

CHEMICAL HERITAGE FOUNDATION

MARY K. GALL

Transcript of an Interview
Conducted by

Hilary Domush and Michael Wronski

at

The Chemical Heritage Foundation
Philadelphia, Pennsylvania

on

26 and 27 March 2012

(With Subsequent Corrections and Additions)

CHEMICAL HERITAGE FOUNDATION

Oral History Program
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MARY K. GALL

1922 Born in New York, New York

Education

1944 B.S., Vassar College, Chemistry

Professional Experience

Hayden Chemicals, Garfield, New Jersey
University of Pennsylvania Medical School, Philadelphia, Pennsylvania
McNeil Laboratories
Rohm and Haas
Mobil Research Laboratories

ABSTRACT

Mary K. Gall, the elder of two children, was born in New York City, New York. The family lived first in Short Hills, New Jersey, and then in Newport, Rhode Island. She spent summers in Holderness, New Hampshire, where she discovered nature on walks with her grandmother. Gall attended several different elementary schools; in high school she found that she liked Latin and was good at math and chemistry. Her paternal grandfather, a pilot, helped promote an air force after World War I. Her maternal grandfather was a U.S. Representative from Rhode Island.

Gall matriculated at Vassar College, which her mother and aunt had attended. She could afford college only with scholarships and by living in cooperative housing. Like many freshmen, she found college's freedom seductive but soon settled in to hard work. Originally she was interested in bacteriology, but she decided to major in chemistry. She felt she did not have enough "drive" for medical school, and she always wanted to be a lab person, not an academic, a view confirmed by jobs she was given in the chemistry lab.

After graduation Gall's first job was at Hayden Chemicals, about which she does not remember much except the styrene odor. Although there was only one other woman chemist at Hayden, Gall felt there was no particular bias against women. Gall left Hayden for McNeil Laboratories, but she soon resigned in order to travel with her mother and a friend in Europe. When she returned from Europe she took a retail job at Strawbridge but realized that she wanted to go back to chemistry. This she did at the University of Pennsylvania Medical School. There she worked with interns on liver regeneration, establishing the "Liver Local." On she went to Rohm and Haas to work on sigatoka, a banana pest. She took over reading to a blind chemist and began to write an information bulletin based on her reading of patents, including those in German and French; eventually she even learned Braille. Rohm and Haas downsized, sending Gall to Mobil Research Laboratories. There she worked with the early computers, using special thesauruses for managing data and searching patents. Joining the American Chemical Society, she met and married John Gall, a fluorine chemist.

During the interview Gall discusses changes she has seen in the chemistry field, particularly, and in science generally, especially changes for women. She highlights the need for a PhD and tenure obstacles for women. She feels she is not aggressive in the usual sense, but is a "quiet pusher" who helped many people all over the world while she was at Mobil. When the interviewer characterizes Gall as having humor, curiosity, and charity, she says her philosophy is not to worry about what she cannot change. Keeping up with current topics, she cuts articles for family and friends: "I have the scissors; they have the wastebasket." She still volunteers and is a member of two book groups.

INTERVIEWERS

Hilary L. Domush completed a B.S. in chemistry at Bates College before earning an M.S. in organic chemistry and an M.A. in the history of science at the University of Wisconsin. As a graduate student, her research focused on 19th-century chemistry in Edinburgh. As program associate for the oral history program, Domush helps manage the program and conducts oral histories for the Women in Chemistry project.

Michael Wronski is a member of CHF's advancement staff.

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science class at Brooklyn Polytechnic Institute. Professors at Vassar. Interviewer's characterization of Gall as having humor, curiosity, charity. Her philosophy is not to worry about what she can't change. Keeping up with current topics; cuts articles for family and friends: "I have the scissors; they have the wastebasket." Finds people interesting. Still volunteers and is member of two book groups.

INTERVIEWEE: Mary K. Gall

INTERVIEWER: Hilary L. Domush and Michael Wronski

LOCATION: The Chemical Heritage Foundation
Philadelphia, Pennsylvania

DATE: 26 March 2012

DOMUSH: Okay. As we just discovered, today is March 26th. I am Hilary Domush. I am here interviewing Mary Gall at the Chemical Heritage Foundation. With me is Mike Wronski. So, first of all, thank you very much for coming and joining us today. As I said, I want to start in the very beginning. I don't know where you were born.

GALL: I was born in Manhattan, [New York].

DOMUSH: Oh.

GALL: Manhattan, and actually in the [Society for the] Lying-In Hospital, which is probably, if it exists still, it's part of Bellevue [Hospital Center]. Anyway, [...] at that point my parents were living in, I guess, it was East Orange, [New Jersey], in an apartment there. Then at some point, I was too young to know what was going on, but they...I don't know whether they had the house built or they bought a house that was built (I'm not sure), in Short Hills, New Jersey. Well, I could probably go there, just off Hobart Avenue. Anyway, I...

DOMUSH: Did you have siblings? Did you have siblings, brothers or sisters?

GALL: I have one brother who is about almost six years younger than I am. He was born in 1928; I was born in 1922. [...] He is no longer living.

DOMUSH: So then the house in Short Hills, New Jersey, is [...] that where you spent of your growing up?

GALL: Well, we did until my father died, but this is the place that I can clearly remember [...] many things about the house. I can probably draw a diagram of the house and the various things. One of the things, they had a fireplace and French doors on either side of the fireplace

that would open to a terrace, I guess. I would sit there and one of the things...I'd listen to whatever the radio program was at that time. I don't know. I don't remember what it was, but it was something that apparently appealed to somebody my age, which was probably maybe as much as ten.

DOMUSH: Okay. What did your father do in New Jersey? What did he do for a living?

