that I remember. She used to have patients with RDS [respiratory distress syndrome]. They have this pectus excavatum, the chest sunk in. She figured that if she put a safety pin on the chest wall and hung it up in the hole of the incubator, it would help the baby expand the chest wall.

DR. GARTNER: Right.

DR. OH: Did you see that she used to do that?

DR. GARTNER: Yes, I remember that.

DR. OH: I wish I had taken some pictures of it, because when I talk about it today people laugh at me. She did that for several babies. They all died. It didn't help, but that was a reflection of her devotion. Then the other thing she did was to go down to the building and grounds department and ask them to build a seesaw to put a baby in. I don't know how they did it, but they put a little fulcrum, almost like a seesaw, and it ran with battery. Then they put a baby in there. It was to simulate an iron lung — not the iron lung, but allowing the diaphragm to move up and down. It didn't help, but that's how it was.

DR. GARTNER: They actually made those commercially. Maybe she invented it, because I remember them being commercially made.

DR. OH: She wrote a book with Julius [Hayes] Hess. I missed Dr. Hess by four years. He passed away in 1955

DR. GARTNER: I was going to ask you about Dr. Hess, because she was Julius Hess's nurse.

DR. OH: She was Julius Hess's nurse, yes. In fact, the first time I met Bill [William A.] Silverman was when he came to visit with Miss Lundeen and talked about premature nursing. To me, she was the mother of premature nursing. I still use her when I talked about feeding babies. I would say, "One cc per 500 grams. For a 1,000-gram baby you should start with 2 ccs and increment by 2 ccs." They would ask me, "What's the basis for that?" I said, "Well, that's Lundeen's formula. Lundeen's formula is always right."

DR. GARTNER: [Laughs]

DR. OH: I wrote an article about her. I was trying to find it in the Internet today. It was published in one of those neonatology news reviews, and the title was, "I Remember Evelyn Lundeen." I wrote up all of this, it's in the newsletter for the AAP Section on Perinatal Pediatrics in the 1990s. It's a piece of an article.

DR. GARTNER: I think I remember it, yes.

DR. OH: When you are a resident rotating through premature nursery with Ms. Lundeen, you only get called 3 times. When the baby gets admitted, she needs a physical. When the baby dies, she needs someone to write a death certificate. And when the baby does not poo, because she needs a barium enema order. [Laughter] Everything else, she does. She was amazing. Every time I came up to write a death certificate, she would say, "Dr. Oh, you must go into research and find out what to do to save these babies. They all die on us." Because in the 1950s, you know, the mortality rate for premature babies under 1,000 grams was 90 percent. So she used to tell me that. And that really was the inspiration and the stimulus that made me go into research.

DR. GARTNER: So that also came from Lundeen.

DR. OH: From Lundeen, yes.

DR. GARTNER: Had you not thought of research before?

DR. OH: No. Well, I wrote a thesis when I was an intern, a rotating intern at Milwaukee. They required one publication as a rotating intern, so I remember I wrote a review on dialysis and renal failure. It never got published anywhere. I just submitted it to fulfill my internship requirements.

Dr. Metcoff used to have a lab across the street. I still remember vividly that every afternoon he would be in the lab. I mean, he was very devoted. So when he found out that I wanted to go to into research, he said, “Well, spend a year with me first to learn all the basic methodology.” There was no such thing as a neonatology fellowship in those days. He said, “Spend a year with me. Go to the lab. I’ll teach you how to do various things.” You know, pipetting and weighing chemicals, running the VanSlyke. I remember, this is one story that I must tell, the VanSlyke story.

DR. GARTNER: Okay.

DR. OH: He had an old VanSlyke with mercury that runs CO₂ [carbon dioxide], and it was so clumsy in those days. You know. You pushed it.

DR. GARTNER: I never ran a VanSlyke.

DR. OH: I tried to run it, and I spilled mercury on the floor.

DR. GARTNER: Oh, dear.

DR. OH: Try to catch all that mercury on the floor!

DR. GARTNER: [Laughs]

DR. OH: Today I would have been in deep, deep trouble.

DR. GARTNER: Oh, yes.

DR. OH: Because that’s a no-no. But trying to pick up all this running mercury, I could not forget that. And learning how to weigh chemicals, to run the standard. He would be standing behind me, watching me and making sure that what I did was right. He was a very, very disciplined person. He was a perfectionist. He wanted everything done right. So I spent a year with him. The only thing I did that one year was to publish my first paper.

DR. GARTNER: What was it?

DR. OH: The developmental changes of body water distribution in rats. I had to sacrifice rat pups on E18, E19, E20, newborn, 5-day, 10-day, 12-day, et cetera. I, essentially, established the body fluid changes throughout the gestation, and that was published in *Biology of the Neonate* [now *Neonatology*] in 1965 [Oh W, Stewart L, Baens GS, Metcoff J. Body composition and renal adaptation in the newborn rat. *Biol Neonat.* 1956;8(2):65-80]. That was my first paper.

DR. GARTNER: Good.

DR. OH: He found out that I really wanted to do research and really wanted to be in the newborn field. He said, “You know, you need to take a two-year fellowship in this field.” And I said, “Well, there’s no such thing here in America.” There was no fellowship in neonatology in the 1960s. You must be about the same time.

DR. GARTNER: Yes, yes. No, there wasn’t any fellowship.

DR. OH: So he said, “Why don’t you go to Stockholm or Paris.” He had two very close friends in Europe, Alex [Alexandre] Minkowski and John [Johnny] Lind. You probably know who they are.

DR. GARTNER: I’ve met both of them.

DR. OH: They’re very close friends, because they’re both really art lovers, Johnny and Alex. They both love art, and they have a lot in common, going to museums, et cetera. They became very good friends. And so he said, “If you want to go to one of those two places, I can support you. \$300 a month for two years. I’ll send you there with airfare, plus Mary’s airfare.” I thought that was an offer you can’t refuse. He said, “But only on one condition.” And I said, “What is that?” And he said, “Well, you will have to come back and run my nursery.”

DR. GARTNER: [Laughs]

DR. OH: So I said, “Sure. Of course. You know that’s not a bond, it’s good for me.” So I went home and told Mary, and I asked, “Where do you want to go, Paris or Stockholm?”

DR. GARTNER: [Laughs]

DR. OH: I’ll tell you the story behind this. She said, “Paris is so expensive, and we don’t know the language. If it makes little difference to you in terms of your career, let’s go to Stockholm.” I said, “Stockholm? You don’t know Swedish, either.” She said, “But most people in Sweden speak English.” So that’s how I ended up in Stockholm for my fellowship for two

years with Johnny. That was also a very, very nice experience. I wrote an article. I have it with me. It was just published last month. [Historical Perspectives Perinatal Profiles: Professor John (Johnny) Lind, Neonatology Pioneer *NeoReviews* Vol.9 No.7 2008 e279 © 2008 American Academy of Pediatrics]

DR. GARTNER: Oh, really?

DR. OH: Alistair [G. S.] Philip asked me to write an article on all these pioneers, so he asked me to write about Johnny. I have it with me.

DR. GARTNER: Oh, great.

DR. OH: I'll give it to you later.

DR. GARTNER: Sure, I'd love to read it.

DR. OH: I describe him as a scientist, an art lover and a man, et cetera. He was a wonderful person.

DR. GARTNER: Oh, yes.

DR. OH: The funny thing is, I went to Stockholm with Mary, arriving in July, July 1, and he promptly had a heart attack, Johnny. [Laughs] So there I was, ready to go, and I found out he was in the hospital. In those days, myocardial infarct meant six weeks in the hospital. So for six weeks, he was there, and there I was alone. You know, nobody to go to. And he would ask me to come in to the hospital, to the bedside, and talk about the project once he recovered. So two, three times a week I'd go visit him.

DR. GARTNER: Did he have an established neonatology fellowship at that time?

DR. OH: Yes, I followed Bob [Robert H.] Usher. Bob and Leo Stern. They were all there. Millie [Mildred T.] Stahlman was his first fellow. I don't know if she's on the list or not.

DR. GARTNER: Millie's already been interviewed, yes, some years ago.

DR. OH: She was number one, and then Bob Usher came.

DR. GARTNER: We've interviewed Bob Usher also.

DR. OH: Leo Stern, and then me. No, I came right after Bob. He was doing blood volume in newborns.

DR. GARTNER: Yes, I remember that. I remember that paper.

DR. OH: So I picked up the project and ran with it. But you will read in the article, Johnny was a very inspiring person. He made you think. One day he came out of the hospital, and it was a fall day, like this, so he came to the hospital. He walked into the formula room and grabbed a Findus [now owned by Nestle], the baby food, with a couple of teaspoons. He said, "Come on, Bill, let's BS." I said, "Johnny, what are you talking about?" He said, "Let's brainstorm." I said "Oh, okay, let's go." So at lunchtime we had baby food sitting on the doorstep of this hospital, and we talked about the project. "Let's brainstorm," he said. "What do you think happens to the umbilical cord when the baby is born?" I said, "I don't know. It collapses? I guess the vessels collapse, and you just cut them, right?" He said, "No, no, no, no, no. Think about it. Why is it that the vessels collapse?" I said, "Well, I guess they constrict because the oxygen tension goes up. The baby breathes." He said, "No, that means that the constriction only occurs when the baby breathes and cries?" I said, "I guess so." He said, "You want to prove it?" I said, "I guess we have to go and watch the birth." He said, "Let's do it." And the next day, he got the media people to come in with a cameraman, and we went into a labor suite. When a full-term baby was born, he had this camera and took a movie camera picture of the umbilical cord, and you could see the circulatory constriction of the umbilical artery when the baby cried and breathed.

DR. GARTNER: Hmm.

DR. OH: That's amazing. You can't publish those things, but that's how he stimulated you to think. He was a great person. I must have written about 16 papers with him in that two-year period. I was in the lab, in the nursery, in the lab all the time. In those days, you didn't have computers. You had to enter everything in a calculator. Remember those days?

DR. GARTNER: Oh, I do indeed. [Laughs]

DR. OH: He bought me an Olivetti calculator. It was an improvement. All you had to do was punch in numbers, and you clicked it, and all the mean, and standard deviation and standard errors all came out. You didn't have to sum them, and divide them and use a formula. But that was very interesting, and he was very stimulating.

DR. GARTNER: Were all of these papers and all the work you did there on cardiovascular types of work?

DR. OH: Mostly blood volume. I wrote seven or eight articles during this two-year period, and I went back twice to write four or five more with him. He was such a great guy to work with. But at the price of my

Stockholm visit, I didn't see Stockholm for two years. I was in the lab all the time. I went to work at 7:00 in the morning and came home at 5:00 p.m. Even on weekends I was working like that. In fact, two days before we left town, coming back to the United States, he said, "You know, you haven't seen Stockholm, yet." [Laughter] So for two days we made a tour of all the nice places that you have to see.

DR. GARTNER: What did Mary do in Stockholm during that time?

DR. OH: Actually, Johnny found a job for her. She was my classmate. We didn't talk about her.

DR. GARTNER: No, no, we have to talk about Mary. You have to tell me more.

DR. OH: We went to school together. We were in the same class.

DR. GARTNER: In the Philippines?

DR. OH: In the Philippines. In that Catholic school, the girls and the boys — they didn't even call them women and men, it was boys and girls — were separate classes. We didn't mix, so I was in one section and she was in the other section. The only time we saw each other was when we went up the stairs to go to the classroom, the girls on the one side, the boys on one side. The stairs crisscrossed so we got to say hello on the stairs on the way up to the classroom.

DR. GARTNER: [Laughs]

DR. OH: It was, essentially, love at first sight. When I saw her, I said, "This is it."

DR. GARTNER: But you hadn't even spoken to her.

DR. OH: No, not a word. When I talk about this, she gets mad at me, but I'll say it. I can edit it out later. I remember I was in microbiology class. It was a huge class where everybody was combined. I was looking at some cystology in the microscopic, and I looked up, and it was Mary standing there. I thought, "Ahh."

DR. GARTNER: [Laughs]

DR. OH: That was it. I tried to date her. In those days, in the 1950s, particularly in the Philippines, and I think here as well, it was very conservative. You didn't go out very often alone. You had to have a —

DR. GARTNER: Chaperone.

DR. OH: A chaperone. She was one of only two daughters, so her father really wanted her to marry someone who was a single child or not from a big family. I came from ten siblings. When I called her to make a date, her father was retired by then, so he always picked up the phone, and I would ask for Mary. After a while, I figured that maybe if he knew it was me calling, he may not want me to talk to her. So at one point I even put a handkerchief to cover the speaker phone to mask my voice. But I tell you, he recognized me right away, and when I said, “Hello,” he would say, “You want to talk to Mary?”

DR. GARTNER: [Laughs]

DR. OH: Even with the hankie on the speaker phone. But he liked me a lot, my father-in-law. We got married in Chicago, actually. When we graduated and came to the United States, we came together, not in the same plane, but at the same time. She ended up taking a residency at Mercy Hospital [and Medical Center] in Chicago, and then I went to Milwaukee, so we were separated for a year. But we were engaged before we came, because my father-in-law said, “No way are you going to go together unless you are engaged.” So we had to have an engagement party. There are a lot of funny stories about those things, about the engagement party. I can say this. We can edit it out later.

DR. GARTNER: No, no, don’t take it out. Put it in. [Laughs]

DR. OH: One of the Chinese customs or traditions is that during the engagement party, the potential groom has to cut hard-boiled eggs with chopsticks, four of them. They would coat the hard-boiled eggs in oil so that they would become greasy and slippery, and they gave you not the Japanese wooden chopsticks, but the — what do you call this?

DR. GARTNER: Steel?

DR. OH: No, the Chinese chopstick that’s made of ivory.

DR. GARTNER: Ivory. Oh, yes, yes.

DR. OH: It’s very slippery also. So you have slippery chopsticks and slippery eggs, and you have to try to split them four times.

DR. C. GARTNER: [Laughs]

DR. GARTNER: Did you do it?

DR. OH: My mother-in-law loved me so much she didn't do the grease around the eggs.

DR. GARTNER: [Laughs]

DR. OH: So it was easy for me. I cut them all.

DR. GARTNER: [Laughs]

DR. OH: So I made it. But we came, and we had a wedding in Chicago, again in a church that doesn't exist anymore. I don't know why it is that all the places that we have history in — We go back to Chicago quite often, for meetings and stuff like that. We couldn't find the place, couldn't find the church.

DR. GARTNER: Where was the church?

DR. OH: On the near North Side.

DR. GARTNER: On the near North Side.

DR. OH: Near Grant Hospital [of Chicago – now part of Columbia Healthcare Corporation]. Remember Grant Hospital?

DR. GARTNER: Yes, yes.

DR. OH: Anyway, I was very poor, actually. I was making like maybe \$50 a month as an intern, and she made a little bit more, a \$100 a month. So our combined income was \$150.

DR. GARTNER: And what was she doing at that time?

DR. OH: She was a resident in pathology.

DR. GARTNER: Pathology.

DR. OH: She's certified in clinical pathology. That's why when we went to Stockholm, Johnny found her a job in the department of chemistry helping the technician run assays and all that. Her name was on a couple of my papers. She did some of my assays.

DR. GARTNER: Good. Where did you live when you were in Chicago?

DR. OH: We lived in those apartments across from Michael Reese.

DR. GARTNER: Yes.

DR. OH: Lakeshore Apartments.

DR. GARTNER: Yes.

DR. OH: We lived there for a couple of years. We eventually moved to Wilmette.

DR. GARTNER: Oh, yes.

DR. OH: We lived there for about three years.

DR. GARTNER: Before we leave Michael Reese, I'd like you to go back and tell whatever you know about Julius Hess, the Michael Reese premature units and all of those very important pieces of history there. You're really the only one who could tell us that story.

DR. OH: Yes. I already told you some of the anecdotes, the safety pin, and the rocking bed and all that.

DR. GARTNER: Yes.

DR. OH: But there are a few more things, like Dr. Hess. I missed him by a few years, as I said.

DR. GARTNER: Right.

DR. OH: Apparently he was a very, very devoted doctor. He was a pediatrician. He and Lundeen co-wrote the book on the premature baby [*The Premature Infant: Medical and Nursing Care*]. I don't know if a copy of the book is still around.

DR. GARTNER: I'm sure we have it in the Academy library.

DR. OH: It's called *The Premature Infant: Medical and Nursing Care – 1941*, by Hess and Lundeen. I had a copy, and I don't know what I did with it. With all the moves that I've made in the last 35 years, I couldn't find it. In fact, I also had one memento that I lost completely, the silver spoon.

DR. GARTNER: Ah, for the nasal feeding.

DR. OH: That Lundeen used to feed babies. It's a sharp-edged spoon —

DR. GARTNER: Yes, turned up.

DR. OH: — that inserts into the nostril. It is turned up so that it goes into the nostril in such a way that when you instill the milk it goes into the esophagus, not the trachea. It's a very interesting little piece of silverware.

DR. GARTNER: Did you actually see her nasal feed the babies?

DR. OH: Oh, yes, yes. I told you I spent two months with her. When I was with her, she was about in her mid-70s. She had Parkinson disease, as I recall. She started to shake. The administration wanted to get rid of her. I went to the administration, and I said, "You cannot get rid of Miss Lundeen. She is the soul of that nursery. If she's gone, you have no nursery." I almost said, "If you fire her, you might as well fire me." That was the time when I was in charge of the nursery already. She was getting old. What else in those days? The spoon, the safety pin, the rocking bed, the whiskey. The mustard bath. She used to bathe the babies with mustard in it.

DR. GARTNER: Mustard.

DR. OH: Mustard. She would, essentially, buy this mustard and put it in the bath, you know, mix it up. She said, "It will increase circulation and vasodilate."

DR. GARTNER: Right. [Laughs]

DR. OH: You didn't check me on the mustard bath.

DR. GARTNER: [Laughs]

DR. OH: But the mustard bath is another thing that's very iffy. There were a lot of things that were not evidence-based in those days. There was no evidence-based in those days. You just did it by intuition. And she was so devoted to those babies that she would do anything to save them.

DR. GARTNER: This was just a premature nursery at the time. You didn't have full-term infants?

DR. OH: No. There was no ICU [intensive care unit]. It was just a room about twice this size, and there were about 20 Hess [incubator] beds. They were called Hess beds. Are you familiar with the Hess bed?

DR. GARTNER: Yes. Oh, yes.

DR. OH: It's a way of warming the baby. In fact, the last Hess bed is in the Smithsonian Institution.

DR. GARTNER: Actually, the Academy has a Hess bed.

DR. OH: Does it?

DR. GARTNER: We got it from Lou [Louis] Gluck. It was one from Michael Reese also.

DR. OH: When that bed was sent to the Smithsonian Institution they needed a doctor to be there to take pictures, so I was there with a mask and cap and a gown. I was standing by the Hess bed, and they took a picture of me. Actually, that picture ended up in the encyclopedia. One day my daughter Amy, whom we'll talk about later, came home from school and said, "Dad, Dad, Dad! I saw you in the encyclopedia." I said, "You're pulling my leg. How can I be in the encyclopedia? I'm not a Nobel prize winner or anything like that." She said, "No, no, no, your picture was on it." I said, "Where?" And she said, "It's under 'I.'" The incubator, the Hess bed, with *me*, you know? I don't think I have that book. She may have it.

DR. GARTNER: Which encyclopedia was it?

DR. OH: *World Book [Encyclopedia]*. It must have been 1975. We were here, in this school here.

DR. GARTNER: Right.

DR. OH: So the Hess bed. That's about it. We have a couple of Air-Shields. When I was there, they bought a couple. In fact, Dr. Metcoff had a group of charity people, development people who bought two Air-Shields. That's when Lundeen put this thing on the pole.

DR. GARTNER: Yes, right. So you actually took care of the babies in the Hess beds.

DR. OH: Oh, yes.

DR. GARTNER: You used the Hess beds. How did that work? It's always been a question.

DR. OH: If you wanted to give oxygen in those days, there was no hood.

DR. GARTNER: Right.

DR. OH: You use an oxygen catheter and put it near baby's nose (blow-by). Not very efficient.

DR. GARTNER: Right.

DR. OH: That's probably why we got a lot of ROP [retinopathy of prematurity] in those days, because there was no control to oxygen being given.

DR. GARTNER: Right.

DR. OH: No, we have come a long way in terms of technology and infant care.

DR. GARTNER: Do you remember anything else about Sarah Morris and the premie unit there?

DR. OH: We did a lot of exchange transfusions in those days for Rh factor, and not many of them were preemies on the first floor. Lundeen, actually, was a very visionary person. She said that we should see how these babies do when they go home, that there should be a follow-up program. There was no formalized follow-up program. But she said, "We have to have someone see these children when they get to be five, seven, ten years old." We had a pediatrician by the name of [Lester] Wishingrad, who was a practicing pediatrician who is very interested in premature babies. In fact, do you remember the bilirubin study in the 1970s, where you had 20 perinatal centers, sponsored by NIH [US National Institutes of Health]? Michael Reese was one of them, and Wishingrad was a PI [principal investigator] for the Michael Reese program. He did a lot of follow-up on these bilirubin babies. I can't forget one experience. We didn't have a follow-up clinic, so they all had to come to the premature nursery. There was a little anteroom where Dr. Wishingrad set up shop and would see these children. He did all the developmental testing himself. You know, there were no developmentalists in those days.

DR. GARTNER: Right.

DR. OH: He was the developmentalist, psychologist, and he'd test everything. He'd say, "Everything is fine." There was a two- or three-pound baby, who was now a seven-year-old. I still remember. I was there, and Lundeen came running to me, and she said, "Dr. Oh, you've got to see this seven-year-old doing very well, except a little bit of a speech problem." And it turned out this was a Greek child.

DR. GARTNER: [Laughs]

DR. OH: Couldn't speak English. Anyway, but that was the follow-up program.

DR. GARTNER: What was Wishingrad's first name? Do you remember?

DR. OH: It started with an L, Lester Wishingrad?

DR. GARTNER: Lester?

DR. OH: Yes, and W-i-s-h-i-n-g-r-a-d, Wishingrad.

DR. GARTNER: I remember the name.

DR. OH: There were several people after Dr. Hess passed away; there was a Ralph [H.] Kunstadter.

DR. GARTNER: Yes, I remember.

DR. OH: He took over, along with someone by the name of [Reuben I.] Klein, the two of them.

DR. GARTNER: Right.

DR. OH: And then Wishingrad was the young associate who helped them. In those days, there were no full-time people. They were all private practitioners, who really devoted their time, with no pay, taking care of these nurseries.

DR. GARTNER: Kunstadter. Of course, the new building that was built was named for him [Kunstadter Children's Center, Michael Reese Hospital and Medical Center].

DR. OH: Yes. Ralph, well, he was a great guy. I wrote a couple of papers with him. He was a very motivated person. One paper that we wrote together was about a kid with, today it's GE [gastroesophageal] reflux. And the title was "Vomiting in the newborn with particular reference to cardiochhalasia," 1964 in *Medical Times*. It referred to the use of the papoose bed. You know, you thicken the feed, and you keep them upright. In those days, there was no such thing as Zantac and stuff like that.

DR. GARTNER: Right.

DR. OH: That was the treatment for it. Anyway, so that was Ralph Kunstadter. And Dr. Klein was also very good. They were all very good people. I miss them. I think they're all gone. So enough of my childhood, the early days.

DR. GARTNER: I don't know, we may get back to some of it. We'll see.
[Laughs] I guess you've told us how these early experiences influenced your later career choices. Were there any other people or any other experiences?

DR. OH: Mainly the pediatrician in Milwaukee. Vaccaro was his name, Dr. Vaccaro. Italian. He always impressed me as a very well-dressed, really well-dressed person. He was a very successful pediatrician. We had a pediatric ward. I think there were about 15, 20 beds, and he always had half of the ward. He would, essentially, be chief of pediatrics if he gets all the patients. I used to follow him all the time. There was no nursery in that hospital. Well, there was a small nursery, but it was not a premature nursery.

DR. GARTNER: Where did the premature babies go in those days?

DR. OH: County Hospital. Milwaukee County [General] Hospital. They had a premature nursery, a small one. I think the Michael Reese Sarah Morris premature nursery was the first premature nursery in the world.

DR. GARTNER: Yes.

DR. OH: There's no question about it.

DR. GARTNER: That's correct.

DR. OH: There was no such thing anywhere.

DR. GARTNER: No.

DR. OH: I think they organized the World's Fair, 1930s [Chicago World's Fair: A Century of Progress Exposition 1933-1934].

DR. GARTNER: That was [Martin Arthur] Couney, with help from Hess.

DR. OH: Couney, yes. You know all the history.

DR. GARTNER: [Laughs] Oh, yes. That was true. Did you have any military service in the Philippines or in the U.S.?

DR. OH: No military service.

DR. GARTNER: Okay. Now, before we forget it, let's go back to Mary. We talked a little bit about marriage, and we didn't talk about family at all — a little more about that. When did you first have children?

DR. OH: We have two children. Our first son was born a year after our marriage, in Chicago.

DR. GARTNER: Was he born at Michael Reese?

DR. OH: No, at Grant Hospital. That's where Mary was working at the time. She actually took off two years of residency just to take care of the kids and support them. When I advise my young people about their career development, I always have the word CROWNS as my — What do you call it? What's the term for a word that you use to mean a few things?

DR. C. GARTNER: Is it an eponym?

DR. OH: It'll come to me. Acronym.

DR. GARTNER: Oh, an acronym.

DR. OH: My acronym for advising people is the word CROWNS. C is for commitment. You have to make the commitment to whatever you want to do. R is for role model, someone who can help guide you. And for each of those I have criteria, criteria for being a good role model. O is for ongoing assessment and planning. W is for work habits. I don't care how bright you are or how committed you are, if you are a lazy bum, you're not going to get anywhere. And N is for native intelligence. You've got to have something up here. Then later on I added the letter S for spouse support. I said, "You have to have the S. Whatever commitment you make, whatever plan you have, for God's sake go home and talk to your spouse and make sure that she or he agrees with you, because otherwise you're going to have a problem in terms of your development."

DR. GARTNER: Absolutely. That's very smart.

DR. OH: So that's my acronym. I gave the talk quite often to my fellows. I have changed the tone of the talk over the years. I have trained more than 100 fellows in my lifetime. The first half of my mentorship ended up with at least 50 percent in academic medicine. Today you know what the statistic is, the fellows in neonatology going to academic? The last count was 12 percent. Eighty-eight percent of them go into private practice.

DR. GARTNER: This is your own group or nationwide?

DR. OH: Nationwide statistic. Nothing wrong with it. Somebody has to take care of the patient. But that's how far it has gone in terms of academic versus private practice. I have nothing against private practice.

Let me make sure I say that. But you need to have a group of academic people to sustain the vigor and the creative nature of the specialty.

DR. GARTNER: Tell us about the children while we're on the subject.

DR. OH: Okay. My son grew up here, and then he went to Bates College. We had been in California. I didn't mention my five-year jaunt in California.

DR. GARTNER: That's right.

DR. OH: I should talk about that before we get into the family.

DR. GARTNER: Okay, go ahead.

DR. OH: I came back to Chicago to fulfill my commitment. You have the C, remember?

DR. GARTNER: Yes.

DR. OH: And I ran the nursery with Dr. Metcoff. He was very supportive, and he gave me a decent salary and gave me a nice title. I was on the faculty at Chicago Med [Medical School] and then later on The University of Chicago. But after a while, I was making, like, \$5000 a year as an assistant professor, and my rent was \$200 or \$300 a month. I kept going back to Dr. Metcoff. I said, "Dr. Metcoff, I need a little raise." Every year he would turn me down. He said, "The budget is tight. I can't do anything." You know, now that I've been through a chairmanship, as you have been through chairmanship.

