

Transcript of Interview with Eula Bingham by Ashton Czech and Samuel Mangold-Lennett

Interviewee: Eula Bingham

Interviewer: Ashton Czech and Samuel Mangold-Lennett

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Summary: Dr. Eula Bingham details her time at UC as a member of the Kettering Laboratory, as a member of the Chemistry Department, the University Administration, and as Assistant Secretary of Labor for Occupational Safety and Health during the Carter Administration.

Categories: Arts & Sciences, Government, Gender

Tags: Chemistry Department, Kettering Laboratory, OSHA, industrial hygiene, Washington, collegiality

Fritz Casey-Leininger: We're recording whenever you're ready.

Ashton Czech: Alright. Hello, my name is Ashton. This is my partner Sam and we are here to interview Dr. Eula Bingham as part of the University of Cincinnati History 3097 honor seminar course titled Bearcat Legacies in collaboration with the University of Cincinnati and Emeriti Faculty History Project. The date is Wednesday, February 7 2018. And the time is 2:13pm. This interview is taking place at the UC Winkler center, specifically in the Lucas boardroom. First of all like to say thank you, Dr. Bingham for taking your time to help us out here. Now starting off, you've already provided us with some information about your basic bi—biographical information, we'd have one quick question of basically what was your family like? What was your family life like when you were a child?

Eula Bingham: They were wonderful. My mother and father—I'm an only child. And I think it was clear that I went to school with—in Covington to where as my as I lived with an aunt, my father sister because they move to a farm over in Boone County, which is the fastest growing county in the us today. And to a farm and I had to walk one mile out to catch the bus and hope the bus came. So they decided that for kindergart—well, there was no kindergarten there. And I should go to kindergarten and I should go to first grade, and second grade, and third grade, and fourth grade. And they said well, you're 10 years old now and you're old enough to walk that mile. It was a tough one. I look back down. I didn't think about it then. But walking a mile in the cold, to catch a bus that was usually a little, you couldn't determine exactly what it would be there. But there were some other kids in the neighborhood. We all stomped our feet. But it was a good experience at that county school, in Burlington. And I enjoyed—I always enjoyed school. I love school. And so, but I was an only child and I loved to have cousins come and visit, and go visit them. So far as the—we raised almost everything we ate. Not quite, but you know, we had bread that we would buy. But we raised a lot of practically everything we ate, and we canned it.

During the war, the Second World War, I remember well, we supplied vegetables to our relatives because we had so many and we would can them. And we had very good food. I didn't feel deprived or anything even though we didn't have very much money. My, my mother used to get a cream check. She would—from we didn't have a lot of cows but she would skim cream off and then sell that. And on the bottom there was a little coupon and he got so many of them. You could get like an umbrella, they had the summertime. So she'd save that for me. I had a I had lots of cousins and they were good to me. So I know, I think back now how little I had but I never felt deprived, which is good. And worked on the farm gardening, helping raise tobacco.

Samuel Mangold-Lenett: So after like your primary education in the county schools, how did your parents feel about you attending college?

EB: Well, my dad insisted upon it as a matter of fact, and that's one of the most wonderful things so that I think about my parents. They didn't have a lot of money. I came over to Cincinnati after I graduated and started interviewing for—cause I always had a summer job. I went to work at Woolworths when I was like six—when I just soon as I was 16 on Saturdays. Somebody told me about the jobs they had over in Covington. But when I graduated, I started looking for a job in Cincinnati and I had had summer jobs at one of the banks, 5/3 as a matter of fact, but I was looking for a permanent job and I interviewed at Procter and they said well 'we will give you a job doing so and so, but you will, we will train you. And then you have to agree to work for us for five years,' or whatever it was. And I can I can remember now walking, getting out of the car that we had them. And my dad was there. And he said, 'well, how'd you do today?' And I said, 'well, I found this offer.' He said, 'I told you I want to do to go to college.' And said 'you find out how much it is to go to Eastern Kentucky University' which was a college, state college then, 'for a year, and let me know, and I'll get the money.' And so I call the cousin that had gone there. And then I called Eastern. And they said, 'well, you can do it. If you're not if you don't spend a lot of money for \$500. It'll be tuition and a meal ticket.' So I told him, and he went to the bank and signed a note and got my \$500. I mean, can you imagine that? It was his, it was—he was a hero. And so I didn't, I didn't incur costs going to college, which a lot of people can't say that, that and that when I was started there, I got a professor, I wanted to be a math major. And the math major was filled up with people. And so the the biology professor took me in and and he said, 'oh, you want to take some biology, not all that math.' And I said, 'no, I want to be a math major. So it turned out. He said, 'well, you know, if you would take a course in zoology and botany, that, then you could be a lab instructor,' because I told him what my family finances were. And I had enough money for like one meal ticket. And I thought, well, I wish I had two meal tickets for a week. So I was always thinking about food. So the next year, I took the biology courses, and then and then he started putting me into the into the lab helping students. That was my first experience working in a laboratory. And it was wonderful. Maths, or I didn't go on I started taking all these biology and chemistry courses and they became my life really. And besides that, I got paid for being a student assistant, you could have another meal ticket. And when I graduated, want to hear about that?

SM: Oh yeah, absolutely.