GALL: No, he was in New York. He was a stock...he was a sugar broker in Manhattan. [...] I'd say one of the things I remember about the house is it was a very...I guess I'd say fairly large lawn in front; now, you know, large in my eyes. My good friend lived across the street. Now the streets were...this is suburban. This is really old-time suburban, Short Hills. [...] No street names. I mean street names but no sign posts. So the only way, when you got to the station and you got a taxi, you had to tell him, if he didn't know the person's name, you had to tell him who lived next door or there. [...] It was almost a country place.

I remember [there were] woods on one side of the house. My friend lived across this little street, and the two of us used to do many things together, one of which was in the roots of a tree that would make all these patterns, we would make little houses and things like that. Then our favorite thing in the hot weather was to go out to the street and [...] make tar babies.

DOMUSH: I don't know what that is.

GALL: Well, we'd just get tar from when the street was surfaced. The tar would run down into the gutter. We were very good about this. We would alternate mothers to get unstuck <**T: 05 min**>. [laughter]

DOMUSH: Well, it sounds very enjoyable. It sounds very fun in Short Hills, New Jersey.

GALL: I'll tell you one more thing about it.

DOMUSH: Sure.

GALL: That was there were woods on one side of the house, and I think there was some tree house, which I think the boys in the neighborhood were the ones who probably built it and did not want us to be in there. But anyway, on the far side of the woods were some more of my friends, or we would collect there and play games and whatnot. At one point, somehow or

another, and playing around, one of the boys I think must have pushed me or somehow or other, [and] I fell. I ended up, although I didn't know it at the time, ended up breaking my arm.

When I got home, my parents weren't there. Of course, my aunt and uncle were there babysitting me, and so what I remember most about that was I finally found a place in the bed that was a position that I was comfortable in. When my parents got home, of course, they just were panicked. So they rushed me over to Summit to the hospital, I guess. I don't know what they did, probably x-rayed. Anyway, I ended up in a cast, but what I remember most about that was not the cast or anything like that; it was the fact after I came to from whatever anesthetic or something they gave me, my mother was in there and had passed out. She was in the adjacent bed. [laughter]

DOMUSH: Oh, no. She was so worried.

GALL: And that was about the extent of my early things. But every summer, we always drove up to New Hampshire to Holderness, where my grandmother, one of my...I knew both of my grandparents, which I think is somewhat unusual. We went up to...it was Holderness, New Hampshire. This is where my father's mother and father spent the summer, although I'm not sure how much of the time he spent there.

But mom was my, shall we say, my nature teacher, because we would go out. She'd turn over rocks and show me the ants. We had a lot of...she was a very good nature teacher really.

DOMUSH: This is your mom who is taking you on these nature walks?

GALL: I can't picture her with us. It was just the two of us.

DOMUSH: Sorry, you and who else on the walks?

GALL: Oh, she was there, but she didn't go with her mother-in-law and me. It was [generally] just the two of us. This was then [on] quite a hill overlooking Squam Lake. In the distance we also could see Red Hill and a lot of the [other] mountains that were around the lake. In the daytime then, we would go walk down through the woods and across some rather heavily trafficked road. I mean, sometimes it was anyway. It was a major road, and then down to the beach.

DOMUSH: It must have been beautiful.

GALL: Oh, it was. Shall we say: the nature walk continued as she—I called my grandmother “mom”—and mom would point out mushrooms and various things like that. That was where we went swimming. I’m not sure...you know, I can’t tell you when my brother really figured into things. It was odd, because for a while there it was just, I felt, it just me and my grandmother. I’m sure obviously my mother was there.

My father [was probably] shortly after...I don’t know. I can’t remember the exact sequence. I can remember some of it <T: 10 min>, but my father died. Then my mother, I guess, decided that either, maybe it was money or...I do not know why. But anyway, she moved us to Newport for [...] the three of us to live with her parents. This is Newport, Rhode Island.

DOMUSH: Had your father been sick?

GALL: No. Well, yes, he had. He’d been in Walter Reed Hospital [Army Medical Center] in Washington, [D.C.]. Actually, what I guess I should tell you, because it probably plays a large part, I think, in my brother’s life, was he committed suicide. He had been in Walter Reed for a while. We were down in Washington I guess when he was there. He came back. I think if his problems...if medicine had advanced for twenty years later, [...] he probably would have gotten better help. But that was the, shall we say, that was the end of the Short Hills thing, except for the fact that my aunt and uncle still lived in the house still in Short Hills, but quite a ways away from where we had our house.

DOMUSH: Right. After your father passed away and you guys moved, your mom and your brother and you moved to Newport, Rhode Island. What was it like in Newport? I mean, everything must have been very different.

GALL: Yes, it was very different. In part, I think my mother had to make a major adjustment in part, because, I mean, here she’s, like, her mother was...well, having lived in the house for as long as she did, or various houses that she and my grandfather lived in and moved around in Newport, you know, she had her own life. So I think it ended up rather knockdown and drag-out arguments and fights until finally things got settled down. So, most of what I remember about Newport is, well, various things. One I think I went to every different school there was, grade school. I don’t know what was the reason for changing. These were all little, little, small private schools. Everything of course in Newport you walked or [you] bicycled. There’s no public transportation. I don’t even think there is even now, probably there [isn’t]. I don’t think there is.

But anyway, but among many things [that] I do remember about Newport, as I say, my grandmother was, I guess it wasn’t that she was strict really, it was just that she’d been by

herself. Her husband, my grandfather, was a Congressman in Washington. [...] Well, he had been in politics for years. I think he was mayor of Newport at one time. I know he was somewhere up in the state legislature. Then he was elected to Congress. He was in Congress for sixteen years.

DOMUSH: Wow.

GALL: As a representative from this part of...

DOMUSH: [Of] Rhode Island.