DR. GARTNER: Mm-hm.

DR. OH: I know he really meant it. He couldn't do anything. His hands were tied. Anyway, I finally said, "You know, I've gotten two years of support from you. I probably should do at least two years." In those days, we didn't have contract. It's a, you know —

DR. GARTNER: A handshake.

DR. OH: A handshake, and you keep your word, I keep my word, okay? So I figured two years should be enough, but I stayed for three. The first two years I took whatever he gave me, because I wouldn't have gotten that job without being in Stockholm for two years. I felt very grateful, and I felt that I should do whatever he wanted me to do. But by the third or fourth year, I was getting a little restless, because it was hard.

DR. GARTNER: Sure.

DR. OH: I worried about the kids' education and all that, so I kept going back and asking for a raise. In the meantime, my career was also beginning to fly. People were beginning to know me. I was starting to get inquiries from several places to see if I would move. I got a call from Houston, Winnipeg, Indianapolis and then Harbor [General Hospital], UCLA [since 1978 Los Angeles County Harbor-UCLA Medical Center], Joe [Joseph W.] St. Geme [Jr.]. So in the fourth year, I finally went to Dr. Metcoff and said, "I have all these offers. I need to let you know that I'm looking." But he still didn't understand why I wanted to leave. He thought I had a good job. But I kept telling him, "I need a raise." He said, "But I can't do it." I finally said, "I just have to move." So I moved to UCLA. Joe, you know Joe?

DR. GARTNER: Oh, a wonderful man.

DR. OH: He was a fantastic chairman.

DR. GARTNER: Yes.

DR. OH: And it was a very good move, because I was surrounded by a bunch of very, very bright academic people. Del [Delbert A.] Fisher and George [C.] Emmanouilides and Cal [Calvin J.] Hobel in OB [obstetrics], and Mike [Michael M.] Kaback, and all those people.

DR. GARTNER: A great group.

DR. OH: Very good group. I must have published at least 100 papers in that five-year period with the group.

DR. GARTNER: Wow.

DR. OH: And I was in the lab all the time doing chronic sheep preparation. In fact, I have to tell this one little anecdote. You know the residency graduation?

DR. GARTNER: Right.

DR. OH: They did a skit in those days.

DR. GARTNER: Oh, yes, yes. We used to.

DR. OH: In one skit they showed an incubator up on the stage, and then some resident wearing a cap came in and looked at the baby. It was

a mannequin. He looked at the baby and said, “Oh, this baby is sick.” And then they had a Dr. No. You know, there was that movie, “Dr. No.”

DR. GARTNER: Yes.

DR. OH: In the back you know it was me. “This baby is sick, but I have to go back to my sheep lab.” [Laughter] And I sat there and said, “Oh, my God!”

DR. GARTNER: [Laughs] I remember those skits. [Laughs]

DR. OH: It was funny. They all laughed. But I wasn’t sure whether to take it as an insult or as a compliment. Probably both. So anyway, then I have to tell you about my move here, that part of my career move. Joe was really a great person. I mean, he really taught me how to administer. He was a great administrator.

DR. GARTNER: Oh, he was wonderful, yes.

DR. OH: When I became chairman here, the first thing I did was call Joe [Joseph B.] Warshaw at Yale for some advice. He told me three things, and those were three things that Joe St. Geme [Jr.] used to tell us. One is take care of your house staff. Two is protect and develop your faculty. Three is make sure your patient care is optimal. Those are the three things.

DR. GARTNER: Each one’s a big job.

DR. OH: Yes. Anyway, so I was very happy at UCLA, at Harbor. I was very productive, and I had very good people. Then the budget crunch came in. The county was losing money. You know Harbor General is a county hospital.

DR. GARTNER: Right.

DR. OH: So they wanted to cut people, and they stopped hiring, and now I was getting very busy. I had one associate and needed a third one. They said “No.” I said, “Well, I can’t do this with just two of us. I might as well resign.” I wasn’t threatening, but —

DR. GARTNER: You were chief of the nursery service.

DR. OH: I was chief of nursery.

DR. GARTNER: Was that a preemie unit or neonatology intensive care?

DR. OH: Intensive care.

DR. GARTNER: That was the ICU at that time.

DR. OH: It was very busy, because I believe in regionalization. I went out to talk to every pediatrician in the South Bay area so they all referred patients to us. We got very busy. I thought that the ICU was making money for them. I said, "I deserve a third person, two fellows," but they wouldn't give it to me. And I said, "If I can't do my job, if I cannot provide my patient care, I'm not going to stay here. It's not fair to the patients. Go find somebody else." Well, they thought I was making a threat, but I wasn't. It just happened that Leo [Stern] came by one day and visited with us, and he was talking about this place. He said, "Come to the east coast. You can develop a program the way you wanted it." So I came over. My first visit to Providence was in 1972. I came alone. They showed it to me. Brown [University] had just started the medical school [Brown Alpert Medical School], and all chairmen of the clinical department had to be full-time chairmen, not voluntary ones. They used to have voluntary pediatrics with a voluntary staff as chairmen.

DR. GARTNER: Right.

DR. OH: They recruited Leo to come here in 1973, to be the first full-time chairman, and I was the first full-time person he was trying to recruit, because he needed a neonatology program. Anyway, in 1973, I came to visit. It was very small. Providence was not like it is today. It was very provincial, tiny. In fact, the night I came in, I stayed at the [Providence] Biltmore Hotel, which was being closed down. There were a few rooms left. I was trying to find a place to eat, and I couldn't find a place to eat for dinner. Anyway, I saw this place. It had a lying-in hospital with 5,000 deliveries a year. That was it. It was a free-standing lying-in hospital about four miles from the main hospital, the Rhode Island Hospital, with 5,000 deliveries with a staff of 60 or 70 voluntary obstetricians and gynecologists. And so I looked at this place. They had a premature nursery with Armstrongs. Do you remember the Armstrong incubator?

DR. GARTNER: Oh, yes, the Armstrong incubator.

DR. OH: Six of them. Boston Children's already had a program, with Clement [A.] Smith running it. I think he was the father of neonatology.

They had an ICU up there, so we sent all our sick kids over there. Anyway, I saw the opportunity. I said, "This is a great place to build a program. You cannot go wrong. You can only go up. You can't go down, there's nothing."

DR. GARTNER: [Chuckles]

DR. OH: And Leo was good recruiter.

DR. GARTNER: Yes.

DR. OH: He wined and dined me, and he took me to the airport and all that. So I came back a second time, and by that time I had gone back to Joe again. I said, “Joe, you have to help me. Give me a third person. I have to go. I can’t do this to the patients.” He was having trouble with the budget and all, just like Metcoff. They were all same. I had the same problem here, you know.

DR. GARTNER: We all have that problem.

DR. OH: We all have the same problem. So I finally decided to come here, mainly because of the attraction of being able to build the program. Essentially, there was nothing.

DR. GARTNER: And you came here when, 1973?

DR. OH: 1974.

DR. GARTNER: 1974.

DR. OH: And I’ve been here ever since. We bought this house. It was a waterfront house, but this is all a new addition. Anyway, again as I said earlier, I was a firm believer in regionalization. First, I assessed the demographics to see how many live births might potentially be out there as a catchment area. The plan of building the NICU [neonatal intensive care unit] was based on the demographics. I made sure of population in terms of potential number of high-risk pregnancies, etcetera, and I did a lot of research on that by looking over health department records. I also knew that in order to be successful, I needed to have the practitioners on my side, so I spent the first year driving around the state and southeastern Massachusetts all the way to the cape. I would call them and invite myself to the pediatric departments’ staff meetings. I would call so-and-so and say, “Hey, who is your chief of pediatrics?” They would give me the name and I would call their office. I said, “So-and-so, I’m so-and-so, and I’d like to come out and talk to you about our program.” I was successfully doing it. You know, it’s a what do you call it? A horse and buggy show —

DR. GARTNER: Yes, right.

DR. OH: — to sell the program. In the first year, I must have logged about 30,000 miles on my car.

DR. GARTNER: Whew!

DR. OH: In a small state like this. Because every week I was out there talking to people. It got to the point that they thought I was an obstetrician. They would refer pregnant women to me.

DR. GARTNER: [Laughs]

DR. OH: They didn't know I was a pediatrician. Anyway, I built an ICU. I had four fellows I recruited. Bill [William Joseph] Cashore was one of them, Richard [M.] Cowett and the late David [O.] Hakanson, and someone by the name of Ed [Edward H.] Karotkin, who was the director of Eastern Virginia Medical School. So the four fellows and I, essentially, started the program. There was a pediatrician by the name of Normand Gauvin, a practicing pediatrician, just like Kunstadter or Bob [Reuben] Klein, a practitioner interested in the newborn. He came in and helped us. He built a ventilator. He built all kind of things for us. He was very good at that, with his hands, building things. In fact, he had a little room next to my office that he built for his things, and we called it Norm's garage, after Normand's garage. So that's how we got started. I had a full program going in about three, four, five years. I mentioned that you have to have an ongoing assessment, so I, essentially, had a five-year plan. Every five years I have a plan on what to do for the next five years. After five years, I got the program all set. I had a lot of referrals to me. They were starting to recruit a full-time obstetrician. Karlis Adamson came on board.

DR. GARTNER: Oh, yes.

DR. OH: But the major deficit was that it was a free-standing hospital. Every time we needed a surgeon, a hematologist, we had to call the Rhode Island Hospital to send somebody over. They would get in a car and come over, park the car, and come in. Then when we had a sick baby we had to move the baby to Rhode Island Hospital for surgery. We didn't have any facility there. Anyway, it got to the point that I said, "In order for this to become a first-rate NICU, I need to have this place moved to the main campus." So I went to my administrator and told him that. He said, "Yes, that makes sense." So he and I went to the trustees, and they also agreed that that made sense. But the people who didn't want it were the practicing obstetricians, because they had it made. They had all their offices around the lying-in hospital, and it was very convenient for them to get in and out, to deliver a baby and go back to the office. They put up a big fight, to the point that they almost fired me. But the trustees were behind me, and they said, "Let's move." So in 1986, we moved to this new hospital Women and Infants right connected to the main campus. And the program really grew after that. It went from 5,000 to 10,000 deliveries. A NICU was built for 30 beds, and now we average between 60 or 70 babies. Now it has gotten to the point that they have a new building.

DR. GARTNER: Oh, really?

DR. OH: Next door to the current unit, with single-room units. It's a beautiful multimillion dollar project.

DR. GARTNER: This is for obstetric patients?

DR. OH: NICU.

DR. GARTNER: NICU.

DR. OH: And some obstetric patients.

DR. GARTNER: But it's mainly for the NICU?

DR. OH: For NICU, yes.

DR. GARTNER: Tell us about it. What is the new unit going to look like?

DR. OH: It's an addition to the old unit, to the old hospital.

DR. GARTNER: So it's an expansion.

DR. OH: Yes, and it's a four-story building. The first floor is all shops and stuff like that, and the administrative office. The second and third floors are the NICU, the fourth floor is OB/GYN [obstetrics/gynecology] patients. It's a very nice building. All the patient rooms are single rooms.

DR. GARTNER: Single rooms for the preemies, for the NICU?

DR. OH: For preemies, so their parents can sleep in.

DR. GARTNER: Oh, very nice.

DR. OH: It's a very parent-oriented facility. It's going to open in October of 2009.

DR. GARTNER: Does having the single room increase the nursing demands?

DR. OH: It probably will. They're trying to work out the details on how to maintain communication. They're also in the process of converting everything into electronic medical records. I kept telling Jim [James Frederick Padbury], once they have that, I'm going to quit.

DR. GARTNER: [Laughs]

DR. OH: I can do computer, although it's very difficult for me to. Right now I'm on service, or, rather, I just got off service this month. When I am on service, my routine is I get in at, like, 7:00 in the morning. Rounds start at 8:00 a.m. For one hour, I go through every baby under my service, look at their nursing notes, looking at the babies. That's all going to be gone. It's all electronic, the computer. They say, "You can look at those computer records at home. You don't have to come in at 7:00 a.m."

DR. GARTNER: [Laughs]

DR. OH: I say, "The problem is I don't have the baby to look at."

DR. GARTNER: Right.

DR. OH: You need to see the baby.

DR. GARTNER: Absolutely.

DR. OH: That's the one that you will not have in the room.

DR. GARTNER: Certainly.

DR. OH: You don't want to miss that. But, you know, you have to go with the age, right? That's the way things go.

DR. GARTNER: Things change.

DR. OH: Things have changed, and we have to go with the wave.

DR. GARTNER: Will all of the NICU be in the new building, then?

DR. OH: Yes.

DR. GARTNER: The whole thing is moving?

DR. OH: Yes. I think the old NICU will be converted to something else. I have no idea what it is. One nice thing about not being involved in the leadership position is that you don't have to have all those headaches. Jim Padbury is doing a very good job in running the place. He's a good leader.

DR. GARTNER: Good.

DR. OH: He's moving this thing forward. He's a good fundraiser.

DR. GARTNER: Before we forget, let's go back to the children, because when we went to California, we were going to talk about the children.

DR. OH: Yes, right.

DR. GARTNER: So we have to finish that.

DR. OH: Before I finish the career section, I need to mention something that I think is very important for me to say.

DR. GARTNER: Okay.

DR. OH: That is that after all those years, Mary and I felt very, very grateful to the institution. I mean, we're here 35 years. So one day we're sitting down, and actually there was a very generous donor who wanted to give about \$1 or \$2 million more for a program. They came to pediatrics first and said, "Do you want this money?" Of course, the administrator said, "Of course we want the money, but the problem is, we can only provide half of what a professorship at Brown asks for, and that is \$2.5 million." You have to have a matching fund.

DR. GARTNER: For a chair.

DR. OH: Yes. So the administrator came to me. I was the chief then. He said "Bill, what can we do about this? I hate to see this money go somewhere else." So I came home and talked to Mary, and she said, "Why don't we match with them?" I said, "Mary, I don't have that money." She said, "You could share with some of the pediatricians or with former fellows, et cetera." So I said, "That sounds like a good idea." We feel very grateful to the institution. So I went back to him and said, "I will match with some of my funds. Not the whole thing, because I don't have \$1.5 million to match them. But I will go out and solicit funds from my former fellows, my former residents and my pediatric colleagues, et cetera." So we did that, and we got the professorship established. It's called The William and Mary Oh-William and Elsa Zopfi Professorship in Pediatrics [for Perinatal Research].

DR. GARTNER: That's very nice. That's wonderful.

DR. OH: I have to put in a recognition.

DR. GARTNER: Well, yes, absolutely.

DR. OH: And it's for perinatal research. And guess who is the first chair, endowed chair. It is Jim Padbury.

DR. GARTNER: Oh!

DR. OH: They have a separate committee to select the recipient. I have nothing to do with it. I stay away from the selection, and they selected Jim as the first professor.

DR. GARTNER: That's very nice.

DR. OH: I'm very happy with that. I think he did a good job. Do you know that he was my medical student at UCLA?

DR. GARTNER: No. Oh, really?

DR. OH: He's still talking about it all the time.

DR. GARTNER: [Laughs]

DR. OH: We make rounds, and he comes in, and he says, "Hi," and tells the other residents, "Now, pay respect to this guy, because he was my professor when I was a medical student."

DR. GARTNER: [Laughs]

DR. OH: They're so funny.

DR. GARTNER: That's very nice that you have that.

DR. OH: Anyway, my children.

DR. GARTNER: Children. Let's hear about it.

DR. OH: So Kenneth was born in Chicago. Then we moved here when he was about nine or ten. He went to high school here. Actually, we sent him to a private school, Moses Brown, a very, very well-known private school here. Then went to Bates and came home. He loved pets. I remember when he was a kid, he had a passion. When you have a passion for a certain thing, that's where you go, you know.

DR. GARTNER: Absolutely.

DR. OH: I never tell him what to do. I always told him, "You do whatever you like to do." Same thing with my daughter, which I'm going to talk about in a minute. So he went into the pet business, and he's now a very successful senior vice president of marketing for a pet company. It's called JW Pet Company. It's based in New Jersey. He's very successful.

DR. GARTNER: He lives here in Rhode Island?

DR. OH: He lives here. That's the nice thing, because he lives about 20 minutes away from us.

DR. GARTNER: Good.

DR. OH: And we have four grandchildren from him.

DR. GARTNER: From him.

DR. OH: Very happy.

DR. C. GARTNER: Bill, would you take that down and hold it so I can have the picture with you and the photo.

DR. OH: Sure.

DR. C. GARTNER: If you don't mind. So this picture is your grandchildren.

DR. OH: The only problem is, I don't have Amy's children that I have to show you.

DR. GARTNER: We'll talk about them also.

DR. OH: Yes, that's fine.

DR. C. GARTNER: And we'll get pictures later.

DR. OH: These are the twin boys. They were born in Indianapolis, because he had to move to Indianapolis for a couple of years, for the company. Jim [James] Lemons was the pediatrician who took care of them. And these are the two girls. She's now 19. Can you believe that?

DR. GARTNER: My goodness.

DR. OH: She just started her freshman year at Boston College.

DR. GARTNER: Very nice.

DR. OH: This is the second daughter, who is a very active soccer player.

DR. GARTNER: Good.

DR. OH: And the two boys are about 11 or so, ten or 11.

DR. GARTNER: Great.

DR. OH: Red Sox fans.

DR. C. GARTNER: Thank you.

DR. OH: So that's my son. My daughter, her name is Amy. She also went to a private school here, Lincoln School, in town. Then went to Dartmouth [College], and that's a funny experience also. I was the one driving them around for college hunting. Like, this time of the year, in her junior year in high school, I drove her. I think she had already gone on the Internet and gotten some information about different schools. So I said, "Let's make a trip up to Vermont, to Dartmouth, New Hampshire, and then [Mount] Holyoke [College], et cetera, make the rounds." We also had made rounds earlier to Philadelphia, three schools, Haverford [College] and Bryn Mawr [College], and what's the third one? There were three schools that she went into. She didn't like them. Anyway, there were three very good undergraduate colleges that she went to visit, and she didn't like them. So we went on a trip to the New Hampshire area to visit Dartmouth. I don't know if you have been there or not.

DR. GARTNER: Yes, years ago.

DR. OH: It's a beautiful town. So I parked my car, and I went out and got [The] New York Times. I don't like to walk with them. She jumped out and went on a tour. About an hour later, she came back. She said, "Okay, Dad, let's go home." I said, "What do you mean? We're going to Holyoke, right?" She said, "Oh, no, I'm going to apply here. Period."

C. GARTNER and DR. GARTNER: [Laughter]

DR. OH: She loved it. She said, "This is it."

DR. GARTNER: Great.

DR. OH: She went for early action and didn't apply anywhere else. She was so confident that she would get in.

DR. GARTNER: Really? Good for her.

DR. OH: Anyway, she got in and had a very nice four years. She loved that school. In fact, every time she came home, when she was ready to go back, she would say, "Okay, I need to go home now." She considered Dartmouth as her home. [Laughs]

DR. GARTNER: It's a nice place.

DR. OH: I looked at her and said, "What do you mean you're going home?"

DR. GARTNER: [Laughs]

DR. OH: She said, "Home. I love it." So after Dartmouth, this was an experience, very interesting, actually. She got accepted to [The] George Washington [University School of Medicine and Health Sciences] for medical school, but one day she came home, like March, in the spring. I was doing some work, and she walked in, on a weekend, and she said, "Dad, I have got to tell you something." I said, "Uh-oh. What is it?" She said, "Well, I've decided to take off a year." I said, "What do you mean 'take off a year'?" She said, "Well, I've been going to school since I was five. I need a break." I guess it happens to many young people.

DR. GARTNER: Students, yes.

DR. OH: I said, "Well, what about your medical school?" She said, "Well, they promised me that they will hold a spot for me until next year." I said, "Oh, okay, that's good. What are you going to do for the year?" She said, "I'll do something, Dad, don't worry." I said, "Well, you have to find a job, right? You're not going to stay home." She said, "Yes, I'm going to find a job." And I said, "Amy, I promise that I'm not going to help you. If this is what you're going to do, that's fine. I support you. But you've got to do it yourself. Don't come and ask for help." And I never helped her. She found a job as a psychometrist at Harvard. I don't know what it is, but she worked with a PhD who had a grant from NIH [National Institutes of Health]. She got paid for six months doing psychometric testing.

DR. GARTNER: Psychometric testing. Good.

DR. OH: She was so good that a one-year project, she finished in six months.

DR. GARTNER: [Laughs]

DR. OH: So now she had to find another job. She went through *The Boston Globe* and everything, and couldn't find any, so she finally found a job working as a nanny. To show you how much she loved Dartmouth, she went back to Dartmouth to work as a nanny for a faculty member at Dartmouth for six months. Then she went to George Washington for medical school. I think she told me afterward that the six months' nanny job really turned her on to pediatrics. She loved children.

DR. GARTNER: Great.

DR. OH: So she ended up going to pediatrics, and guess where she matched? Me. [Laughter] Her application came in, and I told my selection committee, I was chairman then, and I said, “Well, treat her like anybody else, and I’m not going to be around you when her name comes up.”

DR. GARTNER: Right.

DR. OH: So I stepped out, because I sat with the committee all the time, going over the reviews.

DR. GARTNER: Sure.

DR. OH: When her name came up I walked out, I told my program director, “Now, be sure and treat her just like anybody else. I don’t want any favors.” I said it in public, to the committee members, and then I walked out. I think she ranked up very high, because she matched with us and spent three years with me. And that was another experience. When I was chairman, I still made rounds every Wednesday in the NICU. Every Wednesday at 1:00 pm, between 1:00 pm and 2:00 pm, I would make rounds. Not classroom, I hate classroom rounds. I always like to be with the patient, stand around the patient and let the residents present. And I don’t want to know what case they’re presenting, because I’d run the risk of being tripped up and not knowing what to say. But I always manage to say something. So one day she was the resident. She was presenting a set of twins, and she was so nervous. Can you imagine presenting a case, two cases to your dad, with all the residents watching you? She kept mixing baby A and baby B.

DR. GARTNER: [Laughs]

DR. OH: And they were all watching. Anyway, she came through okay and wanted to go into pediatric critical care. There was one faculty member in our critical care program that was a very, very compassionate person. Really, she admired her, so she wanted to go into PICU [pediatric intensive care unit] and ended up at Mass General [Massachusetts General Hospital]. Again, I didn’t help her. She applied and interviewed, and they took her in. Again, one weekend she came home and walked into my office right there and said, “Dad, I have to tell you something.” I said, “Now what is it, Amy?” She said, “I don’t think I want to be an intensivist the rest of my life.” She was looking at me intently. She thought I was going to be very upset. I said, “That’s your life. You do whatever you want to do. I don’t care. If you don’t want to be an intensivist, if you don’t feel like you want to be an intensivist the rest of your life, get out as soon as possible. Don’t do it.” And she was so happy. I could see her sigh in relief, you know, that I was supporting her.

DR. GARTNER: How far along was she in her intensivist training?

DR. OH: Six months. And I said, “Well, you better see Dr. [I. David] Todres.” David just passed away, by the way. Did you know him?

DR. GARTNER: Who is this?

DR. OH: David Todres.

DR. GARTNER: Oh, really?

DR. OH: He was a chief of critical care at Mass General. I said, “You better go and tell him so he’s aware of it, and also talk to your chairman, Alan Ezekowitz.” You know Alan. Alan Ezekowitz was chairman of Mass General.

DR. GARTNER: No, I don’t.

DR. OH: I said, “Again, I’m not going to help you. You have to find something that you want to do.” She said, “Don’t worry, Dad, I’ll manage.” Actually, she went back to talk to Dr. Todres and told him that. Apparently he wasn’t very upset, because he felt the same way I do, that if you don’t like to do something, get out. Then she went to see Alan, and Alan offered her a primary care job in Revere, in the Boston area. So that’s where she’s practicing now.

DR. GARTNER: Oh, really?

DR. OH: She’s very happy.

DR. OH: Very good.

DR. OH: Primary care. With two children. I don’t have her picture here. Other pictures I can get for you later. She works half-time. She wants to spend time with her family, the children. So that is my family.

The nice thing about our children is that they are so nearby. You know, one is 20 minutes away, and the other one is an hour and 15 minutes, and they come in almost every weekend.

DR. GARTNER: Well, that’s nice. Good. You get to see your grandchildren.

DR. OH: Yes, I get to see all the grandchildren.

DR. GARTNER: That's wonderful.

DR. OH: Time for lunch or do you want to go for some more?

DR. GARTNER: Well, let's see. It's 12:00 pm. We can break now or we can continue on. How do you feel?

DR. OH: I'm fine.

DR. GARTNER: Are you ready for lunch?

DR. OH: Let's see. Is there anything else we should talk about? What else is in your agenda? I don't want to rush through it.

DR. GARTNER: No, no. We have a lot more. We have a lot of general material to cover, but I'll just look through my list and see. I tell you, why don't we stop now? And I'll shut this off.

[Recording Interruption]

DR. GARTNER: Okay, let me just say that we're back on, and going to insert something that goes into the original Michael Reese portion of the history. Bill, why don't you go ahead and tell us a little bit more about the work you were doing at Michael Reese.

DR. OH: In contrast to the work schedule we have today with the RRC [Residency Review Committee] requirements, in those days there was no such thing, and I worked like a dog in those days, literally like a dog. I would put in eight, ten hours during the daytime, and then at night I would take call every third night as a resident on duty. Another every third night I would go work as a blood bank technician, because my salary was \$50 a month. I couldn't afford to pay my rent with \$50, so I had to make extra money. So every third night I worked in the blood bank. That's why I know everything about type and crossmatching, and Coombs' [test] and et cetera. The biggest money-maker, actually, was to send blood out, because the Michael Reese blood bank was the blood bank center for the whole city of Chicago. There were 92 hospitals in the Chicago area, and every time they needed blood they had to call me, and every time I sent a carton of blood, I got \$3 per unit. That was a lot of money.

DR. GARTNER: Right. [Laughs]

DR. OH: So when the phone rang, I got very happy. Anyway, that was my every third night. And then every other third night, I would carry the beeper, in addition to the two nights that I carried the beeper, to, essentially, collect blood for blood glucose analysis for Dr. Marvin

Cornblath. He was one of my senior faculty who was doing a lot of research on carbohydrate metabolism. So as you know, it was the kind of work schedule and workload that, compared to today, is night and day. It's literally night and day. There's no comparison.

DR. GARTNER: Do you think the residents today are missing something by not working so hard?

DR. OH: I don't know. I have mixed feelings about it. On the one hand, I've seen fellows who go through a night call and have to stay for the rest of the day the next day, and it's a danger to the patient. That's true. On the other hand, they also miss out on the experience that they would gain, so, you know, it's —

DR. GARTNER: A tradeoff.

DR. OH: Yes, it's a tradeoff. Okay?

[Recording Interruption]

DR. GARTNER: Okay. Thank you. We will put that in. We're resuming the recording, and we have Mary Oh, who is also a physician, joining us. She and Bill are going to talk together for a little bit, so we can hear a little bit more about their life together. So Mary?

DR. OH: Tell him why you picked Stockholm rather than Paris.

DR. M. OH: After we finished our training in Chicago, we decided to go home and set up our practice. Unfortunately, there were no opportunities for us.

