

Host: In the early 1930s, as the Great Depression was digging its heels into the country, Gerald Cooper would rise at 2:30 in the morning and make his way through the North Carolina night to the *Durham Herald*. After helping around the pressroom, he would pack his canvas bag with freshly minted papers and set out on his five-mile route.

Cooper, barely 17 years old when he first got the job, would repeat this routine, delivering papers seven days a week for the next five years. He would use his earnings to support himself through college at nearby Duke University. Those four years would lead to four more as a graduate student in chemistry and later another four as a medical student. His medical diploma barely framed, Cooper would join the fledgling institution now known as the Centers for Disease Control and Prevention and help make it one of the most revered institutions in the nation. Cooper, elegant and gracious in bearing and demeanor, would become one of the most honored, innovative, and beloved figures in modern clinical chemistry.

Dr. Donald Wiebe: People come up at AACC meetings and give him hugs from everywhere in the world.

Host: That's Donald Wiebe, associate professor of pathology at the University of Wisconsin. Rather than deliver the news, Cooper would make it, helping to develop and standardize cutting-edge diagnostic test for heart disease and a host of deadly ailments. He would travel widely, weaving a global network of uniform laboratory practices.

Dr. Russell Warnick: You can go to any physician in the country and your test samples can be analyzed there in the doctor's office or sent to almost any laboratory in the country that the results will be consistent, can be credited to Dr. Cooper.

Host: That's Russell Warnick, senior vice president of laboratory operations and chief scientific officer at Berkeley Heart Lab.

Yet in some respects, Cooper has never wandered far from that paper route. It has been nearly three-quarters of a century since he sent his last paper flying, but when he talks about it, you can almost hear the sound of the paper as it lands, the hum, the clatter of the press, the crickets interrupting the night stillness.

When asked during a recent conversation to reveal the secret of his longevity, Cooper, now 94, still puts in a full day at the office, he immediately mentions the paper route.

Dr. Gerald Cooper: That's five miles of walking every morning for years.

Host: In truth, the lessons learned during his nightly sojourns of hard work, humility, and discipline were stamped earlier, during his boyhood. Gary Myers, chief of the clinical chemistry branch at the CDC, calls him a resolute optimist.

Dr. Gary Myers: The man has a knack for finding the positive in everything.

Host: The young Cooper witnessed firsthand some of the great struggles of the 20th century. He lost an uncle to the Great Influenza of 1918 and watched his aunt single-handedly raise her five children. As the Depression hit, Cooper's father became sick and had to close his butcher shop in South Carolina. His family moved to North Carolina where his mother, who had a college degree in music, took a series of school principal jobs, eventually landing in Durham.

Despite the economic hardship, or possibly because of it, Cooper's childhood resonates with moments of unvarnished pleasure that are almost Norman Rockwell-like in their simplicity. Once Christmas when he was 12, he received a hammer and a saw, a windfall for a boy who expected nothing. A few years later, he saw an old car lying in his neighbor's backyard. She sold it to him for five dollars. Here's how he recalls it.

Dr. Gerald Cooper: I pushed it down the street to my house, got it under a tree in the shade, and I went to work on it.

Host: He promised four girls on his street that he would take them for a ride, and one summer evening, with the motor droning, they set out.

Dr. Gerald Cooper: We had three flat tires along the way that I had to repair, while the girls would party in a drugstore. Each time, after I fixed the tire, the girls would jump back in, bang on the sides of the car, and sing.

Host: The youngest of four boys --

Dr. Gerald Cooper: I paid dearly for that.

Host: Cooper was inspired by his mother to become a high school science teacher and majored in Chemistry at Duke.

One day during his senior year, his professor asked him about his plans and encouraged him to go to graduate school where he could support himself as a research assistant.

Dr. Gerald Cooper: That's when I quit getting up at 2:30 in the morning, when they gave me this assistant job. It allowed me to work in the laboratory and attend classes in graduate school. It was wonderful, and it was so different not to be under pressure

and up all the night, and then try to study and work in the lab.

Host: For Cooper, the laboratory would become kind of a sanctuary.

Dr. Gerald Cooper: It's the only place where you can get the truth, I believe that.

Host: He would be drawn there over and over again. After graduate school, he spent four years working with Hans Neurath on protein structure, followed by a four-year stint in an experimental surgery laboratory.

During World War II, the laboratory was charged with finding new methods of treating burns. Cooper would often visit injured aviators but had to be escorted by a medical resident.

Dr. Gerald Cooper: I realized that I needed an MD if I was ever going to direct a program in a medical school.

(00:05:01)

Host: After Duke Medical School, Cooper embarked on an internship at Emory University. One evening in 1952, while walking home to his wife Lois, whom he had married six years earlier, he noticed laboratories being built behind the hospital where he worked and stuck his head into one of them.

Dr. Gerald Cooper: A gentleman walked up, and I said, "I'm just curious what these laboratories are at the back of the hospital." He said, "They're laboratories being formed for the CDC." Then he turned to me and said, "What kind of training have you had that makes you interested in laboratories?" I said that I had a PhD in chemistry and an MD in internal medicine. He said, "You know, we've been looking everywhere for a person trained like you."

Dr. Gerald Cooper: The following day, Cooper was offered a position. During his 56 years at the CDC, Cooper would work to transform the laboratory into a flawless place, proving exact measures for disease signaling substances, such as cholesterol. Wiebe remembers.

Dr. Donald Wiebe: He wanted laboratories to try to achieve perfection, each laboratory giving the same value on the same sample.

Host: Although Cooper has never left the CDC, he's traveled widely.

Dr. Gerald Cooper: People don't listen to you unless you're there.

- Host: Until recently he could be spotted walking at least a mile a day through the extensive corridors of the CDC, spreading his distinctive brand of cheer. According to Gary Myers:
- Dr. Gary Myers: He is the archetype of the Southern gentleman.
- Host: By all accounts, Cooper has an expansive, generous spirit that practically bubbles out from behind the elegant exterior. Again, Donald Wiebe:
- Dr. Donald Wiebe: He wants everyone around him to succeed.
- Host: Cooper rises at 5:20 in the morning and makes himself a bowl of oatmeal.
- Dr. Gerald Cooper: I don't dare wake Lois because she has a California spirit. She sleeps well in the morning not in the evening.
- Host: During the years they were raising their children, Annetta, Gerald Jr., and Rodney, Lois ran the household.
- Dr. Gerald Cooper: She was a real partner.
- Host: Cooper is in the office by 7:30 in the morning and puts in a minimum of eight hours.
- One day a few years ago, just after he turned 90, he walked in to what he thought was a seminar only to be greeted by a roomful of colleagues, each wearing a bowtie, white shirt, and laboratory coat. Soon after a huge birthday cake bearing 90 candles was brought in. Myers recalls the event.
- Dr. Gary Myers: We went to our office of health and safety and said, "We're going to light these candles. Do we need to turn the fire alarm off?" They said, "That's not going to be a problem. The little bit of smoke that candle will put off is not going to hurt anything." So we brought this cake in, all 90 candles lit, and Gerald blew all 90 candles out in two deep breaths. When he hit the last little bit of candles, a puff of smoke went up and the fire alarm went off, we had to empty the building.

Total Duration: 8 Minutes