GALL: I think Rhode Island probably has only four districts, each one of course has their own representative. But I don't think...I think it's small enough and probably the population isn't as great. Although I think of Newport as when the [U.S.] Army and Navy were still there. The Navy is still there. But the Army probably not so much any longer. But [...] they have [U.S. Naval] War College, which is still going and one of the places that one goes to, to take people to just as a tourist attraction, you might say <**T: 15 min**>.

DOMUSH: Right. I can imagine. I've heard it's beautiful [up] there. I've never had the chance to go to Newport. I have actually been to Holderness, New Hampshire, though, so I know for a fact that it's beautiful there.

GALL: Yes.

DOMUSH: Although, I'm sure [it looked] even more beautiful back then.

GALL: I would think it looks probably much different, because I have somebody whose name I've now forgotten, but can find out. He [...] found my address, [and] so we've been in sort of an epistolary correspondence [...], even by phone. But he now has...he somehow or other bought the house that my grandmother had.

DOMUSH: Oh, wow.

GALL: Yes. The house...I guess she had a stroke, and so I don't know who found her. I mean, this is part of it [that] I should know, but I don't know who found her. But then [...] her

son and her daughter-in-law—this is my aunt and uncle—they took her and [they] brought her down to Short Hills. She stayed there until she finally died. She, along with the rest of the Kenlys, are buried in Arlington National Cemetery.

DOMUSH: [...] Now, I don't know, but I imagine that [not] everyone can be buried in Arlington National Cemetery.

GALL: Well, my grandfather [William L. Kenly] was always known by me and everybody else as Old Bill. He was a general in the First World War. He was one of the ones who tried his best to convince Congress or whoever is important in this case that they needed a separate air corps division, not just as a signal corps observers. So, I think the story is that this got him, shall we say, on the wrong side of some authorities in Washington. I think he was then sent out as a recruiter out to Pittsburgh, [Pennsylvania]. I don't know if this is true or not, but that was sort of a demotion.

Anyway, he had, of course, because he's buried in Arlington, his wife is, [and] then just I have a whole mass of relatives, all of whom are interconnected somehow. They're all buried in this one section of Arlington.

DOMUSH: Oh, wow. Wow.

GALL: So, as I say, I told my son this, and so made sure he knew the names, and so forth and so forth. He went to Arlington and took pictures of all of the graves.

DOMUSH: How nice. They're all together.

GALL: Yes.

DOMUSH: Now, when your grandpa, you said he was a general in World War I, did your father also join the military before he became a sugar broker?

GALL: Well, he was I think probably drafted. He [...] started out in the [U.S. Army] Signal Corps. His brother, who is maybe a year and a half younger than he, he also was in the same Signal Corps. At the time, I'm not sure where Tom—this is the younger one—I'm not sure what he was doing. But he also, I know, was in the Signal Corps and was a pilot flier, because he used to tell stories about what it was like to fly with...really you just flew by the seat of your pants. No real directions, no radar or anything like that; nothing like that had developed.

DOMUSH: No [...], no. This is the very early days.

GALL: And the thing that I've regretted for his sake is that apparently <T: 20 min> at the end of the war, when people were being demobilized, I think he would have stayed in the Air Corps, whatever it was called. Then I think it was called the Signal Corps. I think it was his father, the general that we all called Old Bill—and that's another story—who discouraged him from doing it. I think this is unfortunate, because I think my uncle would have had a much better life if he hadn't been thwarted, you know.

DOMUSH: If he had stayed in the service. Now, you said that you called your grandpa Old Bill, and that's another story. What is the story?

GALL: Well, it was...in the First World War he was, I think, stationed somewhere in England. I don't know. There was a cartoonist at the time depicting the Doughboys in their dugout trenches and things like that. I think one of them said something like, "[...] If you find a better hole, go to it." But I'm not sure exactly how the Old Bill...I thought I remembered, but I don't know.

Anyway, among other things he was made a Knight Commander of the [Order of the] Bath in England. I don't know what honors this confers, but somebody had drawn a wonderful picture of him, a cartoon showing him in the bath. So, I've got to...I think this is all part of things that were in the house. I don't know how...I'll have to see if I can find out how to get some of the pictures back.

DOMUSH: Yeah. Well, it must have been very exciting for this man who bought the house to find you and find out some of these stories.

GALL: Yes, yes.

DOMUSH: Now, was your...when you would go to Holderness in the summer and you would go on these nature walks with your grandma, who you called "mom," was your grandpa at the house in New Hampshire as well?

GALL: Most of the time no. I think he was there sometimes for a short length of time. Now, whether...I don't know. I picture him in the room that where his bedroom [was], but I don't

picture him anywhere else. So, whether he just wasn't a summer person, I don't know. I don't know what he did. [...] I've often wondered, but I do not know.

DOMUSH: Right. Well...and of course when people are little, when you're a little kid [...], however it is, is how it is.

GALL: Yes. Why, you know, why isn't Old Bill here? But I guess I never got an answer.

DOMUSH: Right. So, when you moved with your mom and your brother to Newport and you went to live with your mom's family, did your mom have to find a job now that your father [had] passed away?

GALL: She may have tried to find a job, but she ended up doing various things; one of which was she sold some products, I now don't remember what they were. Then, she made a little business for herself by making...what she made was aprons. Nowadays, of course, [well], they say, "Aprons, what are they?" But I think that's what she did until...I know she must have had something that she did that was saleable, because at one point she went to Manhattan, to New York, for some sales thing, I'm sure. I remember her tales of the Horn & Hardart's, how much was—since she was there with almost no money, because Horn & Hardart's was the place that you ate. Are you familiar with Horn & Hardart at all?

DOMUSH: I'm not. I'm not.