DR. OH: I've covered that part.

DR. M. OH: You did already?

DR. OH: I did, yes.

DR. M. OH: Oh, you can edit it.

DR. OH: [Laughs] I don't want you to repeat the whole thing, yes.

DR. M. OH: So anyway, Dr. Metcoff offered us the opportunity to go to Europe if our trip home didn't turn out to be what we liked. So we decided to go either to Stockholm or Paris. In those days, we didn't know anything about Europe, except I thought Paris must be expensive.

Everybody knows Paris, but nobody knows about Stockholm. So I told Bill, “Let’s go to Stockholm, because with this stipend we probably would be able to live in Stockholm better than Paris.” Well, we got to Stockholm, and then a month after that we got the *Reader’s Digest* and it listed the ten most expensive cities in the world. Number one was Stockholm. [Laughter] We knew we were in trouble.

DR. OH: It was too late. We couldn’t leave.

DR. M. OH: We couldn’t, yes, but it was really the best place for Bill, because Professor Lind was such a wonderful person and a very good teacher, and he also took care of the family.

DR. OH: And found a job for you.

DR. M. OH: Yes, yes, he found a job for me, because Kenny was ready for kindergarten. So after I saw him off to school I was able to work in the biochemistry department. That was the best two years in our married life, because Bill was home every night, and Kenny was able to see the daddy that he hadn’t known for five years.

DR. GARTNER: [Laughs]

DR. OH: It was a research job, so I didn’t have to take night call, which was nice.

DR. GARTNER: That was nice.

DR. M. OH: Yes.

DR. GARTNER: Sometimes those experiences overseas are very special.

DR. OH: Tell him about our first date.

DR. GARTNER: Oh!

DR. M. OH: You were the one who —

DR. OH: I should.

DR. M. OH: Yes, because you goofed.

DR. OH: So, as I said about her father, I was afraid that —

DR. M. OH: No, my father didn’t allow dates.

DR. OH: Yes, right. He was very conservative. But I finally got her to come out one day. I said, "Let's go to a symphony." We love music. We love art. We go to the museum all the time. So I went and got two tickets, but when I met her, I didn't go to her house.

DR. M. OH: Yes, because my father didn't want me —

DR. OH: She had to come out in a taxi and meet me somewhere. She got out of the taxi, and I saw one other lady come out. "Uh-oh," I thought. So I went over, and she said, "This is my niece."

DR. M. OH: My chaperone.

DR. C. GARTNER: Oh, dear.

DR. OH: "Your niece. Oh, nice meeting you, but I only have two tickets." And in those days, tickets were hard to get. So I said, "Now what do we do? Two tickets with three people. We can't go." You had to have three tickets. So I said, "Let's go to a movie." So we ended up going to a movie and wasted two symphony tickets. It was a good movie, "To Catch a Thief."

DR. M. OH: Yes.

DR. GARTNER: Oh! [Laughs]

DR. M. OH: Cary Grant.

See, the Philippines was very old-fashioned in those days. You couldn't go out without a chaperone.

DR. OH: And your dad wanted a son-in-law who was an only son, right?

DR. M. OH: No, no, no.

DR. GARTNER: [Laughs]

DR. M. OH: My father, in his old-fashioned thinking, and because he loved me very much, he spoiled me. If I got married, he wanted me to be the only daughter-in-law, because then they would have no choice but to love me.

DR. GARTNER: [Laughs]

DR. M. OH: And he's one of ten, and that was out. No question.

DR. GARTNER: [Laughs]

DR. OH: I told him about using the handkerchief to mask my voice, and that your father managed to pick it out.

DR. GARTNER: [Laughs]

DR. OH: Very easily. “Oh, you want Mary?”

DR. M. OH: We graduated in March of 1958. We usually met at church on Sunday. I said, “Let’s go home. You have to meet my father.” This is the end of medical school. There was no other way. So we went home.

DR. OH: It was a pouring rain. I remember that.

DR. M. OH: I was so surprised, because my father just took him in like he knew him for years.

DR. GARTNER: [Laughs]

DR. OH: He accepted me right away.

DR. GARTNER: Wonderful.

DR. OH: It was a pouring rain, and I walked in dripping wet.

DR. M. OH: All wet.

DR. OH: I don’t know why, but we didn’t have an umbrella.

DR. M. OH: We took a taxi.

DR. OH: I took my shirt off, and he gave me a new —

DR. M. OH: Slippers.

DR. OH: Beige slippers. We had a good time. Her mom was a good cook. She cooked the best meal I ever had.

DR. GARTNER: [Laughs]

DR. M. OH: So that was it.

DR. GARTNER: So you were made a member of the family.

DR. OH: Yes.

DR. M. OH: Right away.

DR. OH: Right away. We had to leave for the [United] States [of America] in July, and we had to have an engagement party before that. That was in May, May or June, right?

DR. M. OH: See, he still didn't trust you yet, you know? [Laughter]

DR. OH: He said, "If you want to go to the States together, you have to get engaged."

DR. M. OH: Because he knew that we would not have a wedding if we were going to go abroad for so many years.

DR. OH: Yes.

DR. M. OH: Yes.

DR. GARTNER: Well, that's nice.

DR. OH: Yes, we have a good life together.

DR. M. OH: Yes, yes. Otherwise, we wouldn't have lasted —

DR. OH: Fifty —

DR. M. OH: Forty-eight years.

DR. GARTNER: Now, Mary, this is your opportunity to tell stories about Bill that we haven't heard, so maybe you have some stories you'd like to tell us about Bill.

DR. OH: Can you think of any?

DR. M. OH: All I know is that he was so busy working for many, many years, that our son, Kenny, thought he was a babysitter until he was five. [Laughter] But we had a good life, because, you know, we knew what was best for the family, and we adjusted and adapted.

DR. GARTNER: Good.

DR. M. OH: And the kids knew that that's the way life is, and there's always a mommy.

DR. GARTNER: But you worked also.

DR. M. OH: **Yes. After I finished my specialty in clinical pathology, I didn't work for about —**

DR. OH: **Two, three —**

DR. M. OH: **— five years.**

DR. OH: **Five years.**

DR. M. OH: **Five years.**

DR. OH: **Goes fast, those years.**

DR. M. OH: **And it was hard to get a babysitter or a housekeeper. I did try for three months, but it didn't work out. But I did get my specialty board so that as soon as Amy was able to go to school, when she was in third grade, then I was able to go to work and hire somebody after school. So I was able to at least work for about 12 years. That was enough for me.**

DR. GARTNER: That's good. And you worked at Grant Hospital during that time?

DR. M. OH: **No, that was residency.**

DR. GARTNER: That was residency.

DR. OH: **But here she worked in a hospital.**

DR. GARTNER: But you worked here?

DR. M. OH: **Yes, here I worked for a private hospital for two years, and then I came out and went into private practice, and I opened my own laboratory.**

DR. GARTNER: That's what I remember, right.

DR. M. OH: **Yes, yes. But —**

DR. OH: **Very successful.**

DR. M. OH: **But after ten years, it just —**

DR. OH: **Medicare, Medicaid and all that paperwork.**

DR. M. OH: The HMOs coming out, and Medicare, and I was working 12 hours a day, and I said, “That’s not it.”

DR. GARTNER: So did you sell the business?

DR. M. OH: Yes, and I sold the business to a national company.

DR. GARTNER: To a chain, yes. Thank you. Thank you.

DR. OH: Thank you, Mary.

DR. GARTNER: Okay. Well, thank you, Mary.

DR. M. OH: You’re welcome.

DR. GARTNER: Okay. Bill, I’m going to move over here, because the camera is aimed at you over there, so I’m going to move around.

DR. OH: A few more things?

DR. GARTNER: That’s fine. Tell us about some of the honors that you’ve gotten over the years, because I know you’ve gotten a number of very important ones.

DR. OH: I already mentioned The [Virginia] Apgar Award [in Perinatal Pediatrics] in 1995, which I thought was my most important honor.

DR. GARTNER: Yes.

DR. OH: I was president of the Perinatal Research Society [PRS] for one year, in 1980-81. I have been running the International Perinatal Collegium, and chairman of the steering committee. I was chairman of the Fetus and Newborn Committee [Committee on Fetus and Newborn] for eight years for the [American] Academy of Pediatrics.

DR. GARTNER: For the Academy.

DR. OH: That was in the mid 1980s. I was a member and the chairman of the [National Institutes of Health Eunice Kennedy Shriver] NICHD [National Institute of Child Health and Human Development] Human Embryology and Development Study Section. In those days, it was a four-year cycle. You might remember.

DR. GARTNER: Yes, I do.

DR. OH: So I did it for two cycles, and they got me to be the chairman for the last year of my second cycle. Then I guess they liked me so much, they got me to stay two more years. So I did it, like, nine or ten years of study sections. It's an important honor. Not only an honor, but it was an important job, because I feel like I've done something to support young research investigators. It was very interesting to run that committee.

DR. GARTNER: That was very important.

DR. OH: I was also a member of the Basil O'Connor [Starter Scholar] Research [Award] Committee of the March of Dimes. It must be at least 13, 14 years, quite a while. When Mike [Michael] Katz took over as the medical membership director, he decided to change the whole panel of membership. That was good for me, because it had been a lot of work for 10 years.

DR. GARTNER: Right.

DR. OH: It was a lot of work in terms of reviewing grants and all of that. Let's see, there were a few other things. I was also invited to many, many meetings. It's all in my CV [curriculum vitae].

DR. GARTNER: Yes, it's a very impressive CV. I don't think I've ever seen anyone with so many papers. [Laughs] I think it's over 500?

DR. OH: Not quite, but close to it. That's my goal. I want to publish 500.

DR. GARTNER: I think you're over 500 already. [Laughs]

DR. OH: And I've been to many international meetings, by invitation. One of the things I always advise my young people is that if somebody invites you, please don't turn it down, because if you turn one down, people will hear about it and they will never come back and invite you.

DR. GARTNER: That's true.

DR. OH: I never turn down an invitation unless I have a commitment already for a certain date, and I've never accepted a meeting assignment and then not show up — never, never in my lifetime. In fact, one time, was it 1978, there was a huge snowstorm here in Rhode Island. The whole state was paralyzed for one week. Everything was closed. The highway was closed, the airport was closed, and I had an invitation from Portland, Oregon. John [W.] Reynolds invited me to speak on a Friday morning at 11:00, and the storm hit on Monday that week. Everything was paralyzed. So starting on Tuesday, I started calling John, "John, I don't

know if I can make it, because the airport is closed. [Boston's] Logan [International Airport] is closed. Everything is closed." I couldn't get out of my house. I was snowed in. The good news is that the whole family was snowed in. He said, "Well, that's okay. I'm sure it will be open by then." Wednesday came, still closed. Then he said, "Well, I better prepare something to talk on your behalf." Thursday came and the airport was still is closed, so I called him. "John," I said, "you may have to speak for me the next day, because I can't be at a three-day meeting for you." Then Friday morning the airport opened up, so I took a taxi, ran to the airport, took the 6:00 am flight and landed at Portland, Oregon, at 9:30 am. I got to the meeting place at 10:30 am and got up on the podium and spoke at 11:00 a.m.

DR. GARTNER: [Laughs]

DR. OH: That was the closest one I ever had.

DR. GARTNER: [Laughs]

DR. OH: It's a good story to tell.

DR. GARTNER: Your C of commitment — CROWNS.

DR. OH: Exactly.

DR. GARTNER: That's it, C. [Laughs]

DR. OH: Commitment is very important.

DR. GARTNER: Yes. Well, thank you. I'd like to turn a little bit to talk about pediatrics in general, not just neonatology, but pediatrics in general. We'll get back to neonatology in a moment. You've been a department chairman, and you obviously are involved in the broad aspects of pediatrics. I'd like some views on sort of how you feel about the development of pediatrics up to this time, from a historical perspective.

DR. OH: Well, as you know, historically, pediatrics was a division of internal medicine, long time ago. In fact, we had several chairmen of pediatrics who were internists. Pediatrics has always been considered as a micro-medicine. I think we have come a long way in changing that. We really have come a long way. There is only one thing that I see as a trend, which I like to express my own opinion in, and that is that we especially should not forget the fact that we are pediatricians. Neonatologist, critical care, whatever you are, you are still basically a pediatrician. I learned that from Joe St. Geme. Joe is a very avid advocate for "pediatrician one day, pediatrician forever." We were made to attend all his pediatric conferences, whether one was to be a neonatologist, or geneticist or whatever. But now

it's very different. I don't see the neonatologist, the critical care people, the emergency medicine people attending the ward in pediatrics. In fact, I was the only one when I was in neonatology to volunteer my service to be in the ward service. I found it very, very exciting to see a part of pediatrics and talk about fevers of unknown origin. It was very challenging. When I was attending, I volunteered myself two weeks in the general ward. I always had a copy of *Nelson's [Textbook of Pediatrics]* on my bedside. I never knew who was going to call me. I may not remember what it was, and I would have to open up and read a little bit inside.

DR. GARTNER: [Laughs]

DR. OH: But I still think we need to push for more involvement in pediatrics. It's getting to be too isolated.

DR. GARTNER: Too separated.

DR. OH: The specialty is too separated. In fact, Jerry [Jerold F.] Lucey will probably remember this. I don't know if we talked about it or not. About 20 years ago, when neonatology was being developed, there was a big meeting. It was, I think, an Academy meeting, at which a group of neonatologists got together and wanted to separate out of the Academy.

DR. GARTNER: Oh, yes.

DR. OH: To form their own organization.

DR. GARTNER: He does talk about that.

DR. OH: I was vehemently against it. I really spoke about, "We can't do this. We are all pediatricians. We need to be in a pediatric organization." They wanted to form their own society of neonatology separate from the Academy.

DR. GARTNER: Yes. Right.

DR. OH: Which is wrong, I think. Right now, the Academy is very smart. They did it the other way around.

DR. GARTNER: Right.

DR. OH: They got everybody in.

DR. GARTNER: That's right.

DR. OH: So everybody is part of the Academy.

DR. GARTNER: That's true. The Academy has become very important in the whole move.

DR. OH: It's a good thing, a very good thing. A very smart move. Somebody was very smart in those days.

DR. GARTNER: I think there was a similar thing at the SPR [Society for Pediatric Research] and APS [American Pediatric Society] —

DR. OH: Yes, since then.

DR. GARTNER: — to separate off neonatology, and people said no.

DR. OH: Yes, yes. That's not right. I think we are all pediatricians.

DR. GARTNER: Right. I agree.

DR. OH: And I suspect that for many years to come it should stay like this, although the downside of it is that the meetings get to be too big. You still remember the days at the boardwalk, right?

DR. GARTNER: Oh, yes. I loved those meetings in Atlantic City.

DR. OH: Two, three hundred people. You walked on the boardwalk, and you admired all these big names. You know, there's so-and-so, Dr. [Ralph] Platou.

DR. GARTNER: Oh, yes.

DR. OH: Dear Dr. Platou. He was my examiner, you know.

DR. GARTNER: Ah. What about the scientific advances in pediatrics over the last 50 years?

DR. OH: I think we have done a lot. We've come a long way. I mean, in the days I was in training, there was no such thing as genomics. What you knew about genetics was chromosome 21, the old-fashioned chromosome 21 and the older mom, and the younger mom. But today, all this genetics, it's mind-boggling. Sometimes it's really scary. In my own service, when something comes up like this, I have to go back and read, because you get behind. We have done a lot. There have been a lot of advances, particularly in molecular biology. It's changing so much, and it really improves the health outcome a lot. Today, for instance, you make a diagnosis of congenital heart way before the baby is born. We had a CF

[cystic fibrosis] case last month that was diagnosed in utero. When the kid came in with a distended belly, you knew what it was, meconium ileus. The diagnosis was already made. In the old days, you had to figure out what the differential was, and you had to wait six months to get a sweat test done. No more. It's all gone. It's exciting to be practicing in this day with so many advances. And it's all because of research.

DR. GARTNER: That's right.

DR. OH: One of the things that makes neonatology so attractive is the foundation is in perinatal biology.

DR. GARTNER: Yes

DR. OH: And molecular genetics. That's the foundation of neonatology.

DR. GARTNER: Where do you see pediatrics in general, not just neonatology, but pediatrics in general going in the next 25 years? How do you see it changing? Is it going to change? Are we going to see a different kind of pediatrics?

DR. OH: The good news is that there will be more and more new discoveries that will improve the diagnosis, and treatment and outcome. The bad news, quite frankly, is the invasion of regulatory agencies really changing the way we practice pediatrics. You hear it a lot from pediatricians out there. You know they spend a lot of time on paperwork. Remember a few years ago when we had the early discharge? That was probably regulatory invasion.

DR. GARTNER: Yes.

DR. OH: I fought very hard for the Academy. I was the chairman of the Fetus and Newborn Committee. But there's nothing you can do about it. It's all the insurance people driving it.

DR. GARTNER: Yes.

DR. OH: We had a kid last month that was in service, was discharged at 24 hours, because the insurance company said you had to discharge the kid. He came back four days later, bilirubin at 35. It was a very bright mother, a good pediatrician, well screened and all that, but you don't have the baby under your control environment to observe. That's an example of regulatory invasion impeding the outcome.

DR. GARTNER: It's a good point.

DR. OH: Yes.

DR. GARTNER: What other changes do you see in the future in the practice of pediatrics? Do you think the nurses and what they call “retail medicine” will become a real problem?

DR. OH: Yes, to me that’s a real threat, all these MinuteClinic, they call them, in CVS stores.

DR. GARTNER: Right, right.

DR. OH: I mean, they’re all coming from profit. That’s the bottom line.

DR. GARTNER: Right.

DR. OH: And I’m not sure the quality is their concern. Once you have that as the tenet, it’s not going to be good for anyone. The consumer will probably go for it, because it’s convenient for them. It’s probably cheaper, especially if the insurance company says they’ll pay with no co-pay. You go for it, you know?

DR. GARTNER: Right.

DR. OH: The trouble is, from what I understand, and I don’t know much about the way they practice in those retail clinics, it’s all based on a book, right? A nurse practitioner or someone will be reading the book. You might as well go onto the Internet, go to Google.

DR. GARTNER: Right.

DR. OH: The same thing.

DR. GARTNER: [Laughs]

DR. OH: So that’s what scares me. If that becomes more and more popularized, there will be less and less people who want to go into medicine and go into pediatrics, particularly pediatrics. And then we will have medical problems.

DR. GARTNER: I hope not, but I think that is a legitimate fear. What major breakthroughs in research do you think might come up in the next 25 years?

DR. OH: In pediatrics or neonatology?

DR. GARTNER: If you look at the crystal ball, in pediatrics in general.

DR. OH: Genetics, I think, is what the need is. All the discoveries are going to come from that. Right now we're having trouble with the genetic engineering and gene therapy, but eventually we'll get there.

DR. GARTNER: The breakthroughs will come.

DR. OH: Once we get that. And the other major breakthrough will be true molecular biology. We may be able to reduce the problem of congenital malformations. That's our big problem right now, congenital anomalies. Once we understand how these defects come about, there will be a way that we can prevent them. Neural tube defects are an example.

DR. GARTNER: Right, right.

DR. OH: What, 30, 40 years ago we didn't have any clue how to prevent them. Now with the folic acid story, that really changed the picture.

DR. GARTNER: It's often a simple answer. [Laughs]

DR. OH: Exactly, yes.

DR. GARTNER: It's true. Well, let's turn now to neonatology, some of the broad aspects. You already talked about Michael Reese. Is there anything else to talk about in terms of some of the origins? Certainly American neonatology and premie units came from Michael Reese, and I wonder if there's anything else about Julius Hess, particularly, and his contributions that you recall from your years there. Is there anything we didn't cover?

DR. OH: I think there are a few other things. For instance, I mentioned Clem Smith earlier. I think he really was one of the very few people in those days who made very major contributions, just talking about feeding alone. We used to starve those kids for three to five days, and he was one of those who said, "Why are you starving these kids? You need to feed them and give them fluid." So he was one of the very important persons in the field. Bill Silverman is another who comes to mind. He was a giant. He was somewhat controversial at the time, but he did a lot of things. I'm sure some of the other people I'll be mentioning will be in the list. I don't know who the people are.

DR. GARTNER: We've done —

DR. OH: On the list, but people like Mel [Mary Ellen] Avery.

DR. GARTNER: Yes.

DR. OH: No question about it. She made the contribution of surfactant.

DR. GARTNER: Yes.

DR. OH: Look at the outcome of hyaline membrane today. It's night and day just on the basis of that one fetal research. A lot of other people. I don't want to mention just a few. There are so many other people who made major contributions. From the standpoint of the institution, I think Michael Reese stood out. No question about it. I think Boston Children's [Children's Hospital Boston] and Harriet Lane [Home] from—

DR. GARTNER: [Johns] Hopkins [Hospital].

DR. OH: Hopkins and Virginia Apgar. Those are all major. And [L.] Stanley James made a major contribution, along with Virginia Apgar. Those are big people in maternal-fetal medicine. I think we should thank those people, [Roberto] Caldeyro-Barcia, Karlis Adamson, Bill [Sir Albert William] Liley, the major, major players in understanding fetal physiology. I'm still a firm believer that neonatology cannot advance without hand-in-hand cooperation with the maternal-fetal medicine people. The obstetricians's the key.

DR. GARTNER: Right. I think the two have to be wedded.

DR. OH: And nursing as well. Nurses have to be a part of the picture. The first faculty I recruited when I came here was a nurse, Doris [J.] Biester. She is now the president of the Children's Hospital Colorado, in Denver.

DR. GARTNER: Oh, really?

DR. OH: Terrific.

DR. GARTNER: She's done well.

DR. OH: Doris.

DR. GARTNER: I know her name.

DR. OH: And that's why I go back to Hess. He wouldn't have been successful without Evelyn Lundeen.

DR. GARTNER: Right.

DR. OH: It's a mutual thing.

DR. GARTNER: That's right.

DR. OH: I don't think Evelyn Lundeen would have been successful without Hess on her side. The two made a good team.

DR. GARTNER: Yes. That's a very good point.

DR. OH: Yes.

DR. GARTNER: When did you see yourself as a, in name, a "neonatologist?" Do you have any idea when you realized that you were a neonatologist?

DR. OH: I remember when I came here in 1974, I spent a lot of my time explaining to people what I do. I mentioned earlier they thought I was an obstetrician, because I deal with pregnancy a lot.

DR. GARTNER: Right. Sure.

DR. OH: But at that time, we still didn't have the term "neonatology." The group was struggling with perinatologist, neonatologist, neonatal-perinatal medicine, et cetera. So we finally settled on neonatal-perinatal medicine and neonatologist being the name for the people involved, and now they call themselves neos — you know, neo, n-e-o. That's short for —

DR. GARTNER: Oh it's a short form of neonatologist, yes.

DR. OH: I hate that.

DR. GARTNER: I haven't heard them use that.

DR. OH: Oh, yes, you see some of them — neo. Oh, yes. "Are you neo?" "Yes."

DR. GARTNER: [Laughs] Who do you think came up with the name neonatology?

DR. OH: I remember it was in a group meeting. I don't remember if it was an AAP or an SPR meeting. A group got together. I remember George [A.] Little was there, Jerry Lucey was there, I was there, and I think Phil [Philip] Sunshine was there. Four or five of us got together and said, "We must come up with a formal name, nomenclature." And that's when the "neonatologist" came in. Then when the [American] Board [of

Pediatrics] met a couple of years later, I was on the Board then, and that was another thing I forgot to mention. I was a member of the American Board of Pediatrics, the Subboard of Neonatal-Perinatal Medicine. We formalized it, I think, in the mid 1980s, as a sub-board in neonatal-perinatal medicine. But before that, there was no such thing. We were struggling about what terminology to use. It was, I would say, somewhere around the late 1970s or early 1980s, somewhere around that time.

DR. GARTNER: The first board, the first neonatal board was —

DR. OH: 1975.

DR. GARTNER: Yes, was 1975, because that's when I took the first board.

DR. OH: You took the board in Philadelphia, right?

DR. GARTNER: That's right, in Philadelphia.

DR. OH: So it must be earlier than that.

DR. GARTNER: Yes, it must have been before that. Jerry Lucey thought that the person who came up originally with the name "neonatology" was Buck [Alexander] Schaffer in Baltimore. I don't remember that, either.

DR. OH: Could be.

DR. GARTNER: I've been trying to get people to think back on that.

DR. OH: Could be, it must be then, right?

DR. GARTNER: I don't know. I'm not sure.

DR. OH: I don't know if there was anybody who named it.

DR. GARTNER: That's really what I was —

DR. OH: It was a group thing.

DR. GARTNER: Nobody seems to know.

DR. OH: No. Yes, right.

DR. GARTNER: [Laughs]

DR. OH: Good. I'm not the only one. [Laughs]

DR. GARTNER: Well, let's see. Okay. Before we get into neonatology in the broader sense, tell me a little bit about what you consider your most important contributions in research, in scholarly work first.

DR. OH: I'm one of those who doesn't mind speaking negatively about myself. I'm one of those "Jacks of all trades." I've been involved with many, many areas in neonatology, but the area that I think I have done the most is fluid and electrolytes, and infants of diabetic mothers, those two areas. I'm most proud of those two areas, and I speak very easily without worrying about being not up-to-date. In terms of scholarly activities, well, not so much scholarly, but to me, one of the most important things I've done is to propagate the idea of regionalization. I think I was one of the very few people who started this idea about setting up Level II nurseries around the tertiary care centers so there is back-and-forth referrals of high-risk neonatal and pregnancy. That really makes a lot of sense, because they not only become programmatically very, very effective in delivering care, but they also create very good camaraderie among the people in the region. Unfortunately, there's a lot of bad spin-off out of that. There are a lot of people who not only just went out there to start with a Level II facility, but started going up to A, to B, and then started to compete against each other, which is not good. That's unfortunate. But we still maintain the kind of regionalization here in Rhode Island — one center with four Level II units around us, with a catchment area of about 26,000 live births.

DR. GARTNER: Right.

DR. OH: You need to work hand in hand with the maternal-fetal medicine people. We have a very effective prenatal diagnostic center in the region that takes care of all the high-risk pregnancies. That's how we get all these prenatal diagnoses — congenital heart, gastroschisis. Not only do we know what the kid had or the mom had, but you give the opportunity for what's called a prenatal consult. Every congenital anomaly picked out by the Level II ultrasound at this prenatal diagnostic center is automatically referred to us for a maternal interview. Yesterday I saw one mother who has [a child with] gastroschisis and is due in February. I got to meet her, talk to her a little bit about what the problem is, what she can expect, and I gave her a tour of the unit. The continuity is so good, and it makes the parents less anxious, also.

DR. GARTNER: Are the mothers brought from the other hospitals to your center for delivery?

DR. OH: Oh, yes.

DR. GARTNER: So you're doing maternal transports —

DR. OH: Yes.

DR. GARTNER: — for anticipated delivery, too.

DR. OH: We have a contract with all of these Level II hospitals that states that they must follow a certain set of referral guidelines that are medically determined. The faculty created those criteria for 28-week, 32-week, that kind of thing. And we also have a very active retro transfer.

DR. GARTNER: Ah, so you return the babies.

DR. OH: Return the babies. Once they recover, they go back, which makes the parents very happy. It's closer to them. And when they go back to the unit, the same neonatologist is in the tertiary care center. They see the same neonatologist. So it makes the system really work. But it's got to be without competition, and run by a medical staff, because once it begins to have competition, you're in trouble.