EB: When I graduated, I started looking for a job. And that was in 1951, I think it was, and I looked and looked and I finally saw one advertised for a chemical company out here in Pleasant Ridge. Hilton Davis chemical company. They made Bayer Aspirin, they made detergents, they made a lot of different things. And I applied out there the summer after I graduated, and they gave me a job. And I held that job for two years. And it was a eye-opener. I can remember a man standing over—emptying a tank of gasoline. And it was set up in there and you had to take a torch and heat the tank up to get it to come out and one day, something happened to the whatever this hose and he was splashed with that when I had—he had a uniform on. But that uniform stuck to his body, it was horrible. And I will say I'll tell you that every day, the fire department came at least once sometimes twice. I had, I had a pretty good job there really. Mine was very not very hazardous anyway unless the building well. But I remember one day a woman who had graduated from UC was swirling something and she says, you know, some, somebody told me that this chemical that's in here that we're—I'm cleaning the speaker with is benzene and it'll cause leukemia. And I said, 'well then, I wouldn't use it anymore.' And I thought 'huh.' So some of the people out there took interest in me. One man had graduated from UC, in the biology department, in the zoology department, and he was going on to—he graduated with a PhD. And he was going to another site and do research. And he told me, he said, you know, you really ought to apply there. Because you've been here two years. And you know, you'll just grind away at this. So I talked to my parents, and they said, 'sounds like a good idea.' So I applied. And they said, 'well, we don't have a place for you. We have our stipend this used up.' And the week before school started, one of the people dropped out. And they call me and I said, 'I'll take it.' And I left the chemical company. They let me work on Saturday for a while to have a little more money, but and then I was at, UC, and I said, I told, I told the story about a call me max. Yeah. And got my masters and, and got my PhD. And it was at UC, it was great. I was the only woman graduate student, for the first three years I was there. And then they finally took somebody else. But it was an interesting place, because I would have to teach a lot of anatomy and just sifting animals. Almost every, I would say everybody, but I'd say 70% of the students there were Jewish. They were all go—hoping to go to medical school here in Cincinnati, because there are only two places in the U. S, that really took any Jewish students very many. And that was in New York, and in Cincinnati. So everything was great. I enjoyed the teaching, and everybody was good to me. My major professor was wonderful. But I couldn't live on \$900 a month. And I had a little apartment. So I always had a job besides the teaching job. And that's when I went—I think I talked talked about that, to the Jewish hospital and work for Dr. Schwartz, because I needed a little more money. And I don't recall whether I told you that after he, his grant was over. He took me to the Department of Environmental Health, which wasn't a department then it was called the Kettering Laboratory. And, and introduced me to somebody who gave me a job and was—which was Ray Suskind and Dr. Robert Kehoe ran the laboratory. And I learned more about what happens to people when they work. Did I tell you about the woman who came in? I don't think I did. There was a—one of the first things I did, he knew I had been a chemist, he had me mixing up solutions, and they were going to skin test this woman. This woman came in, and she was broken out from her hands, or arms arms across here [gestures at arms]. And Dr. Suskind said, we'll get some of them—or she was a seamstress. And she would make uniforms.

And the, and the fabric would go across her lap like that [gestures at lap]. And we talked about it with her. And so we decided we would take some of that fabric and see if they—we could get anything—put water and alcohol solutions and see what came out of it. Well, it was like a green [coughs], excuse me a green color. And so Dr. Suskind did some skin tests on her, and they all flared up. Well, what that said was that she was sensitized to the fabric and the color in that fabric. And so he began to teach me different things like that. I did. I can remember taking products from Procter and Gamble that they wanted tested on animals, and guinea pigs and swiping the guinea pigs with a brush with this material to see if it's made them break out. So that's sort of the way I moved in a little bit more to health and safety And it just seemed like after my first couple of experiences that I just got more and more involved. There was a horrible—I was a technician, during this period, taking classes, trying to finish my PhD, still was at \$900. And—but I also had a job that I would go to, and particularly after work and on Saturday. And one thing happened. Before I got my degree in law, I think it was like 60—no it wasn't, it was 57 or 8 58. One thing that happened was, they called me and said, 'we're going to go out to this plant, and they make dyes. And some of the men are having trouble urinating. And one of them has bladder cancer. We don't know about the other one.' So the other one had bladder cancers. So we went out there and took samples. And by the time it was all over, I don't know, I've written a paper on it, there was a, you might say, an epidemic of bladder cancer, because those people that worked in that plant where this dye stuff was used to dye material. And there were two or three things like that, that came up. And I just became very interested in what can happen to people in the workplace. And it really became my life. I got my degree, but I always—I stayed working with them until I got my degree and then they offered me a job.

AC: So you're doing all this work in occupational safety. At what point does the government OSHA start to express interest in you? And how did you necessarily transfer from working in academia to going into the government?

EB: Well, I was hired by the Kettering Laboratory, and which became the Department of Environmental Health with Dr. Kehoe and started doing research. And mostly, my research was supported by—at the beginning was supported by industry, for example, there was this lawsuit, and this fellow had cancers on his arm. And there was a lawsuit, the judge said, we'll take this to the Kettering Laboratory and have them test the material that leaks on his arms while he does this cutting of the machinery, of the machine. And so I, I—my boss came to me and he said, 'well test this on mice, our, our system for testing materials, to see if they cause cancer.' And he said, 'it'll probably be a year before they ever get cancer, no, paint the material on the back of the mouse.' So I don't know about 30 weeks into the experiment, if you want to call it that. I said, 'well, we've got tumors,' and he said, 'really?' And I said, 'yep,' I showed him. And we he said, 'well, I'll call the judge because the judge had said to the company, up here in Ohio, we won't settle this case, this lawsuit until we've tested this.' So when that happened, the judge said, 'okay, case is settled, we're going to give the man, he should get compensation.' And so there were a lot of chemicals from industry as particularly the petroleum industry that were sent to the laboratory, and I did the testing of them. And it was—it's interesting that some of the people were physicians and the head of health and safety for large petroleum companies, and they were very honest with