GALL: Horn & Hardart was an amazing food distribution place, you might say. It wasn't a restaurant, in that you went into the place and there was a whole bank of windows. You <T: 25 min> picked what you wanted and you opened the window and got it out. [...] And then, somebody must have paid for it somehow. I don't think you paid ahead of time. It wasn't that you put coins in something. Whatever, you just opened the door and took it. It used to be a Horn & Hardart's out on City Line Avenue. Then I think they became...they had at least one downtown near Hahnemann [University] Hospital.

WRONSKI: It's one of the automats, maybe.

GALL: Yes. The early automats, right. I guess it's called that. But they were fascinating.

WRONSKI: Yeah. When we went to New York, my father thought...I didn't think it was that much of a...[but, yeah], the idea of putting...you could see what it is. You just put a coin in and there was something you could get out. It was revolutionary at the time.

DOMUSH: Yeah. My dad talks about them in New York as well, so he also quite enjoyed them.

GALL: I don't know how you paid for it, but I...

WRONSKI: I think you put a coin in. Of course, it probably only cost, like, a quarter or something.

GALL: Yeah. Maybe we took it to some cashier. But I don't think you put coins in something to open the door.

WRONSKI: No. Maybe, I don't remember.

DOMUSH: Yeah. Maybe at that time there was a cashier.

GALL: Maybe so.

DOMUSH: Maybe so. Now, by the time that you were in Rhode Island and your mom was going into New York and trying to sell some of these things, this is the Depression, the Great Depression. Were you aware of this at the time? I mean, you were a little kid, so maybe...

GALL: Well, I think this is a time when they had [things like] ration stamps. My grandmother—my grandfather at that time was the...I guess he was the president of a wholesale company in Newport—so she always bought things in bulk. So the only thing she needed stamps, I think, was her coffee. They kept asking her, you know, “[...] Don't you need them for sugar?” Well, she said, she would always get sugar in great quantities. I don't remember anything about the Depression.

DOMUSH: Okay.

GALL: I think maybe I was too young, or maybe it really didn't affect our family somehow.

DOMUSH: No. Either way, it sure is lucky.

GALL: Yes.

DOMUSH: So...now, you said that you went to many different schools in Newport, and you're not quite sure why. But do you have any recollection of whether or not you enjoyed school? I mean, some people, even when they're very little, they have this excitement for being in school, for learning things.

GALL: Well, one of the things way back when, we were—when my grandfather was still in Congress; I think this is after my father died—we were down living in Washington [at] an apartment hotel. Well, it was a hotel which had apartments. [...] So for a time there maybe half a year I was at Sidwell Friends [School], which is [still] a well-known [...] school. Apparently we must have moved back to Newport before the spring session, because this is when all the people at Sidwell Friends moved out to a country location.

DOMUSH: Oh. Now, just out of curiosity, your grandfather who was the Congressman, what was his last name?

GALL: Burdick. His name was Clark Burdick. He had no middle name.

DOMUSH: Okay. Yes, Sidwell Friends is a very well-known school. Of course, right now [...] President [Barack H.] Obama's children go there. But I can imagine it was probably...

GALL: Well, the interesting thing to me, as I look back on Sidwell Friends, was that at least one of the teachers came in to find me. He remembered teaching my uncle. I'm sure both of them went, but it was my uncle [who] made more of an impression, or maybe my father was not in his class.

DOMUSH: That's funny. That's funny. So then what was the school like when you got up to Rhode Island?

GALL: Well, I <T: 30 min> never disliked school. I thought it was great. Finally after...the reason, I don't know the exact reason for all these little schools. Maybe they failed. I mean, this could be because there were like maybe four or five pupils, maybe. I don't know. But eventually, I was at a private school down—[when] I say down, down a ways—and all the transportation was, for me, [was a] bicycle, uh-huh. That was a good school. I liked that. There were no outdoor activities that I remember at all. But what I really remember is the fact that I got introduced to Latin. We had four years of Latin there.

DOMUSH: Oh, wow.

GALL: Then I went...and we must have had a good writing course anyway, because I do remember when I got to high school, the public high school—I say “public,” there was no [other]. I think there was a Catholic school. Most of Newport was, I guess it's nonsectarian, but there definitely was a Catholic school. But whatever I [remember], the writing I took is that apparently I had written a paper for somebody at the school, private school. When I got to high school, I just rewrote the paper and handed it in. The teacher knew, I guess. Maybe he'd been at the other school, [the] private school. But he said, you know, “Miss [Kenly], you've already written this.” I remember it was, sort of, embarrassing.

Anyway, and I really, in high school, which I thought was a good high school, the two things that I really enjoyed were math and chemistry. I know I was in, like, an advanced math section. Obviously, must have done well. As I say, the chemistry I remember particularly because the teacher was so, I guess, so good and so inspiring that he probably helped turn me away from whatever I might have thought of doing.

DOMUSH: Now, the chemistry that you did, was there any, sort of, laboratory work [that you got to do]?

GALL: Oh, yes, actually, there was laboratory work. I don't remember much about this. But what I do remember is at that time in order to...I think I had applied to Vassar [College] but you had to take, they're called College Board Exams. One of them, I know one of them was in Latin. I don't remember what the others were, maybe math. I don't remember one in chemistry. So, I guess either they didn't offer it, or I didn't do it.

DOMUSH: Right.

GALL: I don't remember.

DOMUSH: What did you think of the Latin? Was the Latin something that you enjoyed?

GALL: I liked it. I thought it was great. But what [do] I use it for? I don't know. I always say that, well, it improves your recognition of words. I don't know whether it does or not. But I thoroughly enjoyed that, a good teacher partly.

DOMUSH: Yeah. As long as you enjoyed it, that's the important part.

GALL: Yes.

DOMUSH: So, now as you're going through high school, I know that ultimately you ended up at Vassar. Was going to college something that you always assumed that you would do? Or was it maybe a question as to whether or not you would go to college?