DR. GARTNER: That's right. Good.

DR. OH: So that's, I think, one of the things that I'm very proud of. The other thing I'm very proud of is this GBS [group B streptococcal] prevention, the strep prevention. I feel like I have done a lot about that area. I was chairman of the Fetus and Newborn Committee. I just wanted to start talking about the group B strep story. You're familiar with —

DR. GARTNER: Yes, yes, tell us about the group B strep story.

DR. OH: When Sam [Samuel P.] Gotoff did a study in 1986, [Boyer KM, Gotoff SP. Prevention of early onset group B streptococcal disease with selective intrapartum chemoprophylaxis. *N Engl J Med.* 1986 Jun 26;314(26):1665-9] showing that screening the moms at 26 or 28 weeks and treating them during labor would prevent the neonatal GBS sepsis, right?

DR. GARTNER: Yes.

DR. OH: The Academy published a statement in 1992, based on that study and five or six others that were confirmatory, recommending that we should screen all mothers at 26 to 28 weeks. You probably remember.

DR. GARTNER: Yes, I do.

DR. OH: It didn't work well because the obstetricians were never consulted. I mean, these are their patients, right?

DR. GARTNER: Yes.

DR. OH: The pediatrician cannot tell the obstetrician what to do is basically what it is. They didn't want to do it, so there was a lot of controversy about implementation, and a lot of kids still died and had severe GBS sepsis. I don't know if you remember. There was a lot of lay-people-run GBSA, the GBS [Group B Strep] Association established around the country.

DR. GARTNER: Yes.

DR. OH: Lay people got together. You know what happened then. When this controversy started, [*Good*] *Housekeeping* and *Parent* magazines had a big play about the two professional groups fighting each other and having a program available for prevention, and yet it was not being done, because they were fighting each other, ending up with all those kids having trouble — the babies with GBS sepsis. So there were a lot of associations established, including one here in Rhode Island. They even had a national GBSA, a big group of very, very active people, real activists. They even passed a law in Florida and a law in California. They lobbied the legislature to pass a bill, essentially, to tell the obstetrician to start screening. But in California the legislature was very smart. They said, "We don't want to practice medicine. Let's form a committee to look into it." So they formed a committee, and the committee told the health department in California, "Go get a consensus conference organized and see if you can come up with a consensus statement so you don't fight each other." And they called CDC [Centers for Disease Control and Prevention], and the CDC organized this meeting with the AAP, with ACOG [American College of Obstetricians and Gynecologists] and with the other professional organizations. The GBSA was also invited. It was a big group, about 45 people met in that hotel in San Francisco Airport Sheraton Hotel [Sheraton Gateway San Francisco Airport Hotel], for two days. I represented AAP, because I was chairman of the Fetus and Newborn Committee. I went there, and we spent the whole day on day one arguing with each other. They were fighting, and they were fighting and fighting. The next day, I got the ACOG person and the CDC person, the representatives from those two, the three of us, and I said, "We've got to do something," and also the chair of the infectious disease committee from CHOP [Children's Hospital of Philadelphia]. I'm blocking his name. But anyway, the four of us got together and had breakfast. The meeting was supposed to start at 8:30 a.m. We got breakfast at 7:00 a.m., and we said, "We must do something. We couldn't just walk in there, because they're going to come up with nothing." So someone went over to the bathroom and got a piece of toilet paper, and the four of us started writing guidelines.

DR. GARTNER: The famous piece of toilet paper. [Laughs]

DR. OH: Yes, right, to write guidelines. I said, “This is what we’re going to tell them we should do.” So we walked in there, put all these guidelines on the board, and within two hours, although there were still some arguments, we came up with a consensus.

DR. GARTNER: That’s good.

DR. OH: And so it was published in 1996, and since then GBS sepsis has gone down to, like, .3 per 1000, from 1.5 per 1000.

DR. GARTNER: That’s impressive.

DR. OH: That’s a five-fold decrease.

DR. GARTNER: Yes, that’s impressive.

DR. OH: In fact, when I went to the next ACOG meeting, again representing the Fetus and Newborn Committee, they talked about this consensus, and then the chairman, whose name I don’t remember, said, “You know, we should send Bill out to Bosnia.” [Laughter] “He did such a great job as a diplomat doing this thing.” I was very proud of it.

DR. GARTNER: You *are* a great diplomat.

DR. OH: Very proud I was able to bring people together and talk it out and get it done.

DR. GARTNER: It’s a major achievement. There’s no question about it, that really is. That’s very important. What other areas do you —

DR. OH: See, I wish I had this, then I could think about it.

DR. GARTNER: [Laughs] You can always add a few more when you get it back.

DR. OH: I can send you an e-mail and say, “Oh, I forgot to mention this.”

DR. GARTNER: You can add it in when you think of things. What about your current involvements in neonatology? Tell us what you’re doing now.

DR. OH: Well, I still work about, right now I’m half time. I spend four months down in Florida. I still work down there, actually. I have a computer, I have Internet, everything. They call me there, they write me, and when they have a meeting that involves me, they send me an e-mail, and

I send in my recommendations and all of that. But I, essentially, am half time. I get paid half time. When I'm up here between May and November, I attend one month on the NICU, which totally occupies me. In fact, when I'm on call, Mary always sleeps in the other room, because the phone rings. I can pick it up and talk, and give advice and all that, then hang up and go back to bed. She can't. So I said, "You go to the other bedroom for the month." And I still get involved with counseling young people, the fellows. I still go to the Promotion and Tenure Committee [Tenure, Promotions and Appointments Committee – Brown University]. They asked me to be a member. I go to all the conferences and sit there and make my comments. They always look at me and say, "What do you think? Have you ever seen cases like this in the past?" I say, "Well, maybe one or two."

DR. GARTNER: [Laughs]

DR. OH: I still feel very active, and I feel like the moment they don't think I'm wanted, I will quit. But right now, every time they talk about something, they will turn to me and say, "What do you think?" I never comment during their talks. When someone is giving a talk, I always keep quiet. I don't like to interrupt people. Then at the end, when I raise my hand, they all look at me and hear what I have to say. Our unit is a member of the [NICHD] Neonatal Research Network [NRN]. You're familiar with it?

DR. GARTNER: Yes.

DR. OH: Sixteen centers. Very active. I was the PI for it. In fact, that's another that I forgot to mention. I was the chairman of the steering committee when they started in 1986.

DR. GARTNER: Under the NICHD.

DR. OH: Somebody else started it. They asked me to be chair of the steering committee for the first five years, then I resigned and went back and competed, and I got funded. So I've been on the network now for just about 22 years. We've continued to be funded for the last five cycles. I still get involved with protocol. I still have a couple of active protocols. The one that I'm working on very hard is to try and see if we could use probiotics to prevent necrotizing enterocolitis. I'm working very hard to get it going. So that occupies most of my time.

DR. GARTNER: While we're on the NICHD network, why don't you tell us a little bit about some of the major achievements of the network?

DR. OH: Oh, quite a few.

DR. GARTNER: Because that's important.

DR. OH: To me, there were several important advances. One is the hypothermia thing for hypoxic-ischemic encephalopathy. That's a very important study. We just finished a phototherapy trial. Aggressive versus conservative in babies under 1000 grams each. It will come out in the *New England Journal [of Medicine]* in about two weeks.

DR. GARTNER: Oh, really?

DR. OH: Yes. We enrolled, like, 2,000 babies.

DR. GARTNER: I remember that.

DR. OH: Never had a clinical trial with 2,000 babies.

DR. GARTNER: No. [Laughs]

DR. OH: It's very appropriately randomized. One group got phototherapy within 24 hours. The other group got the conventional treatment. It turned out the aggressive therapy is more beneficial, which is very important. We have several other things. We have one project now that is almost finished, which is to see if continuous positive pressure will reduce the incidence of bronchopulmonary dysplasia [BPD]. We published the results of our Vitamin A trial for BPD. I think that has also become standard good care practice. People use Vitamin A as a supplement to prevent disease. The first five years were very difficult, because we had just started, and I had no administrative support. I went to the meetings every three months, and then I came home. There was no follow-up. We didn't have it. I finally went to the director of NICHD.

DR. GARTNER: Oh, Duane [F.] Alexander.

DR. OH: I finally went to Duane, and I said, "Duane, you must do something. This is not good, because every time I come home, I feel depressed. You know, when you chair a steering committee, you're responsible, and if nothing is happening, I feel responsible."

DR. GARTNER: Sure.

DR. OH: I said, "What you need is an administrative person who could coordinate in between steering committee meetings." And he went out and recruited Linda Wright, who came in to be the research coordinator, and that really made the difference.

DR. GARTNER: That made the difference. That's a good point.

DR. OH: She stepped down. Now there's a new person, Rosemary [D.] Higgins, who is also very good. That's what makes the network really work. But in the first five or ten years we were criticized very severely. A lot of people out there said that this is a waste of money, and look at all the RO1 [NIH Research Project Grant (RO1)] being unfunded, and yet you spend so much money on the network. It's useless. But now it's —

DR. GARTNER: It's productive.

DR. OH: It's been reversed. It really is very effective. It's so good that they now created a [NICHD] Maternal-Fetal Medicine [Units] Network, a pediatric pharma- —

DR. GARTNER: Pharmaceuticals?

DR. OH: Pharmacotherapy unit, [NICHD Pediatric Pharmacology Research Units Network] PPRU. They even have an international neonatal network [NICHD Global Network for Women's and Children's Health] —

DR. GARTNER: Oh, good.

DR. OH: — that addresses the conditions that are more common among the underserved countries. It's going very well. That's what Linda Wright is doing right now. So I think that was a very important initiative that the NICHD started. That's another honor that I forgot to mention. I was a member of the National Advisory Child Health and Human Development Council of the US National Institutes of Health. That was at the time when they had just gotten started. That's why I got forced into becoming the chair of the [Neonatal Research Network] steering committee. Dr. Sumner Yaffee had the idea, but we pushed it for him.

DR. GARTNER: That's good. Well, it is very important. Okay. Up to now, we've been talking about you and your career in neonatology, and I want to go a little bit broader into neonatology, but through your perspective and your eyes. I've asked everybody this question, and in a way we talked about it, but let me ask you directly. Where do you see the beginning of newborn medicine? When did newborn medicine begin? How far back would you put it?

DR. OH: I have a very specific idea about that. I think it begins with the preconception period.

DR. GARTNER: I was asking historically, not biologically.

DR. OH: Oh, okay.

DR. GARTNER: Historically. [Laughter]

DR. OH: Biologically neonatology should include everything.

DR. GARTNER: I agree, yes.

DR. OH: Now, what do you mean by “historically”?

DR. OH: If you go back over the history of medicine, when do you think the idea specialized, or a concept of newborns requiring special medical care started, and who started it? Where did it have its beginnings?

DR. OH: That’s a real tough one. I want to say that — what’s his name — [Pierre] Budin was one of the very few in France, he started that idea

DR. GARTNER: Yes, right. I think so.

DR. OH: And then several other people after that sort of followed through. Johnny Lind was one of them. In fact, I have an article for you. The reason why he is so unique is that he was one of the very few who started the family-centered care concept. His famous quote is, “When the baby is born, the family is born.”

DR. GARTNER: That’s good.

DR. OH: And he was one of the very few people who started allowing fathers in the delivery room.

DR. GARTNER: Really?

DR. OH: He really started it

DR. GARTNER: I didn’t realize.

DR. OH: Oh, yes, he started that. There was a big article in the Stockholm newspaper about that. He started that. He started the play therapy. He did a lot of things in that line. So I think Budin is probably one of the first few. I don’t know much about him, but historically I want to say Budin is very important.

DR. GARTNER: He’s very important, obviously. From some earlier research that I did, I believe the Chinese actually had what we would call neonatology, newborn experts as far back as perhaps 1000 years ago.

DR. OH: I didn’t know that.

DR. GARTNER: Apparently they had a board.

DR. OH: See, I'm not a history buff.

DR. GARTNER: They gave written exams for all of the specialties in medicine.

DR. OH: No kidding. Really?

DR. GARTNER: And pediatrics had a whole group of subspecialty written exams, which I've never seen, but people have told me about.

DR. OH: See, you always have to leave it to the Chinese.
[Laughs]

DR. GARTNER: Apparently newborn medicine was a specialty, which is interesting.

DR. OH: I didn't know that.

DR. GARTNER: I thought maybe you would know more about the Chinese history.

DR. OH: No. I, again, neglected to mention this early in my discussion about the family. I have five generations of Chinese herb doctors.

DR. GARTNER: Hmm!

DR. OH: My father, my grandfather, my great-grandfather, my great-great-grandfather. They also prescribed herbs — you know, herbal medicine. I should have mentioned that.

DR. GARTNER: Have you ever used herbal medicine in neonatology?

DR. OH: My father used to tell me, "Why don't you do some research on it? They're really important." Now I wish I had, because the alternative medicine now is very popular.

DR. GARTNER: That's right. Well, you still could. [Laughs]

DR. C. GARTNER: Did your father grow the herbs as well?

DR. OH: No, he used a huge herbal store in town, almost like all these nature, natural — what do you call those?

DR. C. GARTNER: Naturopaths [Naturopathic Physicians]?

DR. OH: Yes. He had everything.

DR. GARTNER: Oh. Oh, really?

DR. OH: He always told me that there are only two things in Chinese medicine, the hot and the cold. If they have fever, you give them cold medicine. If they're cold, you give them hot medicine.

DR. GARTNER: What do you think about acupuncture?

DR. OH: Oh, he was a firm believer in it.

DR. GARTNER: Not you?

DR. OH: I think it's real. I just don't know how it works.

DR. GARTNER: Do you think it has a place in newborn medicine? Do you think acupuncture would do anything for newborns?

DR. OH: Somebody would have to go into it. You need to know the basic physiology. I wouldn't be surprised 25 years from now that acupuncture will be used in the newborn.

DR. GARTNER: Hmm.

DR. OH: I wouldn't be surprised.

DR. GARTNER: I wanted to do a study on this when I was in the nursery with Kwang-sun Lee, and Kwang didn't.

DR. OH: He didn't want to do it.

DR. GARTNER: He thought I was not being serious. But I was. [Laughter]

DR. OH: There's something about acupuncture.

DR. GARTNER: Yes, there's something we don't understand about it, but it does work.

DR. OH: You just have to understand the basic physiology.

DR. GARTNER: Right.

DR. OH: You can't just go around and put a needle into kids.

DR. GARTNER: Right. I think we talked a little bit about the development of neonatology, but I just wondered if you think there are any major factors that led to newborn medicine becoming a separate specialty or subspecialty. Do you think there are any particular factors that led to that?

DR. OH: No, I think it's a conglomeration of a lot of things happening at the same time. We were lucky. We were at the right place at the right time.

DR. GARTNER: The right time, when there was money.

DR. OH: When there was money. I don't think there's one single factor that precipitated the creation of the specialty. I think it's about a lot of things that happened.

DR. GARTNER: I think some of it was individuals' desires to have a specialty. I mean, at least for me, and I think for you and for many of us, individuals wanted to have a specialty of newborn medicine, because we wanted to do it.

DR. OH: Yes, right, that's true.

DR. GARTNER: And I think you feel that way, and I think many of us do. But I think there are a lot of other factors as well. I assume you think that the development of neonatology as a subspecialty was a good thing.

DR. OH: Oh, yes. I think so.

DR. GARTNER: That it hasn't done any harm?

DR. OH: No, I don't think so. It allowed for a group of people with common interests and with common focus to work on it for the benefit of the population. See, we have a distinct population to deal with, the fetus and the newborn. Other specialties are different. Is there a geriatrics society? There must be one.

DR. GARTNER: Yes, there is.

DR. OH: That's a distinct population, also.

DR. GARTNER: That's another population. No, I think some people have felt that by neonatology developing as a separate entity, it has taken away some aspects of pediatrics in general now.

DR. OH: A lot of academic pediatricians feel that way, probably legitimately, from the science standpoint. But some of it is probably for business reasons.

DR. GARTNER: I was going to say I think the economics —

DR. OH: Economics.

DR. GARTNER: — enters into this as well.

DR. OH: Yes, yes.

DR. GARTNER: Neonatology has become a big money maker for most hospitals.

DR. OH: No question about that, yes. That's why people keep asking me how I survived 15 years as chair here at Brown, where neonatology is separate. I don't have any neonatology money. Zero.

DR. GARTNER: That's true. That's a good point.

DR. OH: When I was chairman for five years and chief of neonatology at the same time, I had a free hand in, not officially and not illegal either, but in a subtle way is the word for it, trying to utilize resources to benefit the full group, because I was in charge of both places. When they recruited Jim Padbury as the chief, because I couldn't do it forever, five years was enough for me, I sat down with him, and told him, "If you come and be the chief of neonatology, you will have a separate budget. I won't touch it." And I kept my word. I never touched it. It was hard for me to run a program without neonatology. I had to keep going to the administration with hands outstretched to ask for more resources.

DR. GARTNER: But you were able to do it.

DR. OH: Yes.

DR. GARTNER: Now, it is true that in most places, neonatology is the definite money maker, and for the hospital.

DR. OH: And for the hospital, yes. It's the cash cow.

DR. GARTNER: Yes.

DR. OH: In fact, when I was chief of neonatology, the administrator, if ever the census dropped below a certain number, sent me a piece of census sheet with red ink on it, "Bill, what's going on?"

DR. GARTNER: [Laughs]

DR. OH: With an exclamation mark, because he was worried. If neonatology goes down revenue-wise, the whole hospital goes down.

DR. GARTNER: From a national and sort of a public health perspective, what do you think about the fact that we are spending so much money on neonatology, on newborn care?

DR. OH: I don't apologize for it.

DR. GARTNER: Okay. But people have raised the question.

DR. OH: I know. I know. But, you know, when you save a baby, think of the years to come. It's a good investment. That's the way I feel. A little bit selfish, but that's the way I feel. It's true that we are the most expensive specialty —

DR. GARTNER: Right.

DR. OH: — from the standpoint of cost to society, but then think of the benefit that we're getting.

DR. GARTNER: Do you think we're doing too much? Are we going to too young, too small preemies? Have we pushed too far on?

DR. OH: That's an area that's probably the most controversial today. How small is too small, and how far do we go? I feel that in some cases we have gone too far, and it's not because we wanted to, it's because the parents wanted to.

DR. GARTNER: Yes.

DR. OH: That's the most common reason. I see a lot of this — moms. I just had a kid, a 23-weeker come in. We have an automatic maternal consult when we have 23, 24 gestation. And I walk in, and there's a young sweet couple. First of all, I never use a percentage when I consult people. I use a lot of descriptors, such as, "extremely good," "very good," dah-dah. She was in pre-term labor. I started by saying, "If the baby delivers today, chances are he's not going to survive." I use a very definitive word. "And even if he —" It was a he. "— survives, his quality of life will be very, very, very poor, and I want to know if you want us to do everything to save the baby." And they said, "Yes." What can I do? I said, "Now, you understand what I'm saying, right?" She said, "Oh, yes, but I want everything done." The mom said this.

DR. GARTNER: Do you think they think —

DR. OH: **Fortunately, they stopped the labor.**

DR. GARTNER: You gained another week or two.

DR. OH: **Yes. I was there for a month. I was on service for a month, so that was the case that I consulted with. Then they put her at the hospital, so every day I went up to see her when I was free, I went to see Mrs. So-and-so.**

DR. GARTNER: That was very nice of you to do that.

DR. OH: **“How are you doing today?” And she would say, “Oh, it’s so good of you to come up.” I said, “Yes, I just wanted to make sure you’re still here. And stay there.”**

DR. GARTNER: [Laughs]

DR. OH: **“And didn’t move.” She finally delivered at around 27, 28 weeks.**

DR. GARTNER: Oh, that’s pretty good.

DR. OH: **She’s done good. But you’re right. We sometimes went too far, and that’s because the parent wanted it. You know, this is an ethical discussion. But legally, if the mom says, “I want everything done,” and you say, “I don’t want to do anything, as your doctor,” they can go to a lawyer and sue you, and there’ll be a big legal thing. This happened. Not to me, but to —**

DR. GARTNER: Or you can go to get a court order the other way.

DR. OH: **Exactly, yes. I would rather be able to try to talk it out with her —**

DR. GARTNER: Yes, it’s better not to.

DR. OH: **— and come out with a common ground. In this case, I knew who the obstetrician was. I told her, “Give them all the mag [magnesium] sulfate you can get and calm her down.” And they were successful. It’s a good thing we now have all this armamentarium to stop the labor.**

DR. GARTNER: Right. No, that’s true.

DR. OH: Right now, I think most people, and I think 25 weeks is reasonable. Twenty-four is the point when you begin to have some question whether or not you should go farther. Twenty-three, definitely. Twenty-two, definitely out.

DR. GARTNER: Right.

DR. OH: Twenty-three, 24 is where the gray zone is. Whenever I give a talk about this issue, I always tell them, “First of all, it’s not *your* baby. It’s *their* baby. Your job is to be a doctor, to tell them the facts, and they make the decision. And whatever decision they make, try to respect them.”

DR. GARTNER: That’s good advice.

DR. OH: Yes.

DR. GARTNER: Preparation, that’s important.

DR. OH: That’s the AAP position.

DR. GARTNER: Yes, I think so.

DR. OH: The AAP Committee on Fetus and Newborn wrote a statement a number of years ago about how far we go. It was a hard statement to write, because when you deal with an issue like that, there are so many opinions.

DR. GARTNER: Oh, yes.

DR. OH: Some people are in the extreme. “Don’t do anything unless it’s 26, 27 weeks. If the mom says they want to do everything, go and get a lawyer to get the court order.” I don’t think that’s a good thing for anybody.

DR. GARTNER: I don’t think the courts will order it that easily, either.

DR. OH: No, right.

DR. GARTNER: The times when we went to court were when we had a trisomy.

DR. OH: Yes, right.

DR. GARTNER: And the family wanted to do everything, and it was obviously pointless. But other than that, we never went to court. But it’s

difficult. Are there any other major ethical issues in neonatology that you think we should talk about?

DR. OH: That's probably the most important. The other issue, not neonatology, but in terms of embryo reduction, that's very important for maternal-fetal medicine people.

DR. GARTNER: Perinatal. Right.

DR. OH: The other is the kids with the hopeless situation, the trisomy 18.

DR. GARTNER: Right.

DR. OH: [Trisomy] 13. Those are the difficult ones.

DR. GARTNER: Those are tough ones.

DR. OH: I had one last year that was a trisomy 18. The baby was okay, you know? I don't practice euthanasia — period. I'm Catholic, and I can't do that. But it was difficult. We know that there's a clear-cut trisomy 18, and we know the outcome is extremely, extremely poor, and yet the baby won't die. What do you do?

DR. GARTNER: Oh, they can live for a long time.

DR. OH: Keep going, yes. And what I did with those parents is just kept giving them support, explained to them. The baby went home, actually. That's an ethical issue.

DR. GARTNER: Yes. That is quite so. You've talked about the relationship between pediatrics and OB/GYN and how important that is. Is there anything else that we should talk about, about that relationship and interface?

DR. OH: I think we should maintain a good relationship with the practicing pediatricians in the community. That's so important. And we've really lost sight on that. I've seen a lot of units that have completely taken everything away from pediatricians in the community. That is not good for continuity of care. We don't have private practice. Neonatologists don't have offices. These kids all go up to them, and you really need to maintain good relationships and communication.

DR. GARTNER: How do you do that? Tell a little bit more about the relationship with the general pediatrician.

DR. OH: We have a very good system here. First of all, there is continuity of care between obstetricians and neonatologists, as I already mentioned. It's a very good communication. Whenever we have a baby admitted, we automatically notify the private pediatrician. Seventy percent of our patients are private practice patients. An automatic phone call is made to the office that so-and-so is in the unit. It's followed by a letter signed by me, the attending, giving the diagnosis and how long we expect the baby to be in the hospital. We send it by fax over to the office. Then we also encourage them to come in and make rounds. When they come in and make rounds some people hate them, because they don't want to be interrupted. But when I see a pediatrician come in looking for the baby, the advantage I have is I know every one of them. Almost every pediatrician in town is my former resident. I've been here many years.

DR. GARTNER: Right. That's nice.

DR. OH: I will say, "Jim [James Monti], who do you have?" And very sheepishly he'll say, "So-and-so." Then I'll say, "Oh, come on in, the baby is in that row. When I'm done with rounds, I can call you." Sometimes I will say, "Are you going to go up and talk with the mom?" He'll say, "Yes." I'll say, "Just go ahead and I will follow up with you. I'm glad to know that you are here, and I'll mention that I've seen you, and that you are our co-care people."

DR. GARTNER: Right.

DR. OH: And then at the time of discharge, the residents are very good with the electronic medical record system now. Before discharge, we have a template that spells out the pediatrician name, administration given, eye exam done, dah-dah-dah. Everything has to be checked off, there's a checklist.

DR. GARTNER: Right.

DR. OH: We do not discharge a baby without the pediatrician identified. Also, whenever the baby is discharged, an electronic discharge record is automatically faxed to the pediatrician's office. And they're very happy.

DR. GARTNER: Oh, I imagine.

DR. OH: All the pediatricians are very, very happy with us. And that keeps your business going, too, you know.

DR. GARTNER: Oh, sure.

DR. OH: I got to tell you the story about this relationship with the community. This is a very interesting story. This is the way the regionalization was established. I mentioned that by the mid-1980s, I was going well and really gung-ho. Our service was expanding, and we were moving to the new facility. So one of the community hospitals in town had about 1,500 deliveries. The CEO came over to my office one day and said, “My pediatricians and obstetricians want to have a NICU established in my hospital, and I went to the —” You know, in those days, we had the so-called certificate of need, CON.

DR. GARTNER: Right.

DR. OH: Every time you establish a big program, you’ve got to go to the health department. He said, “I went to the department of health, talked to the director of health, and he said that if Dr. Oh says it’s okay, you can have it. If he says it’s not okay, you cannot have it. Period. End of discussion.”

DR. GARTNER: [Laughs]

DR. OH: He said, “So I’m here to ask you if it’s okay with you.” I said, “John, what do you want a NICU for?” He said, “Well my pediatricians all what them, because it will relieve them of the responsibility.” I said, “John, listen. Of course, I can’t stop you from doing whatever you want to do, but go out and hire one, okay? One neonatologist is not going to do it. He cannot take calls every night, and if he’s going to be in Level II, that has very low acuity. He will be bored. He will burn out, and before you know it, you’ll lose him.” I said, “Why don’t I do this? You go ahead and set up your unit. I’ll hire a neonatologist for you. That neonatologist will become my faculty member. He will make rounds with me in a tertiary care center two months a year, and in those two months, we will send my neonatologist to your unit to take care of the babies.” And that’s how it got started. He said, “Hey, that sounds like a good idea. How much will it cost me?” I said, “Whatever their salary is plus a 20 percent overhead.” He said, “That’s a very good deal. What else do I have to do?” I said, “You have to establish a committee with my people and your people, come up with a contract with the medical criteria for transfer one way and the other, and let’s make sure that we follow the criteria.” And that was it. That was the first Level II that was started, just about five, ten miles from here. Very successful.

DR. GARTNER: It’s a good movement.

DR. OH: I hired a neonatologist, a member of my faculty. That person was in charge of the unit, and they’re happy, because they got somebody for their neonatologist. Then before you know it, I got a call from

several hospitals. There were four of them from Massachusetts, southeastern Mass., Fall River, New Bedford, and — what’s that little town south of Boston, ten miles from Boston?