me, they would say 'now, when you dilute this material, so you can paint it on the skin or you technician will. Don't use benzene don't use benzene and use tiling or xylene, and make sure it's as pure as you can get don't have any benzene in it.' And I said, 'well, why is this?' He said, 'well, because it's we think it causes leukemia.' Okay, so that's why I always did. So when I got—when I got to OSHA, that was one of the first standards I put out was a benzene standard. And I did a lot of work in that area. And somebody who worked on cancer out in California, Paul Kotin, and Hans Falk, left California, because they were working on cancer that you get from air pollution. And they went to the National Cancer Institute. And they heard about my work. And they called me up and they said, 'well, will you come to the Cancer Institute, and talk to us about your work and your, how you test animals?' I said, 'yes.' And I went there, and they gave me a contract. Actually, it wasn't a contract, it was a cooperative agreement. And that was probably in the 70s, early 70s. And I had that until I went to Washington, it just kept going. So it was, I don't know, 15, 16 years. And until I left the department, but I did that there would be sometimes a—another terrible thing. And I would help work on some of those episodes. And I became very interested in chemical carcinogenesis. And if there's anything, I mean, it wasn't just—it wasn't just toxicology, although that was part of it. But it was chemical carcinogenesis, what things in the environment, particularly the workplaces cause cancer. And when, in 1970, I went to a meeting of the Industrial Hygiene folks up in Canada, and Richard Nixon had just been elected. And he agreed to in the Congress agreed to make this a little laboratory here on worker health and safety into the National Institute for Occupational Safety and Health, and it's located here in Cincinnati, and has been, once it was made that Institute. And so I worked with those people, and started publishing. After the act was passed. I worked with some unions. One of the things that I used to test was materials they used in industry, in the petroleum industry. And there was a big episode where the unions that were in the petroleum industry in the—ask the companies to give them a medical care and train them about what were the hazards there and do something about it. And one company held out, all the other companies signed off on the contract. And this one company in Texas, and I never worked with unions before. And Tony Mazzocchi called me and said, 'you were in favor of workers being trained about the workplace, and the hazards and this company won't do it. And you know, all the rest of them have signed up.' He asked me to come to Washington and be on a panel. And I did it. Everybody was, I think, a Nobel Prize winner but me and I was the only woman. And it just shows you how naive I was. They said that—the last question all these people from the newspapers in Washington, kept asking questions. The last question was, 'do you support a boycott of this company?' I'm just a country—I didn't say it. Not I don't know, I never supported a boycott. I don't know. And everybody went down the line and the Nobel Prize winners, they all said, 'oh, yeah.' And they got to me. I said, 'I don't know. I've never boycotted anything before.' And that was the last question. So Tony Mazzocchi, who was head of the Union, came down with his wife laughing, like hell. And I said, 'oh, my God, I'm so sorry. But I was just so taken back.' And he said, 'it was wonderful. We all looked so honest with you did that' So you know, I started working with unions after that. And I guess some of the unions began to recognize me. And what happened, I think what led to Washington was, the act was passed. And they had committees, by the Department of Labor, on carcinogens. And I got asked to be on that and was on it, and spoke out. And, you know, it was somewhat personal, because here in Ohio, there were rubber factor—plants. And benzene was so terrible in those

plants. Lots of people will just fall over for—a large percentage with cancer. And so I knew a little bit about that. And they started asking me to be on committees from the Department of Labor. And then they asked me to be the chair of the committee on coke oven emissions. Coke ovens used to be these big furnaces in the steel industry that they put coal into or coke and fired them up so that they would use that to do the iron and steel. So I just kept going from one thing to the next, and work with unions and work on several big committees. And so when Jimmy Carter—well, I had taken a trip with some people who were out of the UAW, and—auto workers—and Sweden, invited people to come from unions, and let's see, that was about 1976. And somebody asked me to go, and so I went with this group of people, some workers, some union people and some political people. And learned about what they were doing in Sweden, and they were so far ahead of us in, in everything they did in terms of looking after the workplace. I was shocked. And then—and I, I just kept doing committee work. And then, as a result of that trip to Sweden, there were people who worked on Jimmy Carter's campaign. I didn't work on it. But, you know, I wasn't that political. But they knew what I had done and other workplace situations. So the unions got together and decided they would put my name in the pot. And one day, I was in my laboratory. And I got a call from the transition committee. And I laughed at them. And it was it was interesting. Then they call me back and they said, 'well, we would like for you to come in and talk to President Carter.' President— what was President Carter because it was January. And I said, I'm not interested. I can't leave Cincinnati. So it turned out that—I had a large laboratory by that time. A lot of NIH grants and industry by industry grants. And the most important person like with working with me was this African American man by the name of Bill Barkley. And I knew his family and everything. And he said, 'you've got to go, you've got to go and talk to him.' And I said, 'oh, Bill, I can't. 'Well, you've got to do it.' So they called me back. And I went and talked to President Carter, and that's on YouTube. Well I not talked— talking about what he said to me, and what I said to him, I've been—was interviewed, and I can tell you more about that. But I came and talked to Secretary Marshall of the Labor Department. And he's—I told him, I said, 'you know, I have all these grants, I can consult, I go anyplace in the world.' He says, 'you sound just like me, and here I am.' So the people at the university said, 'you've got to go,' you know, because I was a woman, really. Let's face it. And so I did. And I can tell you what conversation Carter and I had, if you want to hear it, but it was, I mean, I wasn't, political. And as a matter of fact, I was registered Republican. And I told him, I said, 'I registered Republican.' And they said, 'well, you sound like a Democrat.' I said, 'well, here it is.' It Billy, Billy Gradison had a somebody who was against him. And so I registered and voted, of course for him. But I felt no pressure to be a Democrat or Republican. When I was there. It was just going after things. What else you want to know?

SM: So,

EB: I'm talking too much. [Laughs]

SM: Kind of, more towards like the becoming director of OSHA, how did you feel your responsibilities changed when you went from being like an advisor or consultant to the actual director of the organization?