GALL: No. I think I just sort of assumed. My mother had gone to Vassar, but she did not graduate. She was there for two years and then she left to get married. Then her older sister went to Vassar and I think flunked out, because she was more interested in activities other than studying. I don't know how long she lasted there, but she did not make it. My mother at least lasted two years. But I don't think my Aunt Ruth—and you know, or maybe you'll find out if you <T: 35 min> haven't: my mother and her sister married two brothers.

DOMUSH: Oh.

GALL: My mother married my father. Then, her sister, I think was first, maybe first introduced to the other brother maybe at the wedding. I'm not sure what, but anyway that was...[but] they had no children. My mother and my father had only two children.

DOMUSH: Right. Now, when it came time to apply to college, and, as you said, you took the College Boards. Did you apply anywhere other than Vassar?

GALL: Yes. There was, of course, a guidance counselor at the high school. When I told her that I had decided, her reaction was, she was [sort of] horrified. She says, "It's [such] a western school." It was so far west of Newport, I guess that was...I don't know. It was just [...] something that stuck in my mind, because I thought [...], "Do you even know where it is?"

DOMUSH: It is quite a ways from Newport, I would imagine.

GALL: Oh, yes. I think most of the people who went to college from the high school were probably...either went to Rhode Island State [University of Rhode Island] or she expected them to go to places like Pembroke [College in Brown University], roughly local colleges. But Vassar...

DOMUSH: Right. I would imagine that people went maybe far away—Massachusetts—some of the schools in Massachusetts...

GALL: They might, [yes].

DOMUSH: Vassar seems very far.

GALL: Well, actually, probably not many of them [went]...I don't think many of them went to college. I have a feeling that this is...maybe this is part of the effects of the Depression. It could be. I was lucky. I either...I don't know, part of it was I got scholarships, which probably helped. I also lived...in Vassar I lived in what was called one of the two cooperative houses, where we got a certain amount of financial help. [...] The college there, when I say it was a cooperative house, this is the one that was really low-level cooperative. It really wasn't...we didn't have to cook. We didn't have to do anything. We cleaned rooms and we waited on tables. But it was none of [this]...shall we say, there was one real cooperative house where I think they did everything. I don't know whether they had to do their own grocery shopping, but I know they did their own cooking and all of that.

DOMUSH: Oh, wow.

GALL: But this was...

DOMUSH: But you didn't have to...you didn't have to do the cooking and the cleaning.

GALL: No, no, no.

DOMUSH: Okay. So how was it when you got to Vassar? I mean this is...it is quite a ways from home, but you've already lived quite a few places.

GALL: Well, the trouble is, I think everybody who goes to college, particularly from any, well, any public high school, I would say, it's a different [atmosphere]. You have, sort of, freedom of choice, which you never had before, really. So, I think I almost flunked out my first year.

DOMUSH: Oh, no.

GALL: But there's so many inducements to not study, so...

DOMUSH: What kinds of things should you have been studying your first year?

GALL: I don't know, but I was given a rather stern lecture by, I'm sure, one of the administrators, or I don't know who it was. But [...] as I say, there are so many ways to not work, not study, unless you had good self-discipline, [and] being scared of losing it. Maybe that was what helped.

DOMUSH: So, then, ultimately you became a chemistry major at Vassar. Did you know that that's what you wanted to do when you first got there?

GALL: No, no, that was the other choice; [the first] was in the field of bacteriology. There was a <T: 40 min> small...actually, I was approached, I guess, as a senior, maybe as a junior, by somebody from IBM, because of the math that I was...I must have been reasonably good at, at the time. But I didn't pursue that. But the bacteriology was very interesting. I thought for a time, not a very...probably not a very long time, but I did think quite seriously of going on to medical school, because then I decided I didn't have the drive. I think a woman at that time, you needed real...one of my classmates who apparently had the drive, she did go to medical school and became a doctor. But this was a time at which a lot of...quite a few of my friends became WAVES [Women Accepted for Volunteer Emergency Service].

DOMUSH: Became WAVES?

GALL: WAVES. This is the women's auxiliary medical, because this is the Second World War.

DOMUSH: Right.

GALL: Yes. That was one of the services for women that I did not do.

WRONSKI: WAVES are [U.S.] Air Force, right, or [U.S.] Navy?

GALL: I thought it was Navy.

WRONSKI: Navy, maybe. [...] There's WACS [Women's Army Corps] and WAVES.

GALL: Yeah.

DOMUSH: Well, it would make sense, WAVES for the Navy.

WRONSKI: It stands for something.

GALL: Yeah.

DOMUSH: Yeah.

GALL: I'm sure, but I can't dig it up right now. I probably will.

DOMUSH: So, the fact that it was World War II while you were in college, how did that change things for you at Vassar? Was there much...I mean, as you said when we talked about the Great Depression a little bit, you don't have anything to compare it to. You didn't live in a different time to know what it's like to grow up...

GALL: No.

DOMUSH: ...differently, so it's a little bit hard to say.

GALL: Well, as far as the Second World War, I'm not sure what real effect it had on most of us except that the few of my friends who actually joined one of those services. But the only other effect it had was that by the end of the war, the returning GIs, you know, had to find someplace to continue their education. So, Vassar actually had men on campus [and in] classes for, I guess, the last year.

DOMUSH: That must have been a big change to have returning soldiers on campus.

GALL: Well, you know, you roll...one of the things that was a change for Vassar was that in previous times, previous administrations, or maybe previous years, maybe it was...the change was done because of finances. But prior to our class, which was 1944, [...] all seniors went to Main. Main was a big building, and they all, from all the other dormitories, all the seniors were in Main. But the last year we did not. We stayed in our same dormitory [...].

DOMUSH: Now, is that because the...

GALL: I don't know why it was, what it was, because my guess from the distance is maybe the amount of money saved from not having to move all these people.