DR. GARTNER: I don’t know Boston. I don’t know the geography.

DR. OH: Anyway, it got to the point that, just to make a long story short, I established exactly the same —

DR. GARTNER: With each of them.

DR. OH: — contract with these two hospitals. The fourth one, I went up to make a visit to see what the place looked like, and then I realized it’s only five or ten miles from Boston, from Chinatown. I said, “This is too much. Mel Avery would have killed me.”

DR. GARTNER: [Laughs]

DR. OH: So I decided not to do it. But there is a very interesting story about Mel Avery. When Leo was still alive, I went down with him to one of those, our AMSPDC [Association of Medical School Pediatric Department Chairmen] meeting.

DR. GARTNER: Oh, yes.

DR. OH: In Florida someplace. So he asked me to give a talk on how I regionalized things. I showed a map with Providence, Boston, southeastern Mass., and I used color. It was all mine, you know.

DR. GARTNER: [Laughs]

DR. OH: Mel Avery was sitting in front. She said, “Bill, I’ve got a gun right here. I’ll shoot you.” [Laughter] True story. I remember it. She doesn’t remember that. I, essentially, invaded the Boston territory. I mentioned earlier that I made a little bit of a demographic study to see what catchment area I would need, and I looked at the map. You know, [Interstates] 95, 93 and 195, right?

DR. GARTNER: Right.

DR. OH: And the highway from southeastern Mass. to go to Boston is more often than not clogged, so it’s not very convenient for them to go up to Boston. When they find out there is a quality of care kind of hospital here in Providence, they all send them to me. Plus the fact that the pediatricians there all knew me, because, as I told you, in the first year of my being here, I spent the whole year traveling to all the hospitals and talking to

the pediatricians. I know every pediatrician in southeastern Massachusetts — Fall River, New Bedford, et cetera, all the way to the Cape. [Laughs]

DR. GARTNER: That's good.

DR. OH: That's why you do the regionalization.

DR. GARTNER: That's right.

DR. OH: It's about the relationship with people. I tried to establish a relationship.

DR. GARTNER: That *is* important.

DR. OH: I did that when I was in LA [Los Angeles]. I, essentially, established a region within the South Bay area. All those hospitals referred patients to me, because I went down and talked to them.

DR. GARTNER: Good. What about the relationship with pediatric surgery? We haven't talked about that.

DR. OH: Yes. It's a very, kind of a tacky-ish issue. I can understand from their perspective, because they've been taught pediatric surgery, and most academic pediatric surgery programs have fellowships. And one of the board requirements of the American Board of Surgery is that the fellow in pediatric surgery has to have an active role in the care of the newborn surgical problems in NICU.

DR. GARTNER: Right.

DR. OH: And you know how it is in the NICU. We take over, right?

DR. GARTNER: Yes.

DR. OH: And it got to be a very dicey kind of situation.

DR. GARTNER: Exactly.

DR. OH: When I was chief, I sat down with the chief of pediatric surgery. We developed, essentially, a guideline, a modus operandi, an MO, on how to separate the responsibility. There was also the issue of where the baby should go after surgery, because the surgery is done at the hospital, across the tunnel from us. We didn't have a neonatal surgery suite at our hospital.

DR. GARTNER: I see.

DR. OH: So there's always the issue of where the baby goes after surgery. That's actually administratively driven. They want more babies.

DR. GARTNER: Sure.

DR. OH: The hospital stay, the length of the hospital days is important for their budget, bottom line.

DR. GARTNER: Right.

DR. OH: So it's elementary. There's always a fight between two, and I always take the fight away from them and make it a medical issue. When I sat down with the chief of surgery, I said, "Let's set up certain guidelines. If the baby is such-and-such and such-and-such, he'll recover at your recovery room and go to the hospital floor. If these are the conditions, the baby comes back to us." And that worked out okay. In terms of fellow responsibility, what we did was to make up a list of things that the neonatologists are responsible for, and another list of things that the surgeons are responsible for, and a third list that is called co-care. It's color coded so that when you have a surgical baby come in, if it's, for example, the wound care, or it's a kid with omphalocele or anything that is a purely surgical issue, he's their responsibility. We don't do anything that has to do with a surgical procedure. Fluid, electrolyte, nutrition, we do, but we always consult with them. Points on the kid, after GI [gastrointestinal] surgery, we never start a feed until the surgeon okays it. Okay. And every time we want to advance the feed, we always ask them. This is very good communication. So we don't really have any fights.

DR. GARTNER: It's a shared responsibility.

DR. OH: It's a shared responsibility. That's the bottom line. It's not true in many places.

DR. GARTNER: No, it isn't. That's a problem in a lot of places.

DR. OH: A lot of problems now a days. [Laughs]

DR. GARTNER: At [Albert] Einstein [Medical Center] there was no pediatric surgery training program, so it was very easy.

DR. OH: Yes.

DR. GARTNER: The surgeons were very happy for us to take care of the patients.

DR. OH: But places where they have —

DR. GARTNER: With a training program.

DR. OH: — a training program, that's where the problems are.

DR. GARTNER: That's right. Quite so. The transition to neonatology was really an outgrowth of premature infant care, and we didn't really talk about what your experience and what other people's experience was in that movement from preemie care to neonatal intensive care. How did that happen, and how did you manage it?

DR. OH: I managed it, essentially, with nursing staff, because the definition — Well, first of all, you have to have a name for it. You know, we used to call it “step-down,” and people didn't like it, because it's a *step down*, which isn't good. Then we called it a “convalescent unit.” They didn't like that either, so we called it a “special care unit.” That's the special care part. The intensive care part is the very high acuity patient, and it's based on nursing staffing, okay? If it was a 1:1 or 1:2 [nurse to patient ratio based on patient acuity], then it stayed in the NICU, in the intensive care unit. If it got down to 1:3 or 1:4, then it goes to the special care. It's easier that way. It's nursing care oriented. And there's also certain medical condition that we try to incorporate. For instance, a kid with a PIC line [percutaneous intravenous catheter] in him needs to stay in the intensive care unit, but kids that are just feeding and growing go to the special care nursery.

DR. GARTNER: I guess I was asking from a historical perspective —

DR. OH: Oh, oh.

DR. GARTNER: — in that time when there was a change. After all, you were in charge of a premature infant unit at Michael Reese.

DR. OH: In those days, there was no intensive care.

DR. GARTNER: There was no intensive care. And then intensive care occurred, and there was a change from what was a preemie unit to a neonatal intensive care unit. Now, I don't know whether *you* experienced that actual transition or whether you left Michael Reese when it was still a preemie unit —

DR. OH: No.

DR. GARTNER: — and went to Harbor General, where there was a neonatal intensive care unit.

DR. OH: Yes.

DR. GARTNER: Is that what happened there?

DR. OH: And that was just the beginning. That was 1969 to 1974. That was the beginning of the concept now called convalescent care, for the less acuity babies.

DR. GARTNER: Right.

DR. OH: So I didn't have to deal with them, because it was all mixed in one unit. First of all, we had no place for those babies. But now it's really a distinct geographic area. We now have a separate unit space for the convalescent babies. And, again, as I said, the transition was actually pretty smooth, because it was under the direction of only one person, with one head nurse, and the two of you got together and worked it out. I didn't have much of a problem.

DR. GARTNER: You didn't have any transition?

DR. OH: No.

DR. GARTNER: You never went through a real transition in changing from a premie unit to changing it to a neonatal intensive care unit?

DR. OH: No.

DR. GARTNER: Okay.

DR. OH: No, not really. I was lucky, in a way.

DR. GARTNER: You were. That was a very traumatic experience in my life. [Laughs] Not for me, but for the nurses.

DR. OH: But I learned a lot in terms of trying to adapt and how to use a ventilator and all of that, but I didn't have any training. That was different.

DR. GARTNER: We learned on the job. Let's see. What haven't we talked about here? We've talked from a more positive perspective, but from a negative one, what are the current deficiencies? What negative aspects of neonatal intensive care still exist?

DR. OH: Well, let me tell you. I split them into three categories. The first is clinical care. The major negative we have now is de-regionalization. I see a lot of units fighting each other, and the competition is

not very good at all. It really compromises the quality of care, and that needs to change. I think the Fetus and Newborn Committee of the Academy is trying very hard to set up guidelines and all that, but, you know, a guideline is a guideline. Nobody really follows it.

DR. GARTNER: Mm-hm.

DR. OH: So that's one thing. The teaching, I think, the deficiency there is the shortening of the residents' exposure to neonatal care. They limit them to, what is it, no more than three months, right?

DR. GARTNER: That's right.

DR. OH: For the entire 36 months. To me, that's hardly enough for a pediatrician out there to take care of a sick baby in a delivery room. There's really not much we can do about it. The board dictates it.

DR. GARTNER: Right. I could try to fight it, but it's hard.

DR. OH: Some places have tried to, not illegally, but tried to creatively — we'll have to use the word "creatively"— structure the program in a way that on paper is not exceeding the requirement, but in actual operation, you do have residents who are involved in the newborn care. For instance, just to give an example, I don't think this is illegal, because our program is accredited for five years. They came to review just a couple of years ago. What they do is to have assigned someone in the, let's say, elective or ambulatory rotation that has a half-day session, and they will spend the other half day in the newborn nursery.

DR. GARTNER: In the well baby nursery.

DR. OH: In the well baby nursery, yes. There is one rotation that is for the normal nursery, but they also sit in the residents' room for delivery. We call them delivery residents. They learn the resuscitation part of it. Resuscitation is so important for the pediatrician to know. If you are down in the boondocks, you're all alone by yourself, you need to know how to intubate, and how to give the oxygen and all those things.

DR. GARTNER: That's right.

DR. OH: So I think we got away, not get away with it, but —

DR. GARTNER: Squeeze it in.

DR. OH: We tried to creatively structure the program so that it fulfills what we think the residents should know, should learn, and yet not

violate the board requirements. Research-wise, I think the major deficiency is lack of funding. I mean, that's what it comes to. We have a lot of very talented people, and yet they can't do any research, because they don't have enough research funding. Funding now is 18th. The last time I heard, it was in the 15th percentile for funding lines. I got my first RO1 with a score of 260.

DR. GARTNER: Terrible. [Laughs]

DR. OH: Today 260 is the bottom, you know.

DR. GARTNER: That's right. But it *is* very difficult to get funding, certainly from NIH.

DR. OH: I got my RO1, I still remember, at 260. I didn't think I was going to get it, but I got a call the next day from NIH, who asked, "What is your budget?"

DR. GARTNER: [Laughs]

DR. OH: But that's a major problems we have. There is also a lot of competition from the private sector to recruit people, so that people are moving more and more toward the practice setting and not academic. The 12 percent I mentioned earlier is an actual figure.

DR. GARTNER: Yes, it's very small.

DR. OH: Yes.

DR. GARTNER: What can we do to improve the academic interest?

DR. OH: I think we need to start from the bottom by exciting them. It's a hard thing to do, but you've got to excite them right at the beginning. I have one medical student come once a week on Wednesday when I'm on service. I always have three hours of one-on-one. I give them a case and drill them, drill them. And in the end, they always say, "Gee, that's terrific. I never had a session like this. How is it to be a neonatologist?" and we get talking about it. It's very exciting.

DR. GARTNER: [Laughs]

DR. OH: In fact, at the end of a session last month, one student looked at me and asked, "Can I set up another session with you?" I said, "Sure, what for?" He said, "I really think I want to go into neonatology. I want to think about it. You know, I'd like to talk to you about it."

DR. GARTNER: Right. That sounds like very good thinking.

DR. OH: So I gave them my card with my e-mail address. "E-mail me any time. My office door is always open for you."

DR. GARTNER: That's good. That's very good.

DR. OH: And then, we need to have more research support. Unfortunately, it's easier said than done.

DR. GARTNER: Especially now, with the economy being the way it is, it's going to be very difficult to get more money. Certainly money will help.

DR. OH: The other thing that I should mention in terms of critical care is that we need to encourage people to do more and more evidence-based practice. Right now, neonatology is one of the worst specialties in terms of practicing without good evidence.

DR. GARTNER: How about training programs? We've talked around training programs in general, and as you pointed out, there are more and more people going into clinical practice, and yet we have requirements in the training programs for research.

DR. OH: I started that, you know.

DR. GARTNER: Oh, so it's your fault.

DR. OH: Yes, it was my fault.

DR. GARTNER: [Laughs]

DR. OH: When I was on the Board [American Board of Pediatrics], I pushed. Mike [Michael A.] Simmons and I pushed that very, very, very hard. Neonatologists must have research training. It's not so much about going to academics. In fact, that's what my intent was, not so much about going into academic neonatology but more for them to be practicing better medicine. I always say that people who have done research will always practice better medicine. They have more discipline to work the evidence. But as it turned out, it really came back to bite us. People do research just for the sake of getting Board eligibility, so you get a lot of trash in the SPR meetings. [Laughs]

DR. GARTNER: That's right. They all have to present.

DR. OH: They have to present, so they have to squeeze out something, and when we do that, the quality goes down. I regret I pushed it,

but on the other hand, I think it might have some good things in terms of allowing people to dabble in research and be able to read a paper more, you know, more —

DR. GARTNER: They should be able to understand the research.

DR. OH: I don't think it's a total disaster. I think it has created all these papers, and presentations and abstracts that really don't belong to an academic society. When I go to the poster session, I get so depressed. So I look at the poster, and I say, "My God, I did this 20 years ago."

DR. GARTNER: [Laughs] I have the same feeling.

DR. OH: That's the other problem, because the people —

DR. GARTNER: It's too much.

DR. OH: — who write research protocol do the MEDLINE, and the MEDLINE doesn't go back to the 1960s and 1970s. They think it's new. To me, it's old stuff.

DR. GARTNER: [Laughs] That's true. If you were to design a neonatology training program now, would you design it in a very different way? Would you do something radically different?

DR. OH: I would do it the way I did it 30 years ago. My fellowship program only had four fellows and never went beyond that. In those days, you had a two-year fellowship, two the first year and two the second year. I never had a first-year fellow start in the nursery in July and August. I would sit down with them one-on-one, no appointment needed. They had to come in every morning until they got their project squared away from July to August. I kept telling them, and I always draw a timeline. "This is where you are. This is next year, the year after, dah-dah-dah." And I said, "If you want to be a professor at the end of ten years, or maybe 15 years, you must start early. You must have a protocol; you must learn how to do the protocol, how to do the study, dah-dah-dah. You have to have a presentation. By such-and-such time, that paper should be written. And then when you look for a job at the beginning or the middle of the second year, you have page three on your CV to go to a chairman or division director and say, 'This is what I want to do. May I join your faculty?'"

DR. GARTNER: Right.

DR. OH: "Then you can ask for support as a junior faculty. And then from then on you can — And don't write an NIH grant." I had what I

call a canned talk on how to become a professor in ten years, maybe 15, maybe never.

DR. GARTNER: [Laughs]

DR. OH: Doing those kind of things. I started with the acronym **CROWNS**. This is what you have to do. Then I went through step by step on what they wanted to do. “This is the way you start. Always come up with a project at the beginning of your fellowship year. Start your methodology. Learn your methodology by about September, October. Then you go on service for maybe four months. Then you go back to the library and write a protocol and go to the lab and do the work. Then by spring the year after, you will have something to present to the regional meeting. By the end of your second year, you should have a paper written. You should have your page three CV prepared, and when you go out and look for a job, they know what you want to do, right? They can support you with some kind of technology as chairman right here.” This doesn’t happen anymore, in many programs. Our program, we still maintain them. Dr. Padbury is very good at that. The fellows always have July and August free to what we call “shop around.”

DR. GARTNER: Right. That’s interesting.

DR. OH: I told them don’t talk to one person. Talk to Dr. Padbury as director, but also go around to various — We have a lot of talent in the department. They can pick what they want to do.

DR. GARTNER: Right.

DR. OH: And then decide on it, go on service, come back in November and start doing. We’re doing it, so our fellows are okay. But I know that, first of all, many programs don’t have enough people, so they have to put them on service.

DR. GARTNER: Right.

DR. OH: And you know when you’re on service, you’re dead. You can’t do anything, right?

DR. GARTNER: That’s a big problem. Would you go back to a two-year program?

DR. OH: No.

DR. GARTNER: No.

DR. OH: Two is too short. You can't learn anything.

DR. GARTNER: So you'd stay with the three-year program.

DR. OH: Three is good. It allows a little bit more time also. The pressure will be less than. Two years is very, very — Of my fellows in the first 20 years that I have been around, 60 or 70 percent are in academic medicine. Several are directors of programs. Almost all of them are full professors. Not just our fellow here, but I have several from —

DR. GARTNER: Harbor.

DR. OH: Harbor. Yes.

DR. GARTNER: Good. Now, let's see. What haven't we talked about here? Let's talk a little bit about the future of neonatology. We've touched on a number of these issues, but what do you think neonatology will really be like 50 years from now? It will be a very different period. What do you think neonatology will really involve, or care of the newborn will really involve?

DR. OH: Fifty years?

DR. GARTNER: Fifty years from now?

DR. OH: That's a hard question.

DR. GARTNER: If the world is still here.

DR. OH: I don't have a very good crystal ball.

DR. GARTNER: Sometimes it's fun to just think about what technology might bring us. For instance, do you think we'll have artificial placentas? What would that do for newborn care?

DR. OH: I think what will happen in the next 50 years is that someone, who will be a Nobel Laureate, will finally discover the mechanism of pre-term labor. If that happens, then neonatology will go down the tubes.

DR. GARTNER: [Chuckles]

DR. OH: Really. You wouldn't have any more subjects. If you don't have patients to take care of, your specialty will die. I really think that will happen sometime. Of course, I bet somebody said that 30 years ago, and it hasn't happened yet. If anything it's going up, prematurity is going up.

DR. GARTNER: Why has it gone up as much? This is an astonishing figure.

DR. OH: There are a lot of reasons. One is the fact that we haven't really improved very much on the socioeconomic thing. The socioeconomic factor plays a very important role. We have advances of technology-related pregnancies. We ended up with many twins and triplets, who become premature babies.

DR. GARTNER: You're talking about artificial in vitro, yes.

DR. OH: The survival of very low birth weight infants is also contributing to the workload. If we didn't have the 23-, 24-, 25-, 26-, 27-weeker surviving, you would have an empty unit. In fact, I can usually predict what the census will be three months from now by looking at my mix of babies in the nursery today. If you don't have many 1000 gramers, you can tell that three months from now it will be an empty nursery. I really think there will be a breakthrough in the mechanism of labor. There are a lot of people working on it in the basic science field. Maybe I'm being overly optimistic, but if that happens, then there will be a major change in the scenario of neonatology as a specialty. You will require less manpower — excuse me, *personpower*. You will be dealing more with — particularly if someone discovers or finds out about some of the etiology of congenital malformations. Those are the two major conditions. If you look at any CPT [Current Procedural Terminology] code on infancy, those are the two major ones in term of volume — prematurity and congenital malformations. If you take those two out, you will have no patients and the specialty will die. We all will have to retire or do something else.

DR. GARTNER: [Laughs]

DR. OH: I really think that will happen 50 years from now. I might be all wet, but —

DR. GARTNER: Well, I hope so. I mean, I think those are certainly needed areas of research. I guess we've really covered most of that.

DR. OH: We covered a lot of territory.

DR. GARTNER: I think we've covered most of it — talked about the economics. I would guess from what you said that you would once again choose to be a neonatologist.

DR. OH: If I were to live my second life?

DR. GARTNER: Yes.

DR. OH: Definitely. No regrets. And I have seen it. The specialty has changed so much over the years from a single-person operation neonatologist, now to, essentially, a multi-specialty program. The neonatologist is the key, of course, but you have to have the nursing staff, respiratory therapy, nutritionists, social service people, nurse practitioners, you name them. And then when we get into the follow-up program, all the specialties you need to help you, the geneticists. I always considered neonatology as a cross-sectional neonatology, you cross all specialties. That's what makes it so exciting, because unlike cardiology, which is a strictly a vertical specialty — the heart, pulmonology, it's vertical — pediatric neonatology is all horizontal.

DR. GARTNER: That's right.

DR. OH: You cross every specialty. And without a team, you cannot survive. The one-man type of operation in the old days, when the neonatologist did everything, is long gone. I mean, you have to have a whole team working with you. Otherwise, you cannot be successful.

DR. GARTNER: That's absolutely true.

DR. OH: I mean, look around at most of the high-quality programs. They all have multi-specialty involvement. Makes the quality care so good.

DR. GARTNER: We talked a little bit about the follow-up and the outcome issues, which to me are very important in terms of quality of outcome of these babies who we invest so much in, and the families invest so much. Do you think there is anything, either that we can do now, or that we should be doing in the future to improve the long-term outcome, particularly the neurologic?

DR. OH: I think there are a lot of things we can do. Some of us don't do them. It's not enough to just do a follow-up for evaluation. You need to bring the intervention people in to try to rehab [rehabilitate] these kids. Otherwise, just evaluating every year, so what? These kids are going to have CP [cerebral palsy]. And to make them be productive members of society, you must help them by bringing in the intervention people. That's what I meant by being a multi-specialty discipline.

DR. GARTNER: Right, but you're saying in follow-up, they need to rehab post-discharge?

DR. OH: You know, OT [occupational therapy], PT [physical therapy], otologists, audiologists. All the people should pitch in in order to help these kids. Otherwise there's no point in having a follow-up program.

This is how we evolved. In the beginning, the first faculty I recruited was the nurse, right?

DR. GARTNER: Mm-hm.

DR. OH: The second faculty I recruited was the follow-up person.

DR. GARTNER: I see.

DR. OH: Betty [R.] Vohr, who's now very well known internationally.

DR. GARTNER: And wonderful work.

DR. OH: She was the first faculty I recruited, other than the four fellows. In fact, when I went to the administrator, I said, "I want a faculty recruited." He said, "What kind of faculty do you want, another neonatologist?" I said, "No, no. My fellows work with me is fine. I want a pediatrician who can do follow-up." He looked at me and said, "Follow-up? You just started." And I said, "Tom [Thomas Parris, Jr.], that's the point. You've got to start in the beginning, to start evaluating and keep statistics, et cetera, and then gradually build the program." Now her department is bigger than our unit. It's huge. There's everything in there, including the intervention people with OT, PT and the rehab.

DR. GARTNER: Has that evolved —

DR. OH: Over time.

DR. GARTNER: — as a group that focused on the post-neonatal intensive care baby?

DR. OH: Oh, you mean the critical care and all the other people?

DR. GARTNER: No, post-neonatal intensive care. In other words, are these rehab people specifically trained and spending the majority of their time doing care of the post-neonatal?

DR. OH: Some of them actually started in the NICU. We have the OT and the PT starting in the NICU, and then following them through after they get discharged. And that, I think, is very, very important. Otherwise there's no point in evaluating. You've got to have some kind of intervention to help them improve.

DR. GARTNER: Exactly. How many places in the country do you think have specialized programs of rehab like that?

DR. OH: Quite a few. There are quite a few. I don't want to name just a few and then neglect the others.

DR. GARTNER: No, no, but there are others.

DR. OH: We're not the only place that has it.

DR. GARTNER: Is that something that's developing now and will develop more in the future?

DR. OH: I think that's something that should be encouraged. Unless somebody discovers how to prevent pre-term labor, we're going to need this, especially with all these anomalies and the 24-, 25-weekers surviving. Rehab needs to be done for these kids. Otherwise, they're going to be forever compromised kids, a real burden to the parents, and the family and society. We pay a lot of money for this.

DR. GARTNER: Oh, yes. It's a huge burden.

DR. OH: And we need to make them productive. So I really think that area is so critical. In fact, they should form some kind of society to do that, to coordinate the efforts in terms of research. That's what's missing.

DR. GARTNER: That's a good point. It's very important.

DR. OH: We have all these programs in the SPR, the Pediatric Society, I mean, all these specialties, the follow-up sessions and all that, but it's not coordinated. We need to have a society or whatever you want to call it, a "Rehab Society of Post-Neonatal and Rehab Medicine," something like that, that will include the neonatologist and the pediatrician, the psychometrist, psychologist, OT, PT, et cetera, so you would have a coordinated meeting for the advancement of the science and improved care.

DR. GARTNER: I had another aspect of outcome of having the baby in the neonatal ICU, whether it's a premie or a sick baby. That is the psychological effect or psychiatric effect on the family, the burden psychologically on the family of having a baby like that.

DR. OH: That should be part of it.

DR. GARTNER: We didn't talk about that, and I just wonder how you see that.

DR. OH: It's very important to have that. For instance, in our place we regularly hold what we call a psychosocial meeting at which we

have a social worker, OT, PT, a psychologist, everybody in there. That's when the resident presents a case, and then as a group, we talk about the impact of this kid on the family. A lot of it is social, but a lot of it is psychiatric, also. It's important to have that kind of session.

DR. GARTNER: I have the impression, and I don't know whether you have this impression, that families, after they have an intensive care baby, often have a very difficult time, and that divorce and separation is big.

DR. OH: That's been documented.

DR. GARTNER: I mean, that's been noted.

DR. OH: There are a couple of papers on that. In fact, one of them was Betty Vohr's manuscript. I don't remember when it was published, but she had a paper on that. In fact, it was presented by one of the fellows four or five years ago in the [APS [American Pediatric Society] meeting.

DR. GARTNER: I think I heard it, right.

DR. OH: The impact of NICU babies on the psychosocial outcome of the family. A lot of divorces, a lot of separations and psychiatric illness, et cetera.

DR. GARTNER: What should we be doing about that? Is there anything we *can* do?

DR. OH: Well, you become a part of this society I'm talking about so that there is a focus on the research in that area. Identify what some of the risk factors are that created the situation. Not everyone.

DR. GARTNER: No, no, not at all.

DR. OH: There's a certain risk factor.

DR. GARTNER: It certainly increases.

DR. OH: Somebody needs to make some kind of observational study to document the association, and then try to provide or produce a randomized controlled trial to see if some kind of intervention would reduce the incidence or not. It can be done.

DR. GARTNER: Yes. Well, I think it can be and it should be done, because I think that's an area that hasn't had enough attention.

DR. OH: Neonatologists are too busy taking care of the sick kids in the NICU.

DR. GARTNER: It's a "soft" area.

DR. OH: Yes. It will happen eventually. Somebody will get the idea and run with it.

DR. GARTNER: Is there anything else we haven't covered that you would like to add or that I missed?

DR. OH: I didn't realize that we would cover so much today.

DR. GARTNER: We covered a lot, a lot.

DR. OH: Including my life story.

DR. GARTNER: [Laughs]

DR. OH: I have to do some heavy editing. [Laughter]

DR. GARTNER: Well, first let me thank you very much for this really wonderful discussion and presentation.

DR. OH: Thank you.

DR. GARTNER: I've enjoyed it.

DR. OH: I started from the top saying that I feel very honored to have this. You know, that phone call that you made that Sunday really made my day.

DR. GARTNER: Good. I'm glad.

DR. OH: It felt so good.

DR. GARTNER: It made it for me, too, because I enjoy this, and I've enjoyed spending time with you.

[Recording Interruption]

DR. GARTNER: Okay, we are resuming the oral history, and we realized, Bill, that we didn't talk about your years as chairman of the department of pediatrics, and we should fill in those important 15 years, so tell us about that experience.