EB: Well, I felt like I—well, let me tell you—let me say, the, when I went up to the Hill, I talked to congressman David Obey from Wisconsin, who was head of the Appropriations Committee, and I wasn't sworn in yet, but they wanted me to talk to him. And he said to me, 'what's the most important thing that you think you can do?' And I say, 'well, we need some standards for certain chemicals. But the most important thing for me that's lacking, the department does some of those standards. But what's lacking is there is \$500,000 spent by the Department of Labor, on training workers. And I think they need to train workers, they need to train the unions, they need to—because I think that workers need to know about what the hazards are.' And he said, 'how, how would \$2 million help?' I just was floored. And I said, 'well it'd be wonderful.' And I went back to the office, and I told the holdovers, they weren't the big boss, but they were the next level down. They said, 'oh, my God, you should never have done that. You should never say something like that. That has to all go through the system. And the Secretary and the President has to agreed all that.' And I said, 'well, he asked me, and he's on the committee, and I told him what I thought.' And they said, 'well, you'll never get it this year.' Well, of course, he made sure I got it, even though the budget was already passed. He made sure I got it that it was—they went back and put it in our budget. And I just did what I thought you should do and Secretary Marshall was very—I never asked to do anything that he didn't back me up on. And I have to say that except for one thing, Jimmy Carter did the same thing for me. I went over there because they—some of the people didn't want us to regulate the cotton dust industry and there been a lawsuit. And well, I should tell you, there's been a lawsuit. and the Department of Labor had dealt with cotton dusts and and Probably the third week I was in office, I got this call when they set up this meeting for me, with Brown—with the Brown Lung Association. It, they worried about people who had Byssinosis, the cotton lung disease. And they came in. And it was a room about like this. And they said, the chair set there, I said here, and all these people, and it was like this [coughs]. And they—some of them have to get up and leave. And they told me that they had been waiting for for three or four years, whatever it was, for a standard. And they wanted me and I said, 'I'll do whatever I can.' And when we got this, this was really fought tooth and nail by the cotton dust industry. And I, I went—one day I went into the office, we had the standard already to go out. And Secretary Marshall was there. And he said, 'oh, I just got a call. Jimmy's gonna call me Jimmy Carter.' And so I was there when he took the, took to call. And there's one of the people from the was head of the—oh I've forgotten his name. He was in charge of making sure that the administration didn't cost industry too much. And he has talked to the President. And the President says, we really need to come over and talk with him about it, even though he had approved it. Well, I thought what am I gonna do? And I call some people Herb Selikoff from Mount Sinai. I call the man from—a pathologist. And I told them, I said, you know, 'if the president doesn't agree to this standard, I can't stay here.' And Herb Selikoff was a sort of a guru in New York City on disease, pulmonary disease, from asbestos. And I told him, and he said, 'you're right.' And I thought, What can I do? And I got out the book on industrial hygiene. And I went to the part where it says, this—these are the control the hierarchy of controls. And the the one that's recommended is you engineer it out, and you get as low as possible so that you don't cause disease. And it went down. The very last thing was, you put people in respirators, because it doesn't work, really. So I went over there, Fritz Mondale, was there. I don't know, about a half

dozen people. And Carter was so very nice. And like he said, 'well tell us why you're doing this.?' So I went into it. And I said, and, 'Mr. President, this is the book on industrial hygiene. And these are the hierarchy of controls.' And I went down, and he was an engineer. And that was it. And he said, 'well, how does this sound? We'll put off requiring it for, I don't know. So many months, and then they'll have to come into compliance, in' he named the steps they would have to do, but they'll have to be they'll come into compliance. And I couldn't believe that I just couldn't believe it. Nobody else could. And I went back to the office and they met me in the hall and it was very emotional. I was crying and they said, 'oh, my god, she's going home.' I said, 'no, I'm not.' Because I said, 'well, no, he agreed that they—everybody didn't have to wear a respirator. They would try to phase it in in different places.' So that was a wonderful thing. For Carter to do that—he was the South, come on. And and probably grew cotton at some point in time, but anyway, that was a big thing for me, because I knew he supported if I could make the case. And the only thing he didn't support was there was something a material that was use on submarines. And he put that off for a period of time. But then— that my appointment was over. But I came back to the university, came back to my department, and took me a while to, oh, maybe six—few weeks to get back into things. And one day the president called me up, Henry Winkler. And I had met Henry, when he was made president. About halfway through my term, he and his wife met with UC graduates up in Washington area. And they invited me to come. And I went, they were very nice, and then when I got back, I was back and for, I don't know, five, few months. And the man who was Vice President for Research and Graduate Studies, [unknown] and it was he was the Vice President for Research in Graduate Studies. And he was, I had two jobs really, dean of the Graduate School, graduate school used to be in that. And so he asked me to come and do that. And I said, 'oh no, I want to do my research.' But he convinced me I should do it. And it was possible for me to still be on committees in my profession, and it was wonderful. It was a great job, you got an opportunity to make sure departments got—you help people coming in, to get money to set up their laboratory, and that's the story of my life. And then I, I did that for what from 1981, maybe and till 91. And I kept, I didn't do a lot in the laboratory, but I did do a lot of publications. And so I went back and got a grant started working in health and safety again. One of the things that I did that helped me out was I had issued a standard for labeling, which was a big thing for workers to know what was it a bag of chemicals. And when the new administration came in, they withdrew that standard. And so, Henry let me take time. And I went around all over the United States, Alaska, Seattle, California. A lot of state legislatures, people were upset about it. And I had the unions here in Cincinnati were wonderful. They passed and the City Council passed a resolution that said, the fire—in the fire code, they put a regulation in that said you had had the bags of stuff chemicals labeled. Can you imagine that? Roxane Qualls was big on that. And I worked—I would work with legislators and make speeches and go California when I needed to, til we got that straightened out. And one day I got on the plane to go to Washington for some committee. When somebody from Procter was on there, he said, 'well, you won Eula.' And I said, 'what do you mean I won?' He said, 'well, they're gonna put back the standard is label everything and that'll be a federal reg.' So that's how I won. One of the things that happened the fellow that was appointed after me to head OSHA was the son of a contractor in Florida, very well off. And this young man got the job. And I don't know, you know, he did what he was told to do by the other people around I'm sure, and really didn't want to do a lot of