DOMUSH: I spoke...I interviewed another woman recently who...she started college in 1944. She was talking about how when she started Iowa State [University], they had a very hard time finding dormitory space because of the GI Bill and all of the men coming back. She said that, you know—this school was, obviously, it was very large—but just finding the physical space to house all of these people was a huge ordeal. So, I wonder if that plays into that.

GALL: Yeah. I think that <T: 45 min> was...that affected us not as much as it probably did the one she was talking about. It sounds like another couple of years on.

DOMUSH: Right, right. The classes below you probably kept being affected by it.

GALL: Yeah. One of the things that [...] I think [of] when I look back on Vassar, one thing I remember was most everybody had a bicycle. You would...always the first class was at 8 o'clock in the morning and it'd be somewhere at the far end of the campus. So there was always a bicycle brigade. Nobody, I don't think anybody ever...I don't think bicycles were stolen. I think this is pretty...you had your own. So, anyway, one of the things as I found out, is I knew already in high school, I am not an athlete.

DOMUSH: Okay. [laughter]

GALL: But at Vassar you had to take some physical exercise program. You had to take [...] four of them, one per semester in order to graduate at this time. At the time that was a requirement. So I started out in some physical thing. I signed up for some sport, [and I figured] I'd never heard of it, so maybe nobody else has heard of it. So I got to the field and the instructor was Miss Richie. I can still see her. We had poles with a net at the end, [and there] was something that flew out. After I [had] done some disastrous things, Miss Richie said, "Miss Kenly, I think you should try another sport." It turned out to be what...? Squash?

DOMUSH: I think it sounds like lacrosse.

GALL: Oh, lacrosse, that's right. Squash, I know what squash is. So, I ended up [in] what they called "the freaks" class, where they try to make you improve your posture and things like that. But they also had the requirement—which I was able to pass, I guess, without any trouble—is in order to graduate you have to be able to swim.

DOMUSH: Oh, okay.

GALL: I don't know if they still have this or not.

DOMUSH: I don't know. I don't know. But you could swim, though. It wasn't a problem.

GALL: Yeah. That was not a problem. The only problem was the physical activity, the other ones. Now they have all these sports and I read *The Vassar Quarterly* [and] I think, "Oh, my goodness." I wouldn't survive.

DOMUSH: I wonder if they still have the requirements, though. I know when I was an undergrad (not at Vassar) we had to do physical activities as part of our requirements. But there were so many, so many options. Not just team sports, but all sorts of other options.

GALL: I finally found a sport that I was good at and I liked: golf. Well, the reason I liked it was the ball was going away from me.

DOMUSH: Yes. [laughter]

GALL: [...] I've always had trouble with things like tennis, where all of these things are coming at me and probably I don't react fast enough. But golf was great. I liked that.

DOMUSH: Now, was that something you could do at Vassar, play golf?

GALL: Yes, that was what I...yes, that filled the requirement.

DOMUSH: Well, that's good.

GALL: Yeah.

DOMUSH: That's good. It's nice you still got to be outdoors [and] things like that. Now, when we started talking about Vassar, we were talking about how you got to be a chemistry major. You said that you had liked chemistry. You [had] liked math. You [had] liked bacteriology. Were [...] there any, maybe an English class or a history class, something less scientific that you liked? Or was everything that you liked really on this more, kind of, scientific path?

GALL: I think that was more the thing that appealed to me was the scientific, chemistry things rather than history. While I like history, you know, but I certainly wasn't—but that didn't appeal to me, I guess was probably. I was very lucky, because the teacher in the chemistry section...I don't remember <T: 50 min>. [...] For a while I remembered her name. I don't remember. But anyway, she gave me jobs in the laboratory to do, which was great.

DOMUSH: Now, what were the classes like for chemistry? Were they big classes or small classes?

GALL: I really—isn't that funny—I don't remember it all.

DOMUSH: What about the laboratory? I mean, I know, [as] you mentioned, you had the head of the chemistry gave you some jobs in the laboratory.

GALL: Yes. Well, I was probably preparing solutions or something like that. I should remember more, because I think she was very encouraging. I can mentally picture her, but I can remember some [of the] other people who were in the class, who [did], shall we say, almost dangerous things, which was there's a...if you're working with metallic sodium, you have one specific way to get rid of it. I think you're supposed to put it in a small container and then, put it in some water. Well, she must have had more—one of the students must have had more, and so she poured the sodium into the sink and great flames came up.

DOMUSH: That is very dangerous.

GALL: Well, it could have been. But I think there was...of course, we put it out.

DOMUSH: Okay. That would have been very scary. Now, when you were deciding to be a chemistry major, you had considered the possibility of going to medical school, but as you said, you didn't quite have the drive for that. Did you know what you wanted to do with this chemistry degree? Did you think maybe you would be a teacher or a professor, or that you wanted to go and do things in the lab?

GALL: Well, I was probably more of a lab person. I didn't think I had the proper temperament to be a teacher. I don't know why, but I've never thought that was the thing I should aim for. Then, of course, considering the time of year—time of the decade and so forth—I had, maybe as I graduated or as I was going to graduate, I had job offers from various chemical companies. I don't know.

I'm not sure why I picked the one I did, except that a good friend of mine, who was also a chemistry major, and, I guess, we ended up essentially making...must have been making the same decision as to where to go. I remember being interviewed at various companies. One was...now, I have to dig too far back. I know one was Standard Oil of New Jersey [...].

[Interview paused]

DOMUSH: Now, you said that as you were graduating you had job offers from multiple companies. One of them was Standard Oil. One of them...I believe the first place that you worked was a place called Hayden Chemicals.

GALL: Yes.

DOMUSH: You said that one of your friends, another chemistry major, that you both went to work at Hayden Chemicals. Now do you still have family in New Jersey at this point? Are your aunt and uncle...

GALL: Yes.