DR. OH: Boy, that was a fateful day. On a Wednesday morning, I remember it was May 17, 1989 — I may be off a day or two — 1989, we were in the middle of a perinatal conference when my secretary ran in, in tears. I said, “What’s the matter?” They never interrupted our conference. She was really puffing, and she said, “Dr. [Leo] Stern just passed away.” And I said, “What are you talking about, Mary [Tucker]?” She said, “He just passed away. He committed suicide,” and she continued to cry. Anyway, so that was a very fateful morning, definitely. Every time I talk about it, I still get chest pain. I told you that. So the whole department was in tears. Everybody knew within 24 hours, around the country, that this bad news occurred. That was a Wednesday. Friday, right after the funeral, the CEO [chief executive officer] of the hospital and the chairman of the board of trustees came to my office and said, “A couple of your senior faculty members felt that there’s no way we can go out and recruit somebody good to come here, because the news is all over the world.” Leo was a very well-known person.

DR. GARTNER: He certainly was.

DR. OH: And they said, “Your people think you should take over.” I said, “I don’t want to be chairman. I am very happy doing what I’m doing here.” In fact, I went over to my filing cabinet. I opened the filing cabinet, and under “C” it said, “CV for chair,” because I had a lot of letters that came to me. I said, “Look at this file. Over the past year people have asked me to be chairman. There are many places in the country. I’ve never sent my CV, because I don’t want to be chairman. I am very happy doing what I’m doing. I take care of babies.” And they went on and on, trying to convince me. The chairman of the board of trustees finally said something that to me was very, very realistic, I thought. He said, “Bill, I understand your feeling. I understand why you don’t want to do this. But think of it this way, if you don’t do it and this department of pediatrics goes down the tubes, guess what will happen to your division of neonatology.” It just dawned on me, you know, this guy is right. If the department of pediatrics goes down the tubes, there’s no way you can have a neonatology division. The training program will go away. So I said “Well, I guess you’re right. Maybe I should think about it over the weekend. I’ll go talk to my wife and think about it, and I’ll get back to you Monday.” So I came home and told Mary. Mary said, “You know, he’s right. And I don’t want to move. I love it here. I don’t want to move anywhere, and I don’t want you to lose your job.” So I went back Monday, and I went to the chairman of the board, a very close friend of mine, and I said, “Lou [Louis A. Fazzano], I guess you’re right. I have to do it. If I don’t do it, they’re right, this department probably will not survive, because the news is so bad.” And the department was in deep trouble at that point in time. One of the reasons that Leo was in crisis was that the budget was something like \$1 million in the red. In those days, the budget only involved \$4 or 5 million. Apparently they wanted him to fire his

faculty members, and he refused to do it. He's very loyal. He was loyal to his faculty.

DR. GARTNER: Yes.

DR. OH: So I said, "I'll do it." Then he said, "What do you need?" I'd already thought about it over the weekend. I said, "You know, Lou, you know what I need? We need a new hospital." And he looked at me. He said, "You're asking me to write a \$50 million check for you?" I said, "You're damn right. But you will get it all back in due time." I said, "To build a new program, you need a facility. It's like, to catch mice you need to get a good mousetrap to attract all these people to come here. When I make rounds here —" Remember I told you earlier that even when I was in neonatology, I always made it a point of doing two weeks ward service?

DR. GARTNER: Mm-hm.

DR. OH: I had first-hand experience of having a mom come in with a kid with appendicitis. The surgery was done. The next day, they wanted to go home, because the place is a dump, very unfriendly. The hospital is 1942 vintage, with eight- to ten-bed wards, no conference room, one bathroom per floor. Terrible.

DR. GARTNER: Right.

DR. OH: He looked at me and said, "Well, okay. I'll do it for you."

DR. GARTNER: Hmm!

DR. OH: And he said, "I will chair the fund-raising committee." And he did.

DR. GARTNER: He raised the money.

DR. OH: He raised the money. He went to Alan [G.] Hassenfeld, who was the chairman or the owner of Hasbro, the toy company, and got I don't know how many millions. And they named the hospital Hasbro Children's Hospital [The Pediatric Division of Rhode Island Hospital]. That's how it started. That was 1989, and the hospital opened in 1994. Since then the program just took off. At the time I left in 2003, 14 years later, we had gone from a residency program of six per year to a total of 72 residents, with Triple Board [Residency Training Program (includes pediatrics, adult psychiatry and child psychiatry)], with Med/Peds [Medical Pediatrics]. It was very attractive. Every year we filled 100 percent. I was very proud of the program.

DR. GARTNER: Very good.

DR. OH: I think the 14 years that I served as chair took at least ten years of my lifetime. It was very stressful. I tell you, toward the end of my 13, 14 years, I finally had a lot of trouble. I mean, not hospital trouble, but I had developed severe hypertension. I started having diabetes, and I couldn't sleep at night. In the middle of the night, I'd wake up and I'd think how to pay for this, how to pay for that, how to do this, how to do that. And then my blood pressure was, like, 180, 200 over — It was terrible.

DR. GARTNER: That was terrible.

DR. OH: Finally I went to my cardiologist, Tom [Thomas M.] Drew, who took my blood pressure and said, "What's the matter with you?" And I had gained weight, because I went to all these committee meetings, you know?

DR. GARTNER: Right.

DR. OH: And recruitment meetings. I said, "Well, I guess my job is killing me." He said, "You're damn right your job is killing you. You can do one of two things. I can give you another pill to try to control your blood pressure, or you quit your job." I said, "Tom, I'll do both."

DR. GARTNER: [Laughs]

DR. OH: So he gave me a new pill, and I went back to the dean, and said, "Go find a replacement. I can't do this anymore. It's killing me." It was literally killing me.

DR. GARTNER: It's hard work.

DR. OH: Yes.

DR. GARTNER: Very hard work.

DR. OH: So he said, "All right, we're going to appoint an interim chair," and they appointed Dr. Robert Klein. Then I left in 2003, and I came back to my roots. I came back to Women and Infants, just serving as a neonatologist, which is what I'm doing now. And within six months, my blood pressure went down, and I only need one pill a day, one of the mild pills that I have. I lost, like, ten pounds.

DR. GARTNER: Lost the weight.

DR. OH: I can sleep at night. You know [claps hands once].

DR. GARTNER: And what year was it that you retired?

DR. OH: 2003.

DR. GARTNER: 2003.

DR. OH: And they gave me three retirement parties. I haven't retired yet.

DR. GARTNER: [Laughs]

DR. OH: I'm waiting for the fourth one. Then I'll *really* retire.

DR. GARTNER: [Laughs]

DR. OH: Right, Mary?

DR. M. OH: You won't do it, because there's no money anymore.

DR. GARTNER: In retrospect, would you have taken, now that you've been through it, do you think your choice to take the chairmanship was the right one?

DR. OH: If I had a choice?

DR. GARTNER: No, I say do you think your choice to have taken it was the right one?

DR. OH: Not for me personally, but the things that I have done for the department, I really think they know that. They all told me. The day I left, they had a party for me, and several came to me and said, "You really turned the department around, and we're going to miss you."

DR. GARTNER: Sounds like you did it.

DR. OH: I told them. The day I announced to the residents, I said, "I'm leaving you because of my blood pressure, dah-dah-dah." I told them this story, and all the residents were crying, I tell you. I told them in the morning report. I very religiously and diligently attended the morning report every day. That's my number one priority on my agenda. Nobody can replace it. So I promised them I'd come back for the morning report regularly, and I still do. Every Tuesday and Thursday at 8:00 a.m. I am there. I don't say anything. I just sit there and listen.

DR. GARTNER: Well, it does sound like you did a remarkable job as chairman.

DR. OH: They really liked it. I think the residents really enjoyed me.

DR. M. OH: I don't know. Tell them afterwards.

DR. OH: Off the record?

DR. GARTNER: [Laughs]

DR. C. GARTNER: Go ahead, Mary.

DR. GARTNER: Do you want to add something Mary, about this chairmanship? [Laughs]

DR. OH: Go ahead, Mary. Tell them.

DR. M. OH: Oh, No.

DR. OH: No? Okay.

DR. GARTNER: Okay. All right.

DR. OH: So that's my story about chairmanship.

DR. M. OH: That's enough, huh.

DR. OH: Actually, I enjoyed it because, you know, you enjoy it when you know you're building something, you're doing something for someone. That's what it was for me.

DR. GARTNER: Yes. Somebody said that ten years was the right time for those kinds of positions — presidents of universities.

DR. OH: How long did you last?

DR. GARTNER: I lasted 13 years.

DR. OH: Thirteen, so I'm one year ahead of you. [Laughs]

DR. M. OH: It's enough.

DR. GARTNER: It's enough. Ten years was the right time, and I should have quit at ten years.

DR. OH: Especially today. You know, it's a very hard environment.

DR. M. OH: Oh sure it is, yes.

DR. GARTNER: Oh, it's terrible. And it's the economics.

DR. OH: That's why —

DR. C. GARTNER: Ten years is enough.

DR. OH: If you just shut it off, I can tell you a few off-the-record things.

DR. GARTNER: Okay. Well, let me just close. Thank you again, Bill, for adding that and for this wonderful interview.

[End of interview.]

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CURRICULUM VITAE

5/11/2006

William Oh, M.D.**Birth Date:****Place of Birth:****Citizenship:** N/A**Office Address:** Department of Pediatrics
Women and Infants' Hospital
101 Dudley St.
Providence, RI, 02903-4970**Current Hospital Title:** Attending Neonatologist
Women and Infants' Hospital**Current Academic Title:** Professor of Pediatrics
Brown Medical School**Undergraduate Education:** 1953 Pre Med -Xavier University, Cagayan de Oro,
The Philippines**Graduate Education:** 1958 M.D., University of Santo Tomas, Manila,
The Philippines1975 M.A.(Honorary) Brown University School of Medicine,
Providence, Rhode Island1988 D.Sc.(Honorary) Rhode Island College
Providence, Rhode Island**Postgraduate Education
and Training:**

1958-59 Internship, Deaconess Hospital, Milwaukee, Wisconsin

1959-61 Pediatric Residency, Michael Reese Hospital and Medical
Center, Chicago, Illinois1961-62 Chief Resident, Pediatrics, Michael Reese Hospital and
Medical Center, Chicago, Illinois1962-64 Research Fellow in Neonatology, Michael Reese Hospital and
Medical Center, Chicago, Illinois1964-66 Research Associate in Neonatal Cardiopulmonary
Laboratory, Karolinska Institute, Stockholm, Sweden**Board Certification:** 1963 American Board of Pediatrics #8957S

1976 The Sub-Board of Neonatal-Perinatal Medicine #243

	1986	Recertified, American Board of Pediatrics and SubBoard of Neonatal-Perinatal Medicine
Licensure:	1967	Illinois - No. 036-0040907
	1968	New York - No. 103172
	1969	California - No. 023319
	1974	Rhode Island - No. 4672
Hospital Appointments:	1966-69	Director, Neonatology Section Michael Reese Hospital and Medical Center, Chicago, Illinois
	1969-74	Chief, Division of Neonatology Harbor General Hospital Torrance, California
	1974	Director of Perinatal Medicine Women and Infants Hospital of Rhode Island, Providence, Rhode Island
	1975-1996	Pediatrician-in-Chief, Women and Infants Hospital of Rhode Island, Providence, Rhode Island
	1989-2003	Pediatrician-in-Chief, Rhode Island Hospital Providence, Rhode Island
	2003-Present	Staff Neonatologist, Women and Infants' Hospital of Rhode Island, Providence, Rhode Island
	1991-	Board of Trustees, Rhode Island Hospital
	1998 -	Board of Trustees/Rhode Island Hospital Foundation
	1998-	Trustee, Rhode Island Hospital Foundation
Academic Appointments:	1968-69	Assistant Professor of Pediatrics, Chicago Medical School Chicago, Illinois
	1969-73	Associate Professor of Pediatrics, UCLA School of Medicine, Los Angeles, California
	1972-73	Associate Professor of Obstetrics and Gynecology, UCLA School of Medicine, Los Angeles, California
	1973-74	Professor of Pediatrics and Obstetrics and Gynecology, UCLA School of Medicine (Joint Appointment), Los Angeles, California

1974-89	Professor of Medical Sciences in Pediatrics and Obstetrics, Brown University School of Medicine, Providence, Rhode Island
1986-87	Acting Chairman of Pediatrics, Brown University Program in Medicine, Providence, Rhode Island
1989-2003	Professor and Chairman, Department of Pediatrics, Brown University School of Medicine, Providence, Rhode Island
1995-2003	Sylvia Kay Hassenfeld Professor of Pediatrics Chairman, Department of Pediatrics Brown University School of Medicine Providence, Rhode Island

**Professional Societies:
(Local and Regional)**

1966-69	Medical Research Institute, Michael Reese Hospital
1967-69	Chicago Pediatric Society
1967-present	Midwest Society for Pediatric Research
1969-present	Western Society for Pediatric Research
1971-present	Western Society for Clinical Research
1971-present	Los Angeles Pediatric Society
1971-1974	Southern California Perinatology Club
1974-present	New England Pediatric Society
1975-present	Rhode Island Medical Society
1975-present	Providence Medical Association

(National/International)

1966-present	American Federation for Clinical Research
1967-present	American Association for Advancement of Science
1968-present	American Academy of Pediatrics
1968-present	Society for Pediatric Research
1969-present	American Association of Maternal and Child Health
1972-present	American Pediatric Society
1972-present	Perinatal Research Society (President, 1980)

1973-present	American Society for Clinical Nutrition
1973-present	American Institute of Nutrition
1973-present	Federation of American Scientists and Experimental Biologists
1974-present	American Society of Photobiology
1975-1976	National Perinatal Association
1975-present	International Perinatal Collegium
1975-present	The New York Academy of Science
1975-present	International Intensive Care of the Newborn
1978-present	The American Thoracic Society
1984-present	The Society for Gynecologic Investigation
1986-present	Society of Perinatal Obstetricians (Honorary)
1990	European Society for Pediatric Research (SPR Affiliate Member)
1991-present	International Pediatric Association Advisory Expert Panel
1994-present	National Perinatal Association
2000 -	National Asian Women's Health Organization (NAWHO), Board Member
Hospital Consultant:	
1967-1969	Certified Pediatric Consultant, Chicago Board of Health, Chicago, IL
1967-1969	Consultant, Martin Luther King Neighborhood Health Center, Chicago, IL
1969	Neonatology Consultant, St. Francis Hospital, Evanston, IL
1972-1974	Consultant, St. Mary's Hospital, Long Beach, CA
1974-present	Consultant, Kent County Memorial Hospital, Warwick, RI
1975-present	Program Consultant, Regional Newborn Intensive Care Unit, Rhode Island Department of Health, Providence, RI

1975-present	Member, Consultant Staff, Rhode Island Group Health Association, North Providence, RI
1976-present	Consulting Staff, Roger Williams General Hospital, Providence, RI
1976-present	Consultant/Lecturer in Pediatrics at the Naval Regional Medical Center, Newport, RI
1970-1974	American Academy of Pediatrics, Committee for Fetus and Newborn, Southern California Chapter
1972-1974	Ad Hoc Committee, Crippled Children Services, Hyaline Membrane Disease Committee, California
1973	Ad Hoc Committee for Promotion, UCLA and U.C., Irvine, California
1973-1974	Chairman, South Bay Regional Fetus and Newborn Committee
1974	Planning Committee, Family Practice Residency, Pawtucket Memorial Hospital, Pawtucket, RI
1974-present	Perinatal Mortality Committee, RI Medical Society
1975-1976	Search Committee for Chief of Allergy and Immunology, Roger Williams General Hospital, Providence, RI
1975-1976	Member, Professional Advisory Board, The Childbirth Educational Association, Providence, RI
1975-1976	Member, Heart Association's Pediatric Cardiology Council, Providence, RI
1975-1976	Member, Nominations Committee, Section of Perinatal Pediatrics, American Academy of Pediatrics
1976-present	Member, Medical Advisory Board, Meeting Street School, East Providence, RI
1976-1977	Corporation Member, Rhode Island Health Science Education Council, Cranston, RI
1976-present	Member, Medical Advisory Committee to the Division of Maternal and Child Health, Providence, RI
1976-1977	Member, Professional Advisory Board, East Shore District Nursing Association, Warren, RI

**Committee Membership:
(Extramural Appointment)**

- 1976-1977 Associate Chairperson for the Advisory Committee for Pediatric Hematologist Search, Rhode Island Hospital, Providence, RI
- 1977-1978 Member, Ad Hoc Committee for the Licensing of Midwives in Rhode Island, Department of Health, Providence, RI
- 1977 Member, Committee for Crippled Children, Child Health Division, Rhode Island Department of Health
- 1977-1979 Member, Nominations Committee, American Academy of Pediatrics, Section of Perinatal Pediatrics
- 1978-1979 Member, Task Force on Special Care Units, Health Planning Council, Inc., Providence, RI
- 1978-1979 Member, Central Rhode Island Task Force on Pediatrics, Health Planning Council, Inc., Providence, RI
- 1978-1984 Member, Blue Cross Corporation, Providence, RI
- 1978-1981 Member of the Corporation for the RI Association for the Blind, Providence, RI
- 1978-1980 Member, Developmental State Planning and Advisory Council for the State of Rhode Island, Providence, RI
- 1979-1980 Member, Newborn Hearing and Speech Advisory Council for the State of RI
- 1980-present Member, District I Committee on Perinatal Medicine of the American College of Obstetricians and Gynecologists, Boston, MA
- 1989-1991 Member, National Board of Medical Examiners, FLEX Component 1 Test Material Development Subcommittee H, Philadelphia, PA
- 1990-present Member, Association of Medical School Pediatric Department Chairmen
- 1992-1995 Member, Executive Committee, Association of Medical School Pediatric Department Chairman
- 1992-1996 Member, Rhode Island Philharmonic Board
- 2000 Member, Board of Directors, National Asian Women's Health Organization, San Francisco, CA

Intramural Appointments:

- 1969-1974 Subcommittee on Human Use, Harbor General Hospital, Torrance, CA

1969-1971	Transfusion Committee, Harbor General Hospital, Torrance, CA
1969-1971	Clinical Laboratory Advisory Committee, Harbor General Hospital, Torrance, CA
1970-1974	Intensive Care Unit Advisory Committee, Harbor General Hospital, Torrance, CA
1969-1971	Subcommittee on Fiscal and Administrative Policies, Harbor General Hospital, Torrance, CA
1972-1974	Committee on Biomedical Engineering, Harbor General Hospital, Torrance, CA
1973-1974	Interdepartmental Promotion and Tenure Committee, UCLA, Los Angeles, CA
1974-1978	Chairman, Fetus and Newborn Committee, Women and Infants Hospital, Providence, RI
1974-1975	Search Committee for Chief of Obstetrics and Gynecology (Brown University), Providence, RI
1975-1976	Search Committee for Chief of Pathology, Women and Infants Hospital, Providence, RI
1975-present	Member, Research Committee, Women and Infants Hospital, Providence, RI
1975-1981	Member, Credentials Committee, Women and Infants Hospital, Providence, RI
1975-1977	Faculty Representative, M.D., Curriculum Committee, Brown University Program in Medicine, Providence, RI
1975-1977	Faculty Representative, Clinical Clerkship Liaison Committee, Brown University Program in Medicine, Providence, RI
1977-1978	Member of the Final Examination Committee for doctoral dissertation, Brown University Program in Medicine, Providence, RI
1977-present	Member, Subcommittee of the Women and Infants Hospital Medical Education Committee, Providence, RI
1978-1979	Member, Biochemistry Search Committee, Brown University Program in Medicine, Providence, RI

1978-1979	Search Committee for Faculty Member in Physiological Chemistry, Brown University, Providence, RI
1978-1979	Chairman, Search Committee for Chief of Obstetrics and Gynecology, Women and Infants Hospital, Providence, RI
1978-1980	Member, Search Committee for Pediatric Gastroenterologist, Rhode Island Hospital, Providence, RI
1979-present	Member, Affiliation Committee for Women and Infants and Rhode Island Hospitals, Providence, RI
1979-present	Member, Board of Trustees, Women and Infants Hospital, Providence, RI
1982-1983	Chairman, Search Committee for Director, Division of Pediatric Cardiology, Rhode Island Hospital, Providence, RI
1985-1986	Chairman, Search Committee for Director, Division of Pediatric Pulmonology, Rhode Island Hospital, Providence, RI
1987-1988	Chairman, Search Committee for Ambulatory Pediatrician, Roger William General Hospital, Providence, RI
1990-1991	Chairman, Search Committee for Chairman of Obstetrics and Gynecology, Brown University, Providence, RI
1991-1992	Member, Search Committee for Dean of Biology and Medicine, Brown University, Providence, RI
1991-1992	Member, Board of Trustees, Rhode Island Hospital, Providence, RI
1991-1992	Member, Search Committee for the Dean of Medicine and Biological Sciences, Brown University, Providence, RI
1992-1993	Chairman, Search Committee for the Chairman of Surgery, Brown University, Providence, RI
1993-1994	Member, Search Committee for the Chairman of Medicine, Brown University, Providence, RI
1994	Member, Search Committee for Chief, Division of Pediatric Surgery, Rhode Island Hospital, Providence, RI
1994-1995	Member, Search Committee for Chief, Division of Cardiovascular Thoracic Surgery, Rhode Island Hospital, Providence, RI

1994-1996	Member, Search Committee for Director, Division of Pediatric Neurosurgery, Rhode Island Hospital, Providence, RI
1994-present	Advisory Board, Early Hospital Discharge Education Program, Wyeth-Ayerst Laboratories
1996-1997	Member, Search Committee for Surgeon-in-Chief, Department of Pediatrics, Rhode Island Hospital Providence, RI
1996-1998	Chairman, Search Committee for Chairman of Medicine, Brown University, Providence, RI
1996-2002	Chairman, Educational Advisory Committee Rhode Island Hospital, Providence, RI
1996	Chairman, Ad Hoc Committee for Hospital Affiliation Brown University, Providence, RI
1997	Member, Search Committee for CEO of Academic Medical Centers, Lifespan
1997	Member, System Leadership, Lifespan
1997-1999	Member, COMPASS, Lifespan
1998	Chair, Outside Advisory Committee, Department of Obstetrics and Gynecology Program in Women's Reproductive Health Research at Women and Infants' Hospital of Rhode Island.
1999	Member, Search Committee for the Chairman of Surgery, Brown University, Providence, RI

**Honor Appointments
and Achievements:**

1972	Member, Program Committee for Neonatology; Western Society for Pediatric Research Annual Meeting
1972	Member, Program Committee for Fetus and Newborn Committee, American Academy of Pediatrics, California Chapter, Annual Meeting
1973	Program Committee for Neonatology Section, Society for Pediatric Research
1980	President, Perinatal Research Society
1981	Outstanding Physician of the Year, Philippine Medical Association in America, Inc., New York, New York

- 1982 Alton Goldbloom Memorial Lecturer, McGill University - Montreal Children's Hospital Research Institute, Canada
- 1984 Subspecialty Chairperson Neonatology APS-SPR Annual Meeting
- 1985 Rhode Island Governor's Award for Scientific Achievement
- 1988 Sixth Renato Ma. Guerrero Memorial Lecturer, Manila, The Philippines
- 1993 231st Dr. Luis Ma. Guerrero Memorial Lecturer, Manila, The Philippines
- 1994 Member, The Best Doctors in America, (published by Woodward/White, Inc., second edition)
- 1995 The Virginia Apgar Awardee
- 1996 Member, The Best Doctors in America, *American Health*, March issue
- 1997 Alumnus of the Year, University of Santo Tomas Medical Alumni Association in America
- 2001 Lifetime Member of the National Registry of Who's Who
- 2003 Filipina Magazine Outstanding Achievement of the year

Government and Foundation Appointments

- 1978-1988 Member, Basil O'Connor Starter Research Advisory Committee, National Foundation, March of Dimes
- 1980-1985 Key Consultant, Five-Year Research Plan Steering Committee, National Institute of Health and Human Development, Washington, DC
- 1980-1983 Member, Advisory Panel on Pediatrics for U.S. Pharmacopeial Convention, Inc., Rockville, Maryland
- 1980-1984 Member, Study Section, Human Embryology and Development, NICHD, Bethesda, Maryland
- 1981-1986 Member, Subcommittee on Pregnancy Weight Gain, of the Committee on Nutrition of the Mother and Preschool Child, FNB - Assembly of Life Sciences, Washington, DC
- 1982-1988 Member, Research Advisory Committee, Hood Foundation, Boston, MA

1982-1988 Member, Sub-Board for Neonatal-Perinatal Medicine, American Board of Pediatrics

1985-1989 Member, Pediatric Test Committee Part II The National Board of Medical Examiners

1985-1987 Member, American Academy of Pediatrics, Committee on Fetus and Newborn

1985-1987 Chairman, Human Embryology and Development, National Institutes of Child Health and Development

1986-1991 Chairman, Steering Committee for Neonatal Research Network, National Institutes of Child Health and Development

1991 Member, Steering Committee for Neonatal Research Network, National Institutes of Child Health and Development

1993-1997 Chairman, American Academy of Pediatrics, Committee on Fetus and Newborn

1995-98 Member, National Advisory Child Health and Human Development Council of the National Institutes of Health

1999 Chairman, Governor's Commission on Early Intervention, Providence, Rhode Island

2003 Consultant, FDA panel on neonatal hyperbilirubinemia

2004 March of Dimes NICU Family Support National Advisory Committee

2005 Reviewer NICHD /FDA panel on neonatal pain drug development

Research Grant Reviewer:

1972 Site Visitor, Research Grant Committee, Los Angeles County Heart Association

1972 Reviewer, Research Grant Committee, Diabetes Association of California

1974 Reviewer, Research Grant Committee, National Foundation, March of Dimes

1974 Reviewer, Research Grant Committee, Education Foundation of America

1975 Site Visitor, Robert Wood Johnson Foundation

1975	Site Visitor, NIH Clinical Research Center Grant
1976	Site Visitor, National Heart and Lung Institute
1976	Site Visitor, MCH Pulmonary Centers
1976	Site Visitor, NIH Bureau of Community Health Services
1976	Consultant, Bureau of Medical Devices, FDA, Washington, DC
1979	Reviewer, Thrasher Foundation, Utah
1980	Site Visitor for NICHD to 3 Clinical Research Centers
1982	Reviewer, National Osteopathic Foundation
1983	Site Visitor, Program Project for NICHD, Staten Island, New York, Clinical Research Center University of Cincinnati, Cincinnati, OH; Medical Research Council
1986	Site Visitor, Program Project for NICHD Columbia Presbyterian Medical Center, New York, New York.
2003	Member, Review group for NICHD Pediatric Pharmacology Research Unit Network

Reviewer for Journals:

1972-present	Pediatrics
1972-present	American Journal of Obstetrics and Gynecology
1974-present	Pediatric Research
1975-present	Journal of Pediatrics
1975-present	New England Journal of Medicine
1976-1980	Cardiology
1977-1980	Infant Behavior and Development
1981-present	American Journal of Clinical Nutrition
1981-1983	Pediatric Gastroenterology
1982-present	Early Human Development
1983-present	American Journal of Diseases in Children
1983-present	Journal of Laboratory Clinical Medicine

1984-present	Clinical Pediatrics
1984-present	Journal of Pediatric Gastroenterology and Nutrition
1984-present	Biology of the Neonate
1987-present	Journal of Respiratory Diseases
1987-present	Pediatric Infectious Disease
1988-present	Metabolism
1989-present	Acta Paediatrica Scandinavica
1996-present	Ambulatory Child Health
2003-present	Obstetrics and Gynecology

Editorial Board Member:	1975-1983	Current Concepts in Perinatology, Neonatology, and Pediatric Nutrition
	1982-present	Acta Paediatrica Espanola
	1987-1996	Early Human Development
	1990	Perinatal/Neonatal Practice

Guest Editor:	1982	Pediatric Clinics of North America, The Newborn
	1988	Section editor, Fetal and Neonatal Physiology (Polin)
	1994	Acta Paediatrica Sinica
	2004	Seminar in Perinatology

Grant Support (Funded):

SOURCE	GRANT #	TITLE OF PROJECT	YEAR OF PROJECT	ROLE	DIRECT COSTS 1996
NICHD		The Offspring of Diabetic Mother	1975-1990	PI	\$ 400k/
NINCDS	IROINS27116-02	Randomized Indomethacin GMH/IVH Prevention Trial PI: Laura Rowe Ment, M.D.	1989-98	PI	\$ 50,4
NICHD	1U10HD27904-06	Multicenter Neonatal Research Network/B.U.	2001-2006	PI	\$118,7

Original Articles:

1. Baens, G.S., Oh W., Lundeen, E., Cornblath, M.: Determination of blood sugar in newborn infants. *Pediatrics* 28:850-851, 1961.
2. Oh W., Baens, G.S., Migeon, C.J., Wybregt, S.H., Cornblath, M.: Studies of carbohydrate metabolism in the newborn infant. *Pediatrics* 30:769-775, 1962.
3. Kunstadter, R.H., Oh W., Tanman, F., Cornblath, M.W.: Idiopathic hypoparathyroidism in the newborn. *Am. J. Dis. Child.* 105:499-506, 1963.
4. Oh W., Keller, R., Klein, R.I., Kunstadter, R.H.: Antibiotics in infants for premature rupture of membranes. *Am. J. Dis. Child.* 108:149-153, 1964.
5. Kunstadter, R.H., Oh W.: Vomiting in the newborn with particular reference to cardiochhalasia. *Medical Times* 92:447-451, 1964.
6. Oh W., Stewart, L., Baens, G.S., Metcoff, J.: Body composition and renal adaptation in the newborn rat. *Biol. Neonate* 8:65-80, 1965.
7. Oh W., Arcilla, R.A., Lind, J.: In vivo blood oxygen dissociation curve of newborn infants. *Biol. Neonate* 8:241-252, 1965.
8. Wu, P.Y.K., Oh W., Polar, E., Metcoff, J.: Urinary excretion of citric acid cycle metabolites in premature newborn infants with and without a respiratory distress syndrome. *Pediatrics* 36:856-860, 1965.
9. Oh W., Lind, J., Gessner, I.H.: The circulatory and respiratory adaptation to early and late cord clamping in newborn infants. *Acta Paediatr. Scand.* 55:17-25, 1966.
10. Oh W., Lind, J.: Venous and capillary hematocrit in newborn infants and placental transfusion. *Acta Paediatr. Scand.* 55:38-40, 1966.
11. Oh W., Oh, M., Lind, J.: Renal function and blood volume in newborn infant related to placental transfusion. *Acta Paediatr. Scand.* 56:197-210, 1966.
12. Oh W., Arcilla, R.A., Oh, M., Lind, J.: Renal and cardiovascular effects of body tilting in the newborn infant. *Biol. Neonate* 10:76-92, 1966.
13. Oh W., Blankenship, W., Lind, J.: Further study of neonatal blood volume in relation to placental transfusion. *Annales Paediatr.* 207:147-159, 1966.
14. Arcilla, R.A., Oh W., Lind, J., Gessner, I.H.: Pulmonary arterial pressures of newborn infants born with early and late clamping of the cord. *Acta Paediatr. Scand.* 55:305-315, 1966.
15. Arcilla, R.A., Oh W., Lind, J., Blankenship, W.: Portal and atrial pressures in the newborn period. A comparative study of infants born with early and late clamping of the cord. *Acta Paediatr. Scand.* 55:615-625, 1966.
16. Arcilla, R.A., Lind, J., Zetterqvist, P., Oh W., Gessner, I.H.: Hemodynamic features of extrasystoles in newborn and older infants. *Am. J. Cardiol.* 18:191-199, 1966.