stuff, regulations that should have come out. And I would say about five years after he left OSHA, his son fell off of a scaffold, in Florida, that was all—on their site. Indeed, it was their company. And so, you know, it was horrible for him. And I'm sure he thought a lot about his former job. So anyway, one of the things they did was, after I left, we had this brochure of this man in the cotton dust industry, and what you should do, and this brochure had a picture of a man who had terrible pulmonary disease, and he was on oxygen. And because what they were doing—brown lung disease, people—were going and trying to get the cotton dust in—cotton dust manufacturers to, to, to follow the OSHA rules. And they had this brochure. And it was—it upset some people. So they tried to withdraw it. But it turns out that you can't get rid of anything, when, when the government makes a brochure like that. They can't just destroy it. So anyway, but we finally got it straightened out. What else. So I came back and started, you know, doing things here again, I started working, I got a call from, you want to hear it? I got a call from a union guy. And he said 'Eula, would you go down to Oak Ridge with me, we got some people there construction workers who work at—down there at a at the Oak Ridge facility. And they got all kinds of problems down there, diseases.' And he said, 'come let's talk to the union, this one union.' And I said, 'okay.' so I went down there. And I listened to all these stories about what was going on, at the Department of Energy and what had gone on for a long time back when they're building the bomb. And you know, once you get the radiation around, it doesn't go away. So I came back and thought about it to talked to him, this union guy and I said, 'if you will be on the grant, I'll, I'm going to put a grant into NIOSH to see if they will support us doing a study.' And I did put a grant in. And lo and behold, they funded it. And so we went down there and did this study. And it was really—we did the study with construction workers. Now the construction workers at that site were hired out of the union hall to do a job that would last maybe for two years. Or maybe it would last for six months. And they would go in on a truck into the where they were supposed to work. And I interviewed a lot of analysts, one fellow told me about going into this one building, and they—he—they were supposed to remodel it. And they—he—ripped the boards up. And all this silver stuff came rolling out. Well it was mercury, was mercury. And they had—well, during the time they were trying to build the bomb, I guess Oak Ridge had the world's supply of [inaudible] mercury down there and I guess they didn't have ventilation and anyway they—so anyway, we did the study from NIOSH. And then it turned out that some—the unions were working with the Congress, and they got the law with that had in it medical exams, and medical removal protection if depending on what your disease was. And this was, what 10 years, no, 20 years after I had been in OSHA, and these workers, construction workers, not the plant workers full time, had never had a chest X ray. No matter, you know, they had no medicals. So we worked with this with the Congress, and got that and I worked on that for, I don't know, I worked back at Oak Ridge and some other places, as particularly with construction workers, because the other people had a different way of—had medical care. And I did that up until recently, and I still do a little work on it. I still do a little dabbling. So that's where I've been. I started cutting back on research, and not get got any more grants. And I just last June, stopped it all. I was still on for one, or 2%. But I still—I'm on the DOE committee for this and that for workers and still do things like that. Still run advisory committees for the government, really. That's my life.

SM: it's incredible. So I'm kind of bringing it back to the University of Cincinnati. So what were the notable, oh sorry, what were the notable differences that you see during the 80s, as opposed like when you were a student,

EB: When I was what?

SM: When you're doing like your graduate work here, were there any notable differences from when you are a faculty member, as opposed to being a student?

EB: Um, well, the first of all that building that tower was built, and, you know, they have so much space and equipment. And we didn't have all that, but you know, they always got the specimens for you to dissect. And field trips were very important. There was, I could remember in the spring, we would go out to this one place where we would collect—well we collected a lot. And but what happened to me when I was doing my research was I was working at Kettering and there would be people there if I wanted to buy some things extra. They had money from projects and would help do it if the department did they have it? So the budget was so much is so much greater now for research. And I will say this, Weichert, who was head of the department and then Jack Gottschang, who was head, they didn't have much money for—almost no money for you to go out and buy things. Well, from my perspective, it didn't, it wasn't difficult because I was working at Kettering. And, you know, there was always material there that I could use. And they wanted me to get my degree so they can work—so I could work full time. So that was a big difference is to have enough money available to buy things. It is not that way now. I mean, they have budgets for that. And there are more grants in the department. And—but I'm not complaining because the department was, was good. And I'm sure if I had asked Dr. Weichert for \$50 to buy some chemical, if he didn't have it already in the—locked up somewhere he would have come up with that. I never felt that was a inhibition and probably because when I was really doing my research, I was working at Kettering. And, you know, the the medical school have—they were pretty far ahead in terms of having money from somewhere to buy equipment with—equipment or chemicals. The—most money, if they had to be spent on the equipment or chemicals, was spent for the laboratories that undergraduates had to take. And there were a lot more people who did work with—they go out—they would study the animals in their environment, or they would collect animals and try treatments of this or that. The research then wasn't as—I don't know—chemically related, as it is now. I had my research was fairly chemical but, but I was able to get the chemicals from the Department of Environmental Health, the Kettering place. And—that's one, was one big difference, is one big difference. But the the the help that you got from the professor's was really good, actually was wonderful. Weichert was head of the department. And he was, he was good. One of the things, for example, there was this fellow who eventually became head of the department, Jack Gottschang, and he gave us a test at the end. And you—I didn't go on all the field trips, because I worked. And, but I did as many as I could. And one of the fi—final questions. One of the questions on the final was, 'what does D period O period R period stand for when you see it in a collection?' And what in the world is that? Well, it stands for data on rogue. Well I wasn't all that field trip, and I put down 'Damned Old Rattler.' And he read the thing and started laughing. And called some of the other professors

and they thought was wonderful. So you know, it was it was a good place. It was good. The Graduate Program was good, graduate students helped other graduate students, everybody helped everybody helped the people who are trying to go to medical school. It—you know, and I think I perhaps told about the one guy that saw me. And it's a physician out and there and he's screaming 'Max Bingham!' [Laughs] So that's—there wasn't as much money available for departments as there is now and that's good. And the people now who are hired, a lot more of them are into what I'll call, instead of whole animal work, actually are spinning out fractions and it's a lot more chemical related. One of the things we used to do, though that was wonderful in the spring there was there's a pond somewhere up here in Ohio, where according to the ice of things in the Meridian, the sucker dryers to say the fairy shrimp are due at Walden Pond, but I'll say Walden Pond this week. And these are little—they're freshwater, fairy shrimp. They're about this big. And we used to go out there and collect was a big thing for them. And, anyway, oh, they probably don't do that anymore. You know?