DOMUSH: ...still in Short Hills when you moved?

GALL: I think my...yes. I think my mother was still living there. This is before she remarried.

DOMUSH: Okay. So, your mother was back in New Jersey <**T: 55 min**>?

GALL: I think she was back in New Jersey in a house, actually right next to her sister and brother-in-law. I think the house that she was in was one that my uncle and [...] another young man built for her.

DOMUSH: Oh, wow.

GALL: So, I know it was on a little, small road named, I think, named by the two who were living on it. I think it was called Bishop's Lane, but I think that was...anyway, it was nice. It was a good house, and everything worked out fine. That was...no, that must have been after. Isn't that awful. I can't get the chronological...

DOMUSH: That's okay.

GALL: But my aunt and uncle who [lived] in the house they had built in Short Hills...and they also, at one point—I do not know the reason for it—at one point, they were going to build a summer house, just a summer shack, cabin, or something like that, on land right next to where my grandmother moved, and...

DOMUSH: In New Hampshire?

GALL: In New Hampshire, in Holderness, on the hill. I don't know what happened to that. But then, also for reasons that defy rational explanation, my uncle decided with a friend he knew from school—he had been teaching at some manual training type thing. [...] I don't know if it was a private school or public one. Anyway, it was not in Short Hills. It must have been in one of the Oranges. So, he and this friend, [whose name] I think was Mr. Lance, decided to open a summer camp for boys. Once again, I don't know what was the real motivation. But they found [...] a large amount of land on Lake Kanasatka, which is a small lake that feeds from Squam [Lake] into Kanasatka and then into the big [Lake] Winnepesaukee. The first summer, they had high school or, anyway, four young men who, maybe, they were probably in college, who came up to help build the initial parts of the mess hall and a few of the cabins. My uncle then said [that] my mother could have land there and have a house if she wanted one. So, she had a house, summer house, built there.

DOMUSH: Oh, how nice.

GALL: It was really nice.

DOMUSH: Now, when you were working at Hayden Chemicals in New Jersey, were you living with your mother or...?

GALL: No, no. My friend, who also was from there, we first couldn't find a place. We had to...we found a room to live in. We spent just...I think we got breakfast, but we had to fend for ourselves for lunch and dinner. Hayden had no cafeteria that I can remember. I'm sure it didn't, because I would have remembered it. But we had to eat lunch and dinner out every single day. We swore if we ever found an apartment that we would never eat out, except for some real special occasion. Then eventually we did find an apartment on a top floor of a house, must have been in <T: 60 min> Passaic, [New Jersey]. I know it was the top floor, because we also...it had one big area room and a kitchen and dining room, and [then] the stairs were coming up from the lower thing. So, that was very good; we finally got a place to live.

DOMUSH: Now, what did you do at Hayden Chemicals?

GALL: Oh, I was just hands in a laboratory. What were we making? I don't remember. I can remember [...] at some point we were using styrene, because styrene, you can smell when they have a styrene leak. But it was...I really don't remember what we were making except...no, I don't.

DOMUSH: Okay. Well, we've been talking for just about an hour. So, maybe this would be a good time to take a quick break. We can get some water and catch our breath for a little bit.

GALL: That's a good idea.

[END OF AUDIO, FILE 1.1]

DOMUSH: Okay, back on after a quick break. Hopefully the temperature's a little cooler in here. It was starting to get very warm before. So, we had been talking about your job at Hayden Chemicals. You said that you were hands in a laboratory. I was curious: you and your friend from Vassar were both working at Hayden Chemicals. Do you recall if there were many other women that were working there?

GALL: I don't think there were. It's hard to...of course, there were the usual secretaries, but I don't think there were others. I'm trying to bring back pictures of...recall pictures of what it was like. One of the things I can remember is it must have been a group that we were in. Anyway, I remember outside the actual laboratory there were metal cabinets that supplies were kept in. One of the supplies was butyl acetate, I think. It had apparently slightly corroded the container, just at the liquid level, and if you tipped it forward, then you got the gas film or...so [that's] my comment about that.

I remember one thing about...I was doing something. It must have been some sort of a distillation system or maybe [...] I was refluxing something. Anyway, I ended up—this was after the usual working hours, [which] is why I remember it—because the thing began spewing out and [I was] trying to stop it, which I eventually did. I got a fair amount on my hand. So, then I had go out to the gatehouse, guardhouse, to get help. They took me somewhere where they packed my hand in some compound and wrapped it up. So, I had...

DOMUSH: Did they take you to the hospital or somewhere...

GALL: No, no...

DOMUSH: ...somewhere on the company...?

GALL: [...] It was just there. So they...I don't remember if they were ever [felt] there was anything important enough. I'm sure they wrote up reports on it, because I know here, where I am at Waverly [Heights], if you get...I got a nick somewhere or other, and it was bleeding, so of

course, I put a Kleenex on it, and went out to the front desk [and] said I wanted a Band-Aid. Oh, one doesn't get Band-Aids. They apply it. So, then a nurse had to come, and she did this, that, and the other. Then, they have to write it up. So it sounds familiar.

DOMUSH: Well, it's funny. My husband works for DuPont [E. I. du Pont de Nemours and Company] as a chemist. You know, they have to write up every very minor accident in the hopes of preventing larger accidents. They had an incident where a cabinet door came unhinged. It [...] didn't upset any chemicals, nothing happened, but this door fell off the cabinet when someone opened it. They had to have an investigation about what happened to the cabinet and why did the hinges come loose, and all of these things. I mean, it's great that it was so safe, but they wasted hours and hours, when...

GALL: The door didn't fall down on somebody's foot and hurt it?

DOMUSH: No, no. No one was hurt. No one was hurt. It's just [that] something happened with the door.

GALL: Well, I think organizations tend to make sure that their backside is protected.