17. Oh W., Arcilla, R.A., Lind, J., Gessner, I.H.: Arterial blood gas and acid base balance in the newborn infant: Effects of cord clamping at birth. *Acta Paediatr. Scand.* 55:593-599, 1966.
18. Hanson, J.S., Oh W., Arcilla, R.A., Wallgren, G., Lind, J.: Cardiac output estimation in the newborn infant. Modification of the forward triangle factor. *Acta Paediatr. Scand* 56:66-70, 1967.
19. Hanson, J.S., Arcilla, R.A., Oh W., Wallgren, G., Lind, J.: Quantitative studies of the human neonatal circulation. I. Dye dilution. Principles and techniques. *Acta Paediatr. Scand.*, Suppl. 179:9-21, 1967.
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22. Oh W., Wallgren, G., Hanson, J.S., Lind, J.: The effects of placental transfusion on respiratory mechanics of normal term newborn infants. *Pediatrics* 40:6-12, 1967.
23. Hanson, J.S., Oh W., Arcilla, R.A., Wallgren, G., Lind, J.: Evaluation of the forward triangle factor in the newborn infant. *Acta Paediatr. Scand.* 56:318, 1967.
24. Wu, P.Y.K., Oh W., Lubetkin, A., Metcoff, J.: Late edema in low birth weight infants. *Pediatrics* 41:67-76, 1968.
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27. Kunstadter, R.H., Cabana, E.C., Oh W.: Treatment of vassopressin-sensitive diabetes insipidus with clorpropamide. *Am. J. Dis. Child.* 117:436-441, 1969.
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32. Hohenauer, L., Rosenberg, T.F., Oh W.: Calcium and phosphorus homeostasis on the first day of life. *Biol. Neonate* 15:49-56, 1970.
33. Tsang, R.C., Oh W.: Neonatal hypocalcemia in low birth weight infants. *Pediatrics* 45:773-781, 1970.
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39. Oh W., Guy, J.A.: Cellular growth in experimental intrauterine growth retardation in rats. *Nutrition* 101:1631-1634, 1971.
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100. Vohr, B.R., Rosenfield, A.G., Oh W.: Umbilical hernia in the low-birth-weight infant (less than 1,500 gm). *J. Pediatr.* 90:807-808, 1977.
101. Ross, B.S., Peter, G., Dempsey, J.M., Oh W.: Klebsiella pneumoniae nosocomial epidemic in an intensive care nursery due to contaminated intravenous fluid. *Am. J. Dis. Child.* 131:712, 1977.
102. Chandler, B.D., Cashore, W.J., Monin, P.J.P., Oh W.: The lack of effects of phototherapy on neonatal oxygen dissociation curves and hemoglobin concentration in vivo. *Pediatrics* 59:1027-1031, 1977.
103. Monin, P.J.P., Cashore, W.J., Hakanson, D.O., Oh W.: Lack of effects of continuous positive airway pressure on vagal control of breathing in term and preterm newborn lambs. *Pediatr. Res.* 11:967-971, 1977.
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52. Oh W: The Infant of a Diabetic Mother. In: Current Therapy in Neonatal Perinatal Medicine - 2. B.C. Decker, Inc., 1990.
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Other Presentations And Letters To The Editor

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2. Oh W.: New advances in newborn care. Taped in Audio Digest, 16:9, 1970.
3. Oh W.: Consultation session on neonatology. Taped in Audio Digest. 17:2, 1971.
4. Oh W.: Respiratory disease in the newborn. Taped in Audio Digest, March, 1973.

5. Leake, R.D., Schroder, K., Benton, E., Oh W.: Soy based formula in the management of infantile diarrhea. Scientific Exhibit. International Congress of Pediatrics, Buenos Aires, Argentina, 1974.
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7. Siegel, S., Fisher, D.A., Oh W.: Renal functions in respiratory distress syndrome. J. Pediatr.
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17. Ross, B.S., Oh W.: Renal function of low birth weight infants during the first two months of life. Pediatr. Digest, 1979.
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19. Oh W.: Retrolental Fibroplasia: A Model for Risk: Benefit Assessment by Clinicians in Perinatal Medicine, Hospital Practice, May, 1981.
20. Cashore, W.J., Oh W.: Neonatal Jaundice: Exchange Transfusion, Phototherapy or Observation? Consultant, 23:51-57, 1983.
21. Oh W.: Peripheral Circulatory Response to feeding in newborn low-birth-weight infants. Editorial. J Pediatr Gastroenterol Nutr. 3:14, 1984.
22. Book Review: Human Milk Banking. Williams AF and Baum JD (Nestle Nutrition Workshop Series, Volume 5). Raven Press, New York, NY in JAMA 254(7):968, 1985.

23. Forward for Care of the High Risk Neonate (3rd Ed) Klaus MH and Fanaroff AA. W.B. Saunders Co, Philadelphia, 1986.
24. Oh W: Collected Letters. International Correspondence Society of Obstetricians & Gynecologists 28(10), October, 1987.
25. Nowicki, P.T., Oh W.: The Effect of Aminophylline on Gastrointestinal Blood Flow and Oxygen Metabolism in the Conscious Newborn Lamb. Editorial J Pediatr Gastroenterol Nutr 9(1), 1989.
26. Tsang R.C., Oh W.: Beginning an Academic Medical Career: Research, Writing, Speaking. Ross Laboratories, 1990.
27. Oh W, Fanaroff AA, Lawrence RA: Issues on Breast-Feeding. American Academy of Pediatrics Update 11(6), 1990.

Editorship

1. Perinatology, Neonatology, Pediatric Nutrition Currents, Ross Laboratories, 1977.
2. Stern, L., Friis-Hansen, B., Oh W.: Intensive Care of the Newborn, Vol. II, Masson Publishing USA, Inc., 1978.
4. Oh W.: Pediatric Clinics of North American, The Newborn. W.B. Saunders Company 29:5 (October), 1982.
5. Gabbe SG, Oh W: Infant of the Diabetic Mother, Report of the Ninety-Third Ross Conference on Pediatric Research. Columbus, Ohio: Ross Laboratories, 1987.
6. Oh W, Schiff D, Bratlid D: Current Topics in Neonatology. Seminars in Perinatology 1992:16(3)161-204.
7. Oh W, Schiff D, Bratlid D, Vert P: Current Topics in Neonatology. Seminars in Perinatology 1994:18(1)1-41.
8. Hauth JC, Dooley SL, Merenstein GB, Oh W: Guidelines for Perinatal Care, Fourth Edition, AAP and ACOG 1997.
9. Vert, P and Oh, W: Seminar in Perinatology 18th International Perinatal Collegium Seminar in Perinatology 28:1 2004.

Scholarly Presentations And Visiting Professorships

1980

February 5	Symposium at Springfield, Springfield, Massachusetts
February 11-13	Conference on the Newborn, Aspen, Colorado
February 18-20	International Symposium on Brain Injury, Mexico City, Mexico
February 29	Symposium, University of Massachusetts, Worcester, Massachusetts
March 20	Pediatric Grand Rounds, Harvard Medical School, Boston, Massachusetts
April 21-23	Visiting Professor, Fitzsimmons General Hospital, Denver, Colorado
April 24-25	American Academy of Pediatrics, Scientific Exhibit, Las Vegas, Nevada
May 7	Visiting Professor, Upstate University of New York
May 12-24	Symposium at Women's Hospital, Long Beach, California
August 6-8	Perinatal Nursing Symposium, Montreal, Canada
September 1-5	European Congress of Perinatal Medicine, Barcelona, Spain
September 15-18	Perinatal Research Society
September 22-24	Midwest Perinatal Research Society, Woodstock, Illinois
October 7-10	Visiting Professor, University of Child, Santiago and Concepcion, Chile
October 29-31	Annual Newborn Symposium, Louisville, Kentucky
November 5-8	American College of Obstetrics and Gynecology, Postgraduate Course, New Orleans, Louisiana

1981

January 18-22	Annual Pediatric Postgraduate Course, Hollywood, Florida
February 10	Lecture, New Hospital, Newport, Rhode Island
February 27-28	First Annual Florida Neonatal Society Meeting, St. Petersburg, Florida
March 8	First Renato Guerrero Memorial Lecture, New York City, New York
March 12-16	Southeastern Conference on Perinatal Research, Innisbrook, Florida
April 8-11	Fifth Ross Seminar in Perinatal Medicine, Phoenix, Arizona

April 22	Presentation, Newport Naval Regional Medical Center, Newport, Rhode
April 27-30	Annual American Pediatric and Society for Pediatric Research Meetings, San Francisco, California
May 1	Symposium on Neonatal Body Water Homeostasis, Los Angeles, California
May 6-8	Berkley Conference on Perinatal Research, Cadiz, Kentucky
May 13-14	Rhode Island Medical Society Symposium, Providence, Rhode Island
May 25-29	II International Course in Perinatal Medicine, Pampalona, Spain
June 3-5	Genetic Symposium, Providence, Rhode Island
July 14-17	Fifth Annual Pediatric Seminar, Colby, Maine
August 1-5	Basil O'Connor Advisory Committee Meeting, Carmel, California
August 9-14	Second National Symposium in Perinatology, Manila, The Philippines
August 15-19	The World Symposium of Perinatal Medicine, San Francisco, California
August 23-28	International Perinatal Association Conference, St. Adele, Quebec, Canada
September 12	Third Annual Symposium on Perinatal Medicine, Buffalo, New York
September 20-22	Perinatal Research Society, Mont Tremblant, Canada
October 4-6	New England Perinatal Conference, Chatham, Cape Cod, Massachusetts
October 8-9	Greater Issues of Obstetrics and Gynecology, Birmingham, Alabama
October 15-16	Postgraduate Course on Intrauterine Growth Retardation, Chicago, Illinois
October 31- November 3	Annual Meeting of the American Academy of Pediatrics, New Orleans, Orleans, Louisiana
November 5-8	The National Nursing Symposium on Neonatal Critical Care, Chicago, Illinois
November 16-20	Venezuelan Pediatric Symposium, San Cristobal, Venezuela
December 8	Queens Pediatric Society, Brooklyn, New York
December 10-11	Third Annual Mississippi Perinatal Postgraduate Course, Jackson, Mississippi

1982

January 12-13	Western Ohio Pediatric Society Meeting, Dayton, Ohio
January 29	Grand Rounds, Rhode Island Hospital, Providence, Rhode Island
February 1-2	Pediatric Nephology Seminar IV, Bal Harbour, Florida
February 10	Lecture, North Shore University Hospital, Manhasset, New York
February 15-18	Ninth Neonatal & Infant Respiratory Symposium, Aspen, Colorado
March 22-24	3rd Annual New England Regional Genetics Conference, Providence, Rhode Island
April 1-2	Alton Goldbloom Memorial Lecturer, McGill University, Montreal, Canada
April 5-6	35th Annual Medical Symposium, Greensboro, North Carolina
April 23	Eighth Annual Pediatric Postgraduate Course, Louisville, Kentucky
April 29-30	Abbott Laboratories Conference, Washington, D.C.
May 5-6	Rhode Island Medical Society Symposium, Providence, Rhode Island
May 11-13	Annual American Pediatric Society and Society for Pediatric Research Meetings, Washington, D.C.
May 15	12th Annual Meeting of the Great Plains Organization for Perinatal Health Care, Minneapolis, Minnesota
May 19-21	28th Annual Meeting of the Oklahoma Association of House Staff Physicians, Oklahoma City, Oklahoma
June 20-22	2nd International Symposium of Infant Nutrition & the Development of Gastrointestinal Tract, Buffalo, New York
June 23-25	4th Annual New York Metropolitan Conference on Perinatal Research, Montauk, Long Island, New York
July 19-21	Basil O'Connor Starter Research Advisory Committee Meeting, Newport Beach, California
July 22	Lecture, Informal Research Colloquium, Children's Hospital of Los Angeles, Los Angeles, California
July 22	Rounds and Discussion, University of Southern California Medical Center, Los Angeles, California
August 10	Lecture, Sigrid Juselius Symposium on Respiratory Distress Syndrome, Helsinki, Finland
September 12-14	13th Annual Perinatal Research Society, Carefree, Arizona

- September 24-26 Pediatric Postgraduate Education Council, New Orleans, Louisiana
- September 29-
October 1 National Institute of Child Health & Human Development Research Planning Workshop on "Physical Activity in Pregnancy", Washington, D.C.
- October 3-5 Eighth Annual New England Conference on Perinatal Research, Chatham Bars, Cape Cod, Massachusetts
- October 13-14 Breast Feeding Symposium, Women and Infants Hospital of Rhode Island, Providence, Rhode Island
- October 17-20 Guest lecturer, Children's Hospital, Denver, Colorado
- October 28 Annual American Academy of Pediatrics Meeting, New York New York
- November 4-5 Ninth Annual Perinatal Seminar, Temple, Texas
- November 11-12 Second Annual Nursing Symposium, Washington, D.C.
- November 16-17 "Clinical Advances in Pediatrics" Seminar, Kansas City, Missouri

1983

- March 4 Guest lecturer, The Sixth Annual Margaret I. Handy Memorial Newborn Lectureship, The Wilmington Medical Center, Wilmington, Delaware.
- March 16 Grand Rounds, The Children's Hospital of Philadelphia, Philadelphia, Pennsylvania.
- April 6 Grand Rounds, Dartmouth Medical School, Department of Maternal and Child Health; Hanover, New Hampshire.
- May 28 Guest Lecturer, the Philippine Medical Association in America, the 35th Anniversary and Recognition Celebration, New York, New York.
- June 13-17 Lecturer, The International Neonatal Intensive Care Collegium, Spetses, Greece.
- July 20-24 Faculty Member, The Sixth Annual National Symposium of Perinatal Nursing, Chicago, Illinois.
- August 29
September 2 Participant, Specialty Review in Neonatology/Perinatology Course, The Cook County Graduate School of Medicine; Chicago, Illinois
- September 11-12 Grand Rounds/Student Seminar; Boston City Hospital and Boston University School of Medicine in Boston, Massachusetts.
- September 22-23 Faculty Member, 15th Memphis Conference on the Mother, Fetus, and Newborn, University of Tennessee, College of Medicine, Memphis, Tennessee.
- September 30- Faculty Member, Tenth Annual Pediatrics for the Practicing Physician

- October 1 Perrysburg, Ohio.
- October 26 Faculty Member, Intrauterine Growth Retardation Symposium by Mount Sinai Hospital, Toronto, Ontario.
- November 18-21 Faculty Member, the Fifth Annual Las Vegas Seminars, Pediatric Update by the American Academy of Pediatrics, California Chapters 1, 2 & 3, Las Vegas, Nevada.

1984

- January 22-26 Faculty Member, Miami Children's Hospital's 19th Annual Pediatric Postgraduate Course, Continuing Education in Pediatrics - 1984, Bal Harbour, Florida.
- February 4-11 Faculty Member, Ten Crucial Months, Ovum to Newborn Symposium, Vail, Colorado.
- February 22-24 Lecturer, III International Course on Neonatal Intensive Care, Madrid, Spain.
- March 21 Grand Rounds, State University of New York, University Hospital, Syracuse, New York.
- April 11-13 Guest Faculty, Townsend Teaching Day in Neonatal/Perinatal Medicine, the University of Rochester and Rochester General Hospital, Rochester, New York.
- April 18-19 Grand Rounds, Emory University School of Medicine; Atlanta, Georgia.
- May 9 Faculty Member, Problems and Controversies in Newborn Medicine Seminar, the Norwalk Hospital; Norwalk, Connecticut.
- June 17-19 Moderator, Conference "Factors Influencing the Development of the Oral Cavity," University of Iowa, Iowa City, Iowa.
- July 5-8 Faculty Member, The 7th Annual National Symposium of Perinatal Nursing, Philadelphia, Pennsylvania.
- July 9-13 Faculty Member, The Eighth Annual Seminar "Current Topics in Pediatrics" at Colby College, Waterville, Maine.
- September 8-12 Program Co-Chairman/Faculty Member, The World Symposium of Perinatal Medicine, Washington, D.C.
- September 15-20 Seminar on Neonatal Physiology, the Annual Meeting of the American Academy of Pediatrics, Chicago, Illinois.
- September 30-October 2 Perinatal Research Society 15th Annual Meeting, Carefree, Arizona
- October 6-7 New England Perinatal Research Meeting, Newport, Rhode Island.
- October 25-27 Second International Conference on Gestational Diabetes, Chicago, Illinois
- November 1 HH Shuman Annual Lecture, Baystate Medical Center, Springfield, Massachusetts

- November 16-18 Faculty Member, American Academy of Pediatrics General Pediatrics Course No. 4, White Sulphur Springs, West Virginia.
- November 19-21 Visiting Professor, New England Medical Center, Boston, Massachusetts
- November 28 Guest Speaker, VII Perinatal Meeting, Caracas, Venezuela
December 1
- December 6-7 Guest Speaker, Fourth Annual Bristol-Myers Symposium on Nutrition Research "Energy and Protein Needs during Infancy," Washington, DC
- December 9-11 Guest Speaker at the Ross Laboratories Neonatal Regional Conference on Current Issues in Stowe, Vermont

1985

- January 13-15 Western Conference on Perinatal Research, Palm Springs, California
- January 17 Developmental Physiology Seminars on "Developmental Metabolism and Nutrition", Children's Hospital of Los Angeles, California.
- January 24-26 Guest Speaker, John Lind Memorial Symposium on Developmental Physiology, Paris, France.
- March 5 Grand Rounds, Newark Beth Israel Medical Center
- March 13-15 Visiting Professor, The Children's Hospital of Boston.
- March 17-20 Guest Speaker, 90th Ross Conference, Bronchopulmonary Dysplasia and Related Chronic Respiratory Disorders, Carefree, Arizona.
- March 20-22 Guest Speaker, The Ohio Perinatal Association's Annual Meeting, Columbus, Ohio.
- April 2 Grand Rounds, Hartford Hospital, Hartford, Connecticut.
- April 10 Grand Rounds, The Children's Memorial Hospital, Chicago, Illinois
- April 22-23 A Seminar in Neonatology, St. Elizabeth's Hospital, Boston, Massachusetts.
- May 23-25 Faculty Member, American Academy of Pediatrics "General Pediatrics" Course #8, Hilton Head, South Carolina.
- June 16-21 Program Co-Chairman, International Neonatal Intensive Care Collegium, Chatham, Massachusetts
- July 7-16 Visiting Professor, University of Hong Kong and at Kobe University School of Medicine in Kobe, Japan.

July 29-31 Basil O'Connor Starter Research Advisory Committee Meeting, Newport Beach, California.

September 1-7 Guest Professor, XXIV Venezuelan Pediatric Meeting, Maracaibo City, Venezuela.

September 11-12 Guest Speaker, Perinatology/Neonatology: A Look to the Future at the Maine Medical Center in Portland.

September 29-October 1 Annual Perinatal Research Society Meeting, Chatham, Massachusetts.

October 13-17 Guest Speaker, The Fetus and Newborn, State of the Art Conference, San Diego, California.

November 6 Guest Speaker, Newark Beth Israel Medical Center Perinatal Neurologic Insult - A Symposium on Perinatal and Developmental Management.

November 19-26 Referee for Thesis Defense for former fellow, Dr. Ann-Mari Brubakk, Amsterdam.

December 12 Guest Speaker, South County Hospital, Wakefield, Rhode Island.

1986

January 22-34 Site Visit, Columbia University, New York, New York.

January 30-February 1 Sixth Annual Meeting of the Society for Perinatal Obstetricians, San Antonio, Texas.

March 12 Grand Rounds, Memorial Hospital, Pawtucket, RI.

March 23-25 Faculty Member, 13th Neonatal & Infant Respiratory Symposium, Vale, Colorado.

April 12-17 American Academy of Pediatrics Spring Session, Orlando, Florida.

May 5-6 Guest Speaker, The National Conference of Neonatal Nursing, New York, New York.

May 6-9 Annual American Pediatric Society and Society for Pediatric Research Meetings, Washington, D.C.

May 29-30 Program Moderator, Rhode Island Medical Society Perinatal Conference, Newport, Rhode Island.

June 24 Guest Speaker, Sturdy Memorial Hospital Pediatric Conference, Attleboro, Massachusetts.

June 27 Grand Rounds, Rhode Island Hospital, Providence, Rhode Island.

July 11-20 XVIII International Congress of Pediatrics, Honolulu, Hawaii.

July 27-30 Basil O'Connor Starter Research Advisory Committee Meeting, Newport Beach, California.

August 4-8 Visiting Professor, Dartmouth Medical School, Hanover, New Hampshire.

October 5-7 Annual Perinatal Research Conference, Chatham, Massachusetts

October 9-10 Keynote Speaker, "The Newborn - Update 1986," Children's Hospital, Montreal, Canada.

October 21-22 Guest Speaker, Midwest Regional Conference on Neonatal Transport, Columbus, Ohio.

November 16-18 Program Co-Chairman, 93rd Ross Conference on Pediatric Research, "Infant of the Diabetic Mother," Carefree, Arizona.

November 20-21 Advisory Board Meeting, Perinatal Research Institute, Children's Hospital Medical Center, Cincinnati, Ohio.

November 28-December 4 Wyeth Visiting Professor, Pediatric Update Series in Taiwan and Kong.

December 16 Grand Rounds, Massachusetts General Hospital, Boston, Massachusetts.

December 19 Grand Rounds, Rush-Presbyterian-St. Luke's Medical Center, Chicago, Illinois.

1987

January 4-7 Sub Board Meeting, American Board of Pediatrics, Key West, Florida.

January 27 Grand Rounds, Framingham Union Hospital, Framingham, Massachusetts.

March 1-4 Faculty Member, XXI Aspen Conference on the Newborn, Aspen, Colorado.

March 7-12 Faculty Member, Ninth Annual Vail Pediatrics Conference, Vail, Colorado.

March 12-15 Participant, 17th Annual Combined Southern California Pediatric Postgraduate Meeting, Palm Springs, California.

March 31-April 2 Grand Rounds, The University of Texas Health Science Center Southwestern Medical School, Dallas, Texas.

April 27-May 1 Annual American Pediatric Society and The Society for Pediatric Society for Pediatric Research Meetings, Anaheim, California.

May 28-29 Rhode Island Medical Society Perinatal Conference, Newport, Rhode Island.

June 4-6 Guest Faculty, Advances in Pediatrics IV, sponsored by the American Academy of Pediatrics, Williamsburg, Virginia.

June 7-12 Program Co-Chairman and Faculty Moderator, International Neonatal Intensive Care Collegium, Sassari, Italy.

June 13-14 Guest Speaker, Annual Neonatal Meeting, Brussels, Belgium.

July 8 Brown/Dartmouth Faculty Colloquium Steering Committee Meeting, Dartmouth College, Hanover, New Hampshire.

July 17 Grand Rounds, Rhode Island Hospital, Providence, Rhode Island

July 20-22 Guest Faculty, Current Topics in Pediatrics, Colby College, Waterville, Maine.

July 27-29 Basil O'Connor Starter Research Advisory Committee Meeting, Newport Beach, California.

July 30 Guest Speaker, Dr. Jack Scott Memorial Lecture, Valley Children's Hospital, Fresno, California.

September 9-11 Guest Faculty, Second Annual Care of the Sick Newborn Conference, The Children's Hospital, Denver, Colorado.

September 17-18 Guest Speaker, Neonatal Symposium, Marfield Clinic, Marshfield, Wisconsin.

September 24 Guest Faculty, Neonatal Nursing Conference, Omaha, Nebraska.