AC: So throughout your time here, have you noticed any changes and student attitude over the years just like how they view school, their work ethic, etc?

EB: Um I don't I, I will have to say that, the students I've known and I, you know, I was—I started teaching graduate students at Kettering in 1961. Because I was pregnant, I remember and my, the first two or three or five people that did industrial—got a master's in industrial hygiene for in my class. And I can't say there's much difference from them than people now. And I must say that people worked hard. Those people who were in the department of zoology, back when I got my degree. Well, you know, people were didn't get a lot of stipend. They got free tuition if they taught classes. And they wanted to get finished and get out and get a job because some of them had families and others were pre-med students, and they wanted to go to medical school, and people would work like dogs. Now, I taught the labs. I mean, I taught them to dissect all kinds of animals, including cats, I'm sorry to say because I love cats. But the you know, they would be they would come in from a vendor ready for you to dissect, and sharks and one thing and another. But they weren't like dogs. People never—and they never complained about being there on the weekends. And I don't think they do today. People in that, they love what they do.

SM: So I'm kind of throughout your career, I'm sure you've noticed, and dealt with a multitude of changing technologies. How do you feel that or, how do more advanced technology shaped academia? And how did that affect your role?

EB: How did what?

SM: More advanced technology?

EB: It came so slowly, that, I don't know I never think back the way it used to be. If something new comes, and you can afford to get it or put it on a grant, you go after it. And one of the things that happened in zoology, when I was there is most of those people, almost all were students who were just out of college, or if not a year or two out. Whereas over in environmental health, the

first students that I knew there, had worked for industry, for the government that the Navy used to send students. So they were different. They, they came in, and now if you were wondering if you wanted to get to medical school, sometimes you had people who were like this, but—and the Kettering students or the environmental health students and Medical Center, they were more like, this is a job. And you would come in sometimes on the weekends, but they didn't hang around till 10 o'clock at night. That's different. I mean, the people in the graduate now, more recently, the people in the medical school and the people on campus they all acted pretty much the same. They're all looking, trying to figure out how they're going to get money to support their research. They're kind of they're all very focused on—once—once they decide what their thesis is going to be. They're really focused on that. This No, it's just it's different. Is it better? I guess, but a lot of people, when I first went—knew about the the Kettering, a lot of those people were married with kids and labor a little more laid back, I guess about things that had their ups and downs.

AC: So as we've heard from other professors that are now retired, there are a lot of social movements that greatly affected the main campus such as the civil rights movement and the Vietnam War. Do you think the Medical Campus specifically was as strongly affected by these events?

EB: I don't think it was affected as much as the other campus because the medical campus was dealing with people who were already out of college. And I would say that the the students that were in my class, the first year I taught at the Kettering, which was 1961, they'd all been in service. Well, there was one guy who came, who was from Wisconsin, and he had just graduated from college. But everybody else had been in the service, we had a lot of people who were in the Navy. And so it made a difference for me, in my experience with them. And you know. And I will say this, sometimes, except for—well, I don't know what I can say that. Pre-med students are very focused. They're very focused in. And they're—even now. But back then, we had a large Jewish population. And because it would, we were two places in the US that took a lot of Jewish kids in, this was one of them. And they were after acceptance, to be physicians, and maybe their family, their grandfather, their father was a physician. And the people I had over in Kettering, it's a little different. They're younger now, some of them are younger now. But I would say that the class that we have, at least half of them have been out working for at least a year before they came back. And it makes a difference when you have students who have been in the workplace and then come back. Somehow they think they're spending money to go wait. I would say the, the Vietnam War, it just made everybody who, who came, they were likely to be in the service. had people come from the Air For—a lot of people from the Air Force and from the Navy had a place over here. So and, you know, I never—I—I'm trying to think about the whole business of the people in the problems that were during the Civil Rights. My—the main person I picked to work with asked him if he would work with me, he was in another department. And I got along with him. I got along with his family. And I asked him to come work with me and when Dr. Kehoe gave me this big lab, and we had the fellow who was actually we have more, had more African Americans, then that we have now in our department. It's very sad. Very sad. We have Chinese. And—but we don't have African American. That's, that's not good for the university. The—we had quite a few. And we still have quite a few African Americans who are graduate

students. I can't say any more. I mean, I told you, I didn't notice that. What you were talking about that much. Oh, so when I had to go back to think about it.

AC: So usually professors have to strike a balance between teaching and doing their own research. Do you think that medical campus professors strike a different balance?

EB: Yes. More research, more research, lot more research. You're expected to pay your way. That's the way it is. You get yours out, you come up with your salary. You know, at least in our department. Now, probably, there were in—when I first started, there were some basic science departments, because there wasn't much research by and who taught, you know, gross anatomy or whatever. And, but—now you know, it's it's different. It's—so [video ends]

SM: So um, kind of cycling back like student culture. You mentioned how they, you mentioned how motivated and dedicated medical students were their studies, and how how they wanted to ensure

EB: Pre-med students.

SM: Yeah, pre-med. So one aspect of being a student in contemporary college is that there's this huge emphasis on job security. So do you think that medical students, once they get into med school are more competitive? Or do you think it was more competitive while they were still pre med?

EB: Once you—back then, and I think it's still true, now, it's hard to get into medical school. And so once you get in, you know, people help each other out. That's my impression. And it was that way, it was that way when I was in graduate school, and have, had a lot of, you know—one of my best, my best woman friend was wanting to go to medical school and then. And—but, you know, there's so much stress on you to come up with—because you had to have a grade point average and do didi do. And, you know, you had to—I think, particularly among Jewish kids, it was difficult. Because if they didn't get in here, they weren't going to get into New York, because they didn't live in New York. I mean, we had medical students who were in zoology, were from all over the US. It's probably not that way now. But I, I don't—after that—once they were, once they were in medical school, people relaxed, and they did their work, and, but they help each other out. And I think that, you know, that was a big, it was a big thing. And I guess, well, I knew I how stressed people were. Because I taught the lab over there in the biology department. The regular first year lab and the anatomy lab and all. I was went through them all. So that's and I don't think today, I don't know what this mean—I can't really speak a lot about today because I don't see those pre med students very much. Which is probably the same, because they got you know, it's hard to get medical school no matter where. And but they relaxed once they got over, got in school.