DOMUSH: Yes. Now at Hayden Chemicals, I'm not quite sure of the time frame. So were you there while it was still World War II, or had the War already ended by the time you started working there?

GALL: I think it just slightly...yes and no, because I remember the time at which somebody came down some stairs—I don't know what the area was there—but they announced [President Franklin Delano] Roosevelt's death. So, <T: 05 min> I [...] remember that and thinking, oh my, Harry [S.] Truman? That's my recollection of that. So, that gives you an indication of the time.

And I hated [...]...one of my friends that I met there—and we, you know, we did things together—she had an unfortunate accident. [...] I guess maybe it was partly her fault. She did something with a glass beaker, and I think it cut her hand badly. So, there was a great to-do about that, needless to say. I don't know whether they were...I think the thing that was sad about it, she was an amateur violin player. I think this was going to affect her ability [to play the violin...]. Anyway, I'm sure they made a big...I hope they made a big to-do about that. But I remember thinking that it's very sad.

DOMUSH: Yes.

GALL: [...] And I know there was a man in the laboratory too. I guess he was actually doing the same things we must have been doing, but I really don't remember. That seems to be...I'm not very clear at times.

DOMUSH: Yeah. Do you recall, though, before we move on, any of your male colleagues? Did anyone give you a hard time about being a woman? I mean, you were coming from Vassar, even though there had been, kind of, this influx of men due to the GI Bill, you know, it's surrounded predominantly by women. Then, you go to work at Hayden Chemicals and you're surrounded predominately by men. So was it ever problematic?

GALL: I don't remember thinking it was at all. I remember things like: they had a hydrogenation set up with what we call a rocker bomb. It's the thing that goes back and forth [...] that mixes the thing, and it blew up. Well, fortunately, it did it when...in some off hours when nobody was around, but it punctured a big hole, apparently, in the building overhead, but didn't do any damage.

But another time, something similar to that must have had a major effect on the surrounding neighborhood, although I'm only dimly recalling that. But I recall a man who worked in one of the laboratories at the...Clark [E.] Bricker I think was his name. It was somebody that we got to know, both Emmy, my roommate, and I. I say Emmy...I'll have to think about, but I'm not sure that's her name. I have a good friend here at Waverly who is Emmy, and so I'm...maybe I'm confusing them.

Anyway, I remember Clark particularly. He [...] had his own laboratory somewhere or other. But I had seen him subsequent to Hayden. I had seen him in some chemical society meeting. I was interested. At that point, we probably sat together and reminisced about Hayden. Of course, shortly after we...as I say, at the end of the Second World War, the government no longer gave research incentives to companies to provide working things, provide money...

DOMUSH: Right, because during the War...

GALL: Yes, that's...

DOMUSH: ...there was all this need for...

GALL: So, I think when that stopped, this is when a lot of us were let off. That was the end of, shall we say, that's my first firing. Let me see. Where did I go <T: 10 min> from there?

DOMUSH: Now, I know that at some point, you ended up working at the Penn Medical School [now the Perelman School of Medicine at the University of Pennsylvania]. Was that the next...?

GALL: That may have been.

DOMUSH: Okay. Do you recall how you ended up there?

GALL: How I don't...I don't think so. I think the next job I had was with McNeil Laboratories.

DOMUSH: Oh, okay.

GALL: This is before they were bought out by J&J [Johnson & Johnson].

DOMUSH: Right.

GALL: [...] I don't know exactly what I was doing in the laboratory. But I remember some of the things that I thought we were seeing, the way they coat the pills, and all these things that...but we must have been [seeing] something, because one of their products had a coloring in it [that] made the product green. I remember saying, "Well, all you have to do is say Tylenol Green has gone to war." I thought if they would just adopt it, but that was just...this is when at McNeil, this is when I actually knew, not well, but I did know Bob [Robert J.] McNeil, who was the president. I think what ended the employment there, I think was—[my] chronology may not be accurate, but we'll try—was when my stepfather, who taught at Amherst College, was going to take a half-year sabbatical. He and my mother were planning to go travel around Europe for [...] six months. They asked me if I would like to come along. I said, "Sure, if I could bring a friend." So, I asked my friend and she said sure. So we quit our jobs, [and] I bought a car with one of these supposedly repurchase agreements that at the end of the trip, they would buy it back again [...].

But we...I know the four of us sailed from, probably, from Hoboken, [New Jersey], on a ship that...on one of the Holland American Line ships. It was a ship that had been, I think, a troop carrier, and so it didn't have any particular fancy...it was mostly a one-class ship, except

for the very top level, which was, I think, the first class. It was all one thing, except for first class. So that was...of course, we soon—and this is February—[we] soon ran into very bad weather, and [my friend] and I said we ate our way across the Atlantic. Neither of us seemed to be bothered by the pitch and roll and this and that. But my mother was definitely [bothered]: I think she spent a lot of the time in bed, in the bunk. The other thing I remember about the trip over was not only...was we had to brace ourselves. It was hard to really get comfortable in a bunk, because you had to brace yourself because of the motion of the ship was really pretty...and then, of course, the food, the first thing they did was they put up the sides of the tables. They all have...

DOMUSH: How interesting ...

GALL: ...ribs that go about that high. Then, the next thing was they weighed down the table cloth so that the glasses and things wouldn't slide around in it. Then, the last final thing that they did was they removed all stemware. So, anyway, that was our transatlantic trip.

DOMUSH: Where did you go when you were in Europe, once you landed?

GALL: Well, [...] I don't remember. Anyway, I had the car. So, we landed in Cherbourg, [France], and picked up the car. We found out that <T: 15 min> maybe we had more luggage than [...] we thought the car could hold or that we expected the car to hold. So we just simply, essentially, took a map of Europe and spent about one month in each country.

DOMUSH: Oh, wow.

GALL: The