September 27-29 18th Annual Meeting, Perinatal Research Society, Chatham, Cape Cod, Massachusetts.

October 1 Guest Faculty, "Neonatology - The Sick Newborn" Conference, Savannah, Georgia.

October 4-5 Annual New England Conference on Perinatal Research at Chatham, Massachusetts.

October 5-8 Co-Chairman, "World Symposium of Perinatal Medicine" in Montreal, Canada.

October 26-30 March of Dimes 1987 Visiting Professor in Pediatrics, Los Angeles County Chapter, Los Angeles, California.

November 15-17 Ross Neonatology Conference, Newport, Rhode Island.

November 21 Guest Faculty, "Perinatal Update Conference, Montgomery, Alabama.

November 29-30 Perinatal Research Institute National Advisory Committee Annual Meeting, Cincinnati, Ohio.

December 8 Grand Rounds, Framingham Union Hospital, Framingham, Massachusetts.

December 9-11 Grand Rounds, Texas Children's Hospital/Baylor College of Medicine, Houston, Texas.

1988

- January 8 Grand Rounds, The Worcester Memorial Hospital, Worcester, Massachusetts.
- January 8 Consultant, ECMO Review Group, The Children's Hospital, Boston, Massachusetts.
- January 20-21 Guest Faculty, Tenth Annual Conference of the Idaho Perinatal Project, Boise, Idaho.
- February 4 Grand Rounds, Long Island Jewish Medical Center, New York.
- March 14-15 NICHD Perinatal Emphasis Research Center Annual Directors Meeting, Denver, Colorado.
- April 4-5 Guest Speaker, Far Eastern University Postgraduate Course in Pediatrics, Manila, Philippines
- April 6-7 Plenary Speaker, 25th Annual Convention of the Philippine Pediatric Society, Manila, The Philippines.
- April 9 Renato MA. Guerrero Memorial Lecturer at the University of Santo Tomas, Manila, The Philippines.
- April 18-20 Visiting Speaker, Maricopa-Pima Visiting Professor Program, Phoenix, Arizona.
- April 20-21 Visiting Professor, Neonatology Research Seminar, Tucson Medical Center, Tucson, Arizona.
- April 25-29 Guest Speaker, Continuing Medical Education Course No. 8 (American Academy of Pediatrics), Hilton Head, South Carolina
- May 2-5 Annual American Pediatric Society and Society for Pediatric Research Meetings, Washington, D.C.
- May 5-6 The National Academy of Sciences/Institute of Medicine Health Care Technology Forum, Washington, D.C.
- May 26-27 Rhode Island Medical Society Perinatal Conference, Newport, Rhode Island.
- June 13-15 National Perinatal Information Center Conference "Perinatal Regionalization: Revisited," Newport, Rhode Island.
- July 13-15 The National Board of Medical Examiners Meeting, Philadelphia, Pennsylvania.
- July 19-20 Guest Speaker, "Neonatal Infections and the Role of Immunotherapy," Huron, Ohio.
- July 21 Guest Speaker, "The 4th Annual Growth and Challenge: Advances in Perinatal Medicine Conference," Colorado Springs, Colorado.
- September 14 Guest Speaker, "Third Annual Symposium: Perinatal-Neonatal Health Issues." Detroit, Michigan.

- September 19 Guest Speaker, "Marvin Green, M.D. Memorial Neonatal Lecture," Suffolk Pediatric Society, New York.
- September 26-28 19th Annual Meeting of the Perinatal Research Society, San Diego, California.
- October 1-2 Guest Faculty, American Academy of Pediatrics Continuing Medical Education Course "Pediatrics for the Practitioner," Newport, Rhode Island.
- October 5 Guest Speaker, Sturdy Memorial Hospital, Attleboro, Massachusetts.
- October 9-11 Annual New England Conference on Perinatal Research at Chatham, Massachusetts.
- October 13-14 Guest Speaker, 14th Annual Meeting of the Minnesota Perinatal Organization, Rochester, Minnesota.
- October 18-21 Guest Faculty, 57th Annual Meeting of the American Academy of Pediatrics, San Francisco, California.
- November 3-4 Visiting Professor, Duke University Medical Center, Durham, North Carolina.
- November 15-20 Guest Faculty, University of Miami Annual Postgraduate Course, Key Biscayne, Florida.

1989

- January 19 Guest Lecturer, University of Puerto Rico Seminar in Neonatology, San Juan, Puerto Rico.
- February 7 Grand Rounds, St. Francis Hospital, Hartford, Connecticut.
- February 10 Grand Rounds, Rhode Island Hospital, Providence, Rhode Island.
- February 24-26 Faculty Moderator, New England Perinatal Society Meeting, Manchester, Vermont.
- March 15-17 36th Annual Scientific Meeting of the Society for Gynecologic Investigation, San Diego, California.
- March 31 Grand Rounds, Tampa General Hospital, Tampa, Florida.
- April 5-7 Faculty Member, Care of the Sick Newborn Symposium, Long Beach, California.
- April 15 Faculty Member, The Anesthetic and Obstetric Management of the High Risk Mother and Fetus Conference, Providence, Rhode Island.
- April 17-18 Perinatal Emphasis Research Center Annual Directors' Meeting, Newport, Rhode Island.
- May 1-5 Annual American Pediatric Society and Society for Pediatric Research Meetings, Washington, D.C.
- May 10 Guest Faculty, Diabetes During Pregnancy Symposium, Women's College Hospital, Toronto, Canada.

June 7 Guest Speaker, Pediatric Update: 1989, Children's Hospital of New Jersey, Newark, New Jersey.

June 19-23 Program Co-Chairman and Faculty Moderator, Internataional Perinatal Collegium, Lake Louise, Alberta, Canada.

September 21-22 Eastern Society for Pediatric Research Meeting, New York, New York.

October 1-3 Annual New England Conference on Perinatal Research, Chatham, Massachusetts

October 12-18 Ciba Foundation Conference on Hypoglycemia in Infancy, London, England

October 21-24 Annual Meeting of the American Academy of Pediatrics, Chicago, Illinois

November 9-10 Visiting Professor, St. John's Hospital, Springfield, Illinois

November 12 American Academy of Pediatrics Committee on Scientific Meetings, Boston, Massachusetts

November 15 Third Alfred L. Deutsch Conference on Obstetrics and Gynecology "Current Trends in Perinatal Health Care," Detroit, Michigan

November 17 7th Annual Care of the Sick Child Conference, Orlando, Florida.

November 21 National Advisory Committee Meeting of the Perinatal Research Institute, Cincinnati, Ohio.

December 10-12 Ross Laboratories "Hot Topics in Neonatology" Conference, Washington, D.C.

December 14 Guest Speaker, "Reaching for the Gold" Silver Anniversary Celebration of The Maternity, Infant Care Family Planning Projects, New York, New York.

1990

January 12-19 Visiting Professor, Chinese University and University of Hong Kong, Hong Kong.

January 20-23 Guest Speaker, Singapore Pediatric Society Meeting, Singapore.

January 27 Member, Scientific Advisory Group on Infant Dosing for Richardson-Vicks OTC Cough, Cold and Allergy Products, Washington, D.C.

February 8 Panel Member, Maternal-Child Health Care Conference, Providence, Rhode Island.

February 23 Guest Speaker, Perinatology 1990 Conference, Los Angeles, California.

February 28 Guest Speaker, 13th Annual Pediatric Update Conference at Phoenix

March 2 Children's Hospital, Scottsdale, Arizona.

- March 13-17 Association of Medical School Pediatric Department Chairman Annual Meeting, Marco Island, Florida.
- April 5-6 Guest Faculty, The Nevada Perinatal Conference, Las Vegas, Nevada.
- April 19 Grand Rounds, University of Medicine & Dentistry of New Jersey, New Brunswick, New Jersey.
- April 27 Guest Faculty, Future Directions of Perinatal Medicine and Nursing in the 90's, Rush-Presbyterian-St. Luke's Medical Center, Chicago, Illinois.
- May 5-10 Annual American Pediatric Society and Society for Pediatric Research Meetings, Washington, D.C.
- May 24-25 Rhode Island Medical Society Perinatal Conference, Newport, Rhode Island.
- May 31-
June 2 Visiting Professor, Neonatal Conference at University of Coimbra, Coimbra, Portugal.
- July 9-13 Course Director, Problems in Pediatrics Seminar, Colby College, Waterville, Maine.
- July 26-27 Member, Flex Test Subcommittee, National Board of Medical Examiners Meeting, Philadelphia, Pennsylvania.
- September 23-27 European Society for Pediatric Research Meeting, Vienna, Austria.
- October 8-10 Guest Faculty, Annual Meeting of the American Academy of Pediatrics, Boston, Massachusetts.
- October 18-20 Co-Chairman, Neonatology Session, Eastern Society for Pediatric Research Meeting, New York, New York.
- October 24-30 Guest Speaker, Korean Pediatric Association Annual Meeting, Seoul, Korea.
- November 9-10 Program Faculty, Twenty-Fourth Annual Newborn Symposium and Fourth Fall Pediatric Symposium of the Kentucky Pediatric Society, Louisville, Kentucky.

1991

- March 1 Grand Rounds, Winthrop-University Hospital, Mineola, Long Island, New York.
- March 8-12 Annual Meeting of the Association of Medical School Pediatric Department Chairman, San Diego, California.
- April 19 Guest Professor, Ninth Annual Pediatric Science Day, University of Florida College of Medicine, Gainesville, Florida.
- April 29-
May 3 Annual American Pediatric Society and Society for Pediatric Research Meetings, New Orleans, LA.
- May 23-24 Rhode Island Medical Society Perinatal Conference, Newport, Rhode Island.

- June 14-19 Program Co-Chairman and Faculty Moderator, International Perinatal Collegium, Oslo, Norway.
- June 21-23 Course Faculty, American Academy of Pediatrics "Clinical Pediatrics" Continuing Medical Education Course, Washington, D.C.
- July 8-12 Course Director, Problems in Pediatrics Seminar, Colby College, Waterville, Maine.
- July 25-26 Course Faculty, 16th Annual Perinatal Conference, Ashland, Oregon.
- September 1-4 Visiting Professor, National Congress of Pediatrics of the Venezuelan Pediatric Society, Caracas, Venezuela.
- September 26 Invited Speaker, 1991 Chicago Lung Conference, Chicago, Illinois.
- September 29-October 1 Perinatal Research Society 22nd Annual Meeting, Montreal, Canada.
- October 4-5 Regional Meeting of the Eastern Society for Pediatric Research, New York, New York.
- October 6-8 New England Conference on Perinatal Research, Chatham, Massachusetts.
- November 11 34th Annual Heber W. Youngken, Jr. Pharmacy Clinic, University of Rhode Island
- December 16 National Advisory Committee Meeting of the Perinatal Research Institute, Cincinnati, Ohio

1992

- January 30-February 2 3rd Annual Pediatric Problems Conference 1992, Macuto, Venezuela.
- March 10-12 Association of Medical School Pediatric Department Chairman Annual Meeting, Ft. Myers, Florida.
- April 8 1st Annual Pediatric Update Symposium, Newport, Rhode Island.
- April 11-16 1992 Spring Session of the American Academy of Pediatrics, New York City, New York.
- May 4-7 Annual American Pediatric Society and Society for Pediatric Research Meetings, Baltimore, Maryland.
- May 17 Invited Speaker, Bela Schick Symposium, Brooklyn, New York.
- May 21-22 Rhode Island Medical Society Perinatal Conference, Newport, Rhode Island.
- July 13-17 Course Director, Problems in Pediatrics Seminar, Colby College, Waterville, Maine.

- July 31-Aug 2 Faculty Member, The Cape Cod Conference on Pediatrics, Hyannis, Cape Cod, August 2 Massachusetts.
- September 5-10 Invited Speaker, XX International Congress of Pediatrics of the International Pediatric Association, Rio de Janeiro, Brazil.
- September 16-17 Invited Speaker, Neonatal Nutrition Conference, Louisiana State University, New Orleans.
- September 23-25 Invited Speaker, Neonatology - The Sick Newborn, Medical College of Georgia, Augusta, Georgia.
- October 4-6 New England Conference on Perinatal Research, Chatham, Massachusetts.
- October 8-9 Annual Meeting of the Eastern Society for Pediatric Research, New York, New York.
- November 17 Guest Faculty, "Perinatology, 1992: Newest of the New, Dartmouth-Hitchcock Medical Center, Hanover, New Hampshire
- December 9 Invited Speaker, Fifth Annual Contemporary Issues in Gynecology/Health Care, Boston, Massachusetts.

1993

- February 26 Grand Rounds, Rhode Island Hospital, Providence, Rhode Island.
- March 4-8 Association of Medical School Pediatric Department Chairman Annual Meeting, Tempe, Arizona.
- April 13 Pediatric Grand Rounds, "Emerging Issues in Newborn Medicine" Medical City Dallas Hospital, Dallas, Texas.
- April 21 Faculty Member, Second Annual Pediatric Update Symposium, Newport, Rhode Island.
- May 3-6 Annual American Pediatric Society and Society for Pediatric Research Meetings, Washington, D.C.
- May 14 Invited speaker, New England Pediatric Society/AAP District I Meeting, Portland, Maine.
- May 21 Invited Speaker, 9th Annual Neonatal Medicine Symposium, Long Beach, California.
- July 12-16 Course Director, Problems in Pediatrics Seminar, Colby College, Waterville, Maine.
- July 16-19 Program Co-Chairman and Faculty Moderator, Internataional Perinatal Collegium, Chatham, Massachusetts.
- September 15-18 Annual Meeting of the Perinatal Research Society, Montreal, Canada.

September 29 New England Conference on Perinatal Research, Chatham, Massachusetts.
 October 1
 October 30 Annual Meeting of the American Academy of Pediatrics, Washington, D.C.
 November 3
 November 12 Faculty Member, Third Annual Pediatric Update Symposium, Newport, Rhode Island.
 December 3-9 Guest Lecturer, the First Joseph T. Queng, M.D. Memorial Lecture, the 231st Dr. Luis Ma. Guerrero Memorial Lecture and the Philippine Pediatric Society, Manila, Philippines.

1994

February 18 Grand Rounds, Rhode Island Hospital, Providence, Rhode Island.
 March 3-8 Association of Medical School Pediatric Department Chairman Annual Meeting, Marco Island, Florida.
 March 22-25 Forty First Scientific Meeting of the Society for Gynecologic Investigation, Chicago, Illinois.
 April 8-9 Program Chairman, Hasbro Children's Hospital Pediatric Scientific Symposium, Providence, Rhode Island.
 April 18-19 Visiting Professor, Phoenix Children's Hospital, Phoenix, Arizona.
 May 2-5 Annual American Pediatric Society and Society for Pediatric Research Meetings, Seattle, Washington.
 May 19-20 General Pediatric Update Conference, Orlando, Florida.
 May 26-27 Current Concepts in Fetal & Neonatal Care Conference, Newport, Rhode Island.
 July 11-15 Course Director, Problems in Pediatrics Seminar, Colby College, Waterville, Maine.
 August 8-12 Guest Faculty, 37th Annual Pediatric Program, University of Colorado School of Medicine, Aspen, Colorado.
 September 14-22 Guest Faculty, 8th Congress of the Federation of the Asia/Oceania Perinatal Societies, Taipei, Taiwan.
 September 29 Program Committee, Fourth Pediatric Update Symposium and Annual Meeting, American Academy of Pediatrics, Rhode Island Chapter, Newport, Rhode Island.
 October 12-14 New England Conference on Perinatal Research, Chatham, Massachusetts.
 October 22-26 Annual Meeting of the American Academy of Pediatrics, Dallas, Texas.
 October 28-29 Guest Faculty, Obstetrical Inaugural Day Scientific Program, Massachusetts General Hospital, Boston, Massachusetts.

November 30 Guest Faculty, Perinatal Pediatric Conference, Memorial Hospital, South Bend, Indiana.

1995

January 6 Guest Speaker, Grand Rounds, Schneider Children's Hospital of Long Island Jewish Medical Center, New Hyde Park, New York.

March 8-11 Association of Medical School Pediatric Department Chairman Annual Meeting, San Francisco, California.

March 17 Guest Speaker, First Annual Jack Metcuff Memorial Lecture, Evanston Hospital, Evanston, Illinois.

April 8 Program Chairman, Hasbro Children's Hospital Second Annual Pediatric Scientific Symposium, Providence, Rhode Island.

April 26-29 Guest Faculty, Pediatrics Update Conference, Hilton Head, South Carolina.

May 5-9 Annual American Pediatric Society and Society for Pediatric Research Meetings, San Diego, California.

May 18-21 Guest Faculty, Southeastern Private Practice Neonatologists' Association Ninth Annual Conference, Palm Beach, Florida.

July 10-14 Course Director, Problems in Pediatrics Seminar, Colby College, Waterville, ME

September 25-27 Visiting Professor at the Chinese General Hospital and Medical Center in the
Philippines.

November 1 Guest Faculty, 20th Annual Fox Valley Perinatal Day Conference in Appleton, WI.

1996

February 22 Guest Faculty, George Washington University's National Health Policy Forum
Washington, DC

March 7-9 Association of Medical School Pediatric Department Chairman Annual Meeting,
Ft. Myers, Fl

April 19 Guest Speaker, 10th Biennial International Conference on Infant Studies,
Providence, RI.

April 26 Guest Panelist, Advisory Committee of Kaiser Permanente for study on home visits
after early newborn discharge, Oakland, CA

May 6-9 Annual American Pediatric Society and Society for Pediatric Research Meetings,
Washington, DC.

- May 10 Honoree, The Oh Symposium In Celebration of Dr. Oh's 65th Birthday, Providence, RI
- July 8-12 Course Director, Problems in Pediatrics Seminar, Colby College, Waterville, Maine.
- September 18 Represented the AAP's Committee on Fetus and Newborn at Winning the Fight Against Infant Mortality: A National Summit on Community and Corporate Initiatives, held in Washington, DC.
- October 9-11 New England Conference on Perinatal Research, Chatham, Massachusetts.
- November 22-26 Guest Faculty at the 18th Annual Las Vegas Seminars "Pediatric Update" held at the Mirage Hotel.

1997

- January 12 Guest speaker at the Sixth Annual Meeting of the Society of Neonatology, Republic of China in Taipei, Taiwan.
- March 8 Association of Medical School Pediatric Department Chairman Annual Meeting, Tempe, AZ.
- March 19 Grand Rounds at North Shore University Hospital, New York University School of Medicine in Manhasset, NY.
- April 4 The "1997 Donald V. Eitzman, M.D. Visiting Professor" at The University of Florida College of Medicine.
- April 19 Honored Guest at the Philippine Chinese American Medical Association which was held in New York.
- May 15 Current Concepts in Fetal and Neonatal Care Symposium, Newport, RI.
- June 5-6 Guest Faculty at the Advances and Controversies in Perinatal Patient Care Symposium, Woodhull Medical and Mental Health Centers, Brooklyn, New York.
- July 7-11 Course Director, Problems in Pediatrics Seminar, Colby College, Waterville, ME
- July 18-22 International Perinatal Collegium, Mont Tremblant, Canada
- August 20-23 Guest Faculty at the 9th Annual NICHD Aspen Conference on Maternal-Neonatal-Reproductive Medicine in Aspen
- September 10 Guest faculty at the West Boca Medical Center's Conference on Neonatal Jaundice in Boca Raton, Florida.
- September 25-27 Guest Faculty at "The Fetus & Newborn: State of the Art Care" Conference held in San Diego, CA.

- October 15 Guest Faculty at Norwalk Hospital's 14th Annual Neonatology-Perinatology Symposium in Norwalk, CT
- October 24 Faculty Member, Pediatric Update Symposium, Newport, Rhode Island.
- November 1-5 American Academy of Pediatrics Annual Meeting in New Orleans, LA
- November 7-8 Guest Faculty at the Kosair Children's Hospital's Fifth Newborn and Pediatric Symposium in Louisville, KY

1998

- February 12-13 Guest Faculty at the "20th Annual Management of the Tiny Baby Conference" University of Florida, Orlando
- Feb 27 - Mar 1 Faculty at the Philippine Medical Society of Florida, 40th Reunion in Tampa, FL
- March 5-9 Association of Medical School Pediatric Department Chairman Annual Meeting, Ft. Myers, FL
- April 20 Consultant for FDA, Advisory Committee for Reproductive Health Drugs, Gaithersburg, MD
- April 30 Guest Faculty at the "23rd Annual Perinatal Conference" in Perryburg, Ohio
- May 29 Guest faculty at the Guidelines for Perinatal Care: Improving Pregnancy Outcome in Alabama, Birmingham, AL.
- July 13-16 Course Director, Problems in Pediatrics Seminar, Colby College, Waterville, ME
- July 17-18 Featured speaker at the Fifth Annual Driscoll Children's Hospital Conference in Corpus Christi, Texas.
- August 1 Guest speaker at the Cape Cod Conference on Pediatrics hosted by the Nemours Foundation Education Programs on Cape Cod, MA
- August 3-6 Visiting Professor at the University of Chile in Santiago, Chile.
- September 23-25 Key speaker at a symposium on neonatology in Shenyang, China.
- October 16 Guest faculty at the Fifth Annual Perinatal Conference Hosted by St. Vincent Mercy Medical Center held in the French Quarter in Perrysburg, Ohio.
- November 14 Guest speaker, National Perinatal Association, Annual Clinical Conference and Exposition, Providence, RI
- December 7 Guest speaker, Hot Topics in Neonatology, Washington, DC

1999

- March 2-7 Association of Medical School Pediatric Department Chairman Annual Meeting, Wesley Chapel, FL
- May 1-5 Annual American Pediatric Society and The Society for Pediatric Society for Pediatric Research Meetings, San Francisco, California. Presented the data from the Neonatal Research Network
- June 3-5 Guest faculty, Guidelines for Perinatal Care: Improving Pregnancy Outcome in Alabama, Birmingham, AL.
- July 5 Guest Lecturer, Philippine Pediatric Society's meeting in the Philippines.
- July 12-16 Colby College in Waterville, Maine. Course Director
- September 9-10 Guest faculty, Thirtieth Memphis Conference on the Newborn, Memphis, TN
- October 7 Committee Member, 4th Annual Neonatology & Pediatric Conference, Westport, MA
- October 24 Faculty Member, Pediatric Update Symposium, Providence, Rhode Island.

2000

- March 11-17 Association of Medical School Pediatric Department Chairman Annual Meeting, Wesley Chapel, FL
- March 26-30 Guest faculty, 10th Asian Congress of Pediatrics, Tapei, Taiwan
- April 3-6 Guest faculty, Philippine Pediatric Society, 37th Annual Convention
- May 12-16 Annual American Pediatric Society and The Society for Pediatric Society for Pediatric Research Meetings, San Francisco, California. Presented the data from the Neonatal Research Network
- May 18-21 Guest Speaker – Southeastern Association of Neonatologists, San Marco, FL
“New therapy in neonatology – what works, what doesn't, and what is controversial”
- May 24-29 Honored Guest, University of Santo Tomas Medical Alumni Foundation
8th Annual Convention and Reunion
- July 13-17 Colby College Continuing Medical Education, Waterville, Maine. Course Director
“Problems in Pediatrics”
- October 5 Committee Member, 5th Annual Neonatology & Pediatric Conference, Westport, MA

- October 20 Faculty Member, Pediatric Update Symposium, Providence, Rhode Island
- November 3-7 Guest faculty, Neonatal Conference, Valencia, Spain
- November 15 Guest Speaker, Clinical Pearls from the Chiefs: The Best of the Best, Massachusetts Medical Society, Waltham, MA
- December 15 Distinguished Professor, Iowa Neonatology Day, University of Iowa College of Medicine, Iowa City, Iowa

2001

- March 8-12 Association of Medical School Pediatric Department Chairman Annual Meeting, San Diego, CA
- March 16-18 Guest Plenary Speaker, Eastern Society for Pediatric Research Annual Meeting, Atlantic City, NJ
- May 12-16 Annual American Pediatric Society and The Society for Pediatric Society for Pediatric Research Meetings, Boston, Massachusetts
Presented the data from the Neonatal Research Network
- July 9-13 Colby College in Waterville, Maine. Course Director
- July 21-25 International Perinatal Collegium, Marco Island, FL, co-chair and presenter. "Association between peak serum bilirubin and neuro-developmental outcomes in extremely low birth weight infants."
- September 20 Committee Member, 6th Annual Neonatology & Pediatric Conference, Taunton MA
- October 1-2 Speaker at the Association of Administrators in Academic Pediatrics, Mystic, CT. "Development of outreach programs In an academic pediatric department".
- October 20 Faculty Member, Pediatric Update Symposium, Providence, Rhode Island
- November 15-18 Speaker at The American Academy of Pediatrics, California Chapters 1,2,3, &4, Las Vegas, NV. "Common metabolic problems in the newborn: Hypoglycemia and hypocalcemia."
- December 6 Planning Committee, Second Annual Lipsitt Duchin Lecture, Brown Medical School, Providence, RI

2002

- February 16-22 Guest Faculty, Pediatric Potpourri, Maui, Hawaii "Recent advances in Perinatology."
- March 7-11 Association of Medical School Pediatric Department Chairman Annual Meeting, Marco Island, FL

- May 4-7 Annual American Pediatric Society and The Society for Pediatric Society for Pediatric Research Meetings, Baltimore, MD
Presented: "Update – Neonatal Research."
- June 18 NICHD Neonatal Research Network Committee Meeting, Bethesda, MD. Presented: "Cord Clamping: Update."
- July 5-8 Colby College Pediatric Course Director "Problems in Pediatrics", Waterville, ME.
- October 2-4 New England Perinatal Research Conference, Reviewer, Chatham, MA.

2003

- March 5-7 Association of Medical School Pediatric Department Chairman Annual Meeting, Santa Fe, NM
- May 29 Robert Wood Johnson Medical School Pediatric Grand Round
- June 28-July 4 International Perinatal Collegium, Amboise, France, co-chair and speaker, "Association between peak serum bilirubin and neuro-developmental outcomes in extremely low birth weight infants."
- July 29-30 NIH Study Section meeting for Pediatric Pharmacology Research Unit
- Sept 13-15 Neoprep meeting presentation, Vancouver, BC, Canada
- October 3-5 New England Perinatal Research Meeting
- November 19 Wayne State Medical School Pediatric Grand Round

2004

- March 19 Mamouth Medical Center, NJ Pediatric grand rounds
- March 26 AAP district I meeting
- March 29-30 FDA/NICHD panel on drug development for newborn
- April 24 Philippine Pediatric Society of America Annual meeting main speaker
- April 29-May 4 Pediatric Academic Societies meeting in SF, CA
- May 6 Current Concepts in fetal and neonatal care, Providence, RI moderator
- May 13-16 Southeastern Association of Neonatologies Marco Island guest speaker "Prevention of neonatal group B streptococcal sepsis – An update."

May 27-29 IberoAmerican Neonatologists Association guest speaker
July 7-13 Colby Pediatric Update Course director
September 17-19 European Society for Pediatric Research speaker and moderator
October 1 Southcoast Neonatal and Pediatric Conference, Taunton, MA moderator
October 6-8 New England Perinatal Research Society
October 20-23 Pan American Neonatal Congress Invited speaker, Cartagena, Columbia
October 29 Billy Andrew Professorship Lecturer, U of Louisville, Louisville, KY

2005

May 14-17 Pediatric Academic Societies' Meeting in Washington, D.C.
June 15-16 NRN Steering Committee in Rockland, MD