AC: So moving forward, are there any changes that you'd like to see happen at the university, either on main campus or medical campus, or both?

EB: Well, I don't deal with the medical, I mean, with the university campus as much as I used to be when I was over there. I was vice president and then came back. I think that there's not as much on this camp—I'll call collegiality on this campus, as there could be. And even—and I'll—don't want to bad mouth, my department, but in my department. There was a lot of collegiality, we, you know, we had people would go to bowl with bowling teams. There's no bowling team over there now. You know, I bring their kids over on campus for bowling. And there's, there was more collegiality and not much of that goes on in the medical center. The, in our department, it's entirely different, because we have the chair of the department who has her laboratory on one floor, one wing, and she locks, keeps the doors locked. And she brings over students from China, who don't speak any English. And he had keys and they go in, and the doors locked. And the whole corridor where I did 20 years worth of work. Nobody goes in there anymore, except those students that she brings over on the card. And that's—now there's one unit in our department called the industrial hygiene, they, you know, they're mostly engineers. Now, they got to get some women in. But they're sort of like the old—the old way was, everybody helps each other out. But the toxicology is not that way anymore. It used to be that way. And I can remember myself and my, the African American guy that was in my laboratory, worked with me. We would help anybody intubate an animal or do this or do that. And all it, it was all up and down all the corridors. He was a special person. One day, he and I were doing something at the bench together. And he went like this [drops head and shoulders]. And I said, 'Bill, what's the matter?' And he didn't answer me. And I put my arms around him and got him in a chair and call for a nurse that was close. And we got him, a bed for him. And the ambulance came and took him. And he his kidneys were gone. He ended up being treated. And eventually, one of his four brothers donated a kidney and he lived 20 years after that, he's the longest living donor, recipient here. And I we were a family. And I don't see any families like that. When I say the lab, people with each other, were family is what I'm trying to say. And you never hesitated to stop and help somebody out. And I don't see that. It's their little groups of people here and there. This is—that's different. And it's different cultures, I'm sure. And I'm not blaming anybody, but it's different cultures, as to how and—and we had people from we had people in the lab, back then, who came from Yugoslavia. They escaped when Tito or whoever came in, and they blended in and you know, we patted each other on the back. And then this doesn't happen anymore. There's little people who come here from other countries don't blend in as well. And it may be Americans' fault, or it may be their fault, I don't know. But there are some conditions that happen on campuses that make it more difficult but you know, locking people in this corridor or that corridor. Not having free access. And that's a lot. That's wonderful when you could go around, actually this campus is has more of that than it does over in the—in that building that I've been in. And I don't know why maybe it's that way in chemistry. I don't know about that. So it's a, you know, it's one of I guess, growing pains with emigrants, from certain countries. I wouldn't want to be getting a job, job in Ohio without a degree if I were from Mexico now, you know? It's—And, and maybe I don't know, I mean, my great—I think my grandfather, my great, my grandmother came from Germany. And maybe she felt, I don't know. It's, maybe it's just inevitable. So—but I don't know what you can do there probably things you can do and not do to make it easier if you're going to have the immigrants. So—and our department has fewer African

Americans now than they did when I came over there in 1960s. Isn't that interesting? So, who knows?

SM: So, um, as we, as we, as we neared the end of the interview, would you mind telling us what your favorite memory of UC is?

EB: My favorite memory?—Well, I have seen—I have quite a few. I mean, it was wonderful being Vice President for Research and Graduate Studies. I loved when this guy brought the current chair, or the current president over to me and said, 'we got to hire that we got to have this guy for an assistant professor, and he's from a school in Pennsylvania, and he needs this, this and this,' and to be able to help him out, to have enough budget to help him out, that is wonderful. That would make me feel so good. And, you know, I was able to, I love being with arts and sciences faculty, and the other fac—faculty meetings, they would come in, and they accepted me. And that was wonderful. I was so happy. I must say that I was never treated like a woman, I'll say it that way, by the faculty when I was Vice President. It was that I was one of them. And it was wonderful. I can remember Bill Joyner who was a big honcho in, in physics, and was always tweaking the administration on things. And my office was on the same building. And when I first got that—took that job, he stuck his head in one day and said, 'I'm Bill Joyner.' I knew he was a big political guru and always fighting the the administration and the and I said he would, he brought up a subject, I don't know it was, it was a good subject. And I said, 'come on in and sit down.' And from then on, he would come into the door. And I said, 'come on, sit down Bill. And you know, that was so important because he was a president of the faculty. And, and I felt so accepted by the faculty who was wonderful. I always felt accepted by the faculty in my department. But the rest of the—medical faculty really never knew who I was, by and large, because they were just doing medical students. I was doing graduate students, oh, in my—in environmental health, we didn't really didn't do much with medical students. And that was great. And it was great to be able to see young, hire people who had been hired, help them get started setting up their laboratory and helping them out. One of the things that happen I didn't cause it to happen. But Dick Celeste, who ran the Peace Corps, and he became governor twice. And that was when I was VP for Research and Graduate Studies. And he got the state to come up with this, pockets of bags of money and gave him to the universities. And I was able to go to the faculty, and talk about having this money if you've got a really good research project, and you need some money to hire somebody for a couple of quarters, or you need a piece of equipment which you put it in. And that was just spectacular when this—that resulted in the engine—well, that we had eminent scholars, I guess they still do, what that resulted in, start helping to start that, and you could get them going. So that was really a wonderful thing that happened while I was over there. And that's what I can think of. And I'll be honest, what helped me the most in my career was getting approval, and being asked to be on committees at the federal and state level. The Committee on—we're going to study histoplasmosis, or we're going to study this, and would you come help us decide how we should set that up? I was on advisory committees for the Department of Labor before I ever went to Washington. And what it does is—at the state level, I was when Dick Celeste came back. He had several committees, and I was on two of them. That is really that really, and maybe it's just because I'm a woman empowered me. It really made me

know that I was accepted. And I mean, somebody was making a statement, it almost seemed to be that she's okay. It's hard. It was hard when I was first starting out. And, you know, I, I suppose I, it's my undergraduate, they were so accepting of me. And I worked in a chemical plant, where they're all men, men or young, young kids out of school. So I was one of the boys. And if you did your job, then they accepted you there. So—and that helped me I think, at UC when—and Henry Winkler, for example, knew I was in Washington. And he, when he was first came here, he and his wife had that meeting up there, and they invited me to come. The Chairman of the Board of Trustees, was very accepting of me. Which really helped out trying to think there was something else that that helped—It's gone.[Laughs] To be accepted helps. And I'm sure it's difficult. I mean, maybe people who are from various cultures, they have a hard time because they stick with their cul—they don't know whether they're accepted. So that may be something that ought to be worked on a little bit more at the university. I don't know if you've heard anybody talk about that or not. But—The other thing I can remember, Henry Winkler when I came back, was ready to retire. And he called me in the office one day, and they were looking for candidates. And they had this, one of the candidates was from Connecticut. And the funny thing is, he worked for a Gun Company, Joe Steger. You've heard of Joe. And Henry sent me up there to interview Joe, at one—at a club up in the, you know, the airport clubs. And I, oh, my goodness, what am I gonna do. But we got along of fine. And it was a great appointment. I tell you, what was great about it. Joe Steger would go out early in the morning, or after five o'clock, and go around to the buildings and see who was cleaning, and what the women and the men who were doing all that work. He knew every one of them, he knew their name. I knew that was a special thing. To do that. And, you know, that makes those people feel like they're needed.

AC: Alright, so what may be our final question.

EB: Okay.

AC: If you've had to give one piece of advice to a college student now, what would it be?

EB: To a college student now?

AC: Yes.

EB: Oh, my—one piece of advice.—Really, it would depend on the college student, you know. Do they have enough money to go to school on? I mean, in my life, that was always a big issue, do they have enough in order to get the money. So that's a big thing. Now, if you if you're a college student, and your parents are paying your way you don't have to worry— I would give those students, the advice is find somebody who needs help, and help them out. You know, be a big brother or big sister or be a colleague. And that's what I would say. If they don't, if they don't have to worry about their tuition, then that would be the thing. Do do something nice for somebody that you don't have to do it for. I mean, even if it's only helping them with their homework sometime.—I don't know what else to say.

FC: Eula, is there anything that they haven't discussed or that you haven't discussed that you'd like to put on the interview for the record and closing?

EB: Well, I would say that—I'm not sure. I think it was easier. When I went to call that undergraduate school down in Eastern Kentucky people were nicer to each other. And I think people were nicer to each other when I came here to graduate school. In many ways, even if they did say that they had to call me Max they couldn't call me Eula Lee. But that didn't that—they were still nice to me. And I think we're I am now in that in the department. People are not nice to each other. And it would be a very it—we have groups of people here from a country. We have some from another country and they tend to stick together and I'm not saying that's wrong, but, because they want to be comfortable. And I don't know. I haven't really thought about this, I don't know how you make them feel more comfortable. One of the things I'll say that I did that I'm glad I did I tried to do it is we get new students in, and we had a couple of students from from Africa. And they worked menial jobs, and they came over to do a degree in Industrial Hygiene. And I looked them up after our first seminar where everybody came together. And some of them were really on money they saved to come. And they just needed somebody to come and talk with them. And I sort of made it my business to do that. And one of them wanted to be—go on with his degree, and he was working hard. And I gave—I decided to have a—when I was Vice President, I decided I was going to have a fund at the—that would be a—you have to put so much money in before it's that they spend it all. They'll take the interest off of it. And when I moved back to my department, they started spending the money. And I said 'no, no.'

FC: This was for like an endowment or something?

EB: And I said, 'that's to be an endowment. And it's not, it doesn't have \$50,000 set in it. And I'm trying to give this 2000 or 5000 a year depending.'

FC: And it was to a student, you wanted to give it to a student?

EB: Huh?

FC: You wanted to give that money to a student?

EB: Yeah!

FC: Okay.

EB: And I decided that I was going to have an endowment, because there were some students who really could use \$1,000. And I decided to put it in industrial hygiene. And I just got a big award from a group out in California in industrial hygiene, not because of that, but—and I finally got the money in there. And the first award I gave was, to this woman who was a—her uncle was a graduate student with me. And the other the first, I didn't have the one award to be made, but I made two. Dug in my pocket and gave two awards, one was to her. And one was to this fellow

who told me about how he worked and saved the money to come here to do the industrial hygiene program. And the way I gave them the award was that they could use that award to go to the national meeting. And that that's what they were to use it for. And that way they can go and meet people from all over the United States in industrial hygiene. And you know, we, I don't know, we just need to help students sometimes, I mean, I'm not rich. But you know, [inaudible]. And it's—you need to help some of these people out a little bit with just a little something. That—I think one I've got 1000 than the other one got \$1,000 but when it made it so that they could go to the industrial hygiene meeting and have a place to live. So I don't know that you can ask all faculty members to do that. It depends on you know, whether they been as lucky as I've been. So, but people ought to be encouraged. To give back, to give back. And

FC: Well, you've done a great job at that. And I know the students. I'm sure those students appreciate it.

EB: It's hard. I think about the people have come here.

FC: Well, I think that concludes it. Dr. Bingham. Thank you.

EB: I'm a soft touch.

FC: Thank you for thank you for doing this.

EB: Good luck. Where are you going to go next year, graduate school?

AC: I actually still have one year left as a student here. After that, I'm not sure. I really wanted to go into graduate school. It's just I'm not sure what I want to go in for. Since I'm a mechanical engineering major right now. I'm kind of bouncing between trying to get an MBA so that I could take more like the management around in engineering [video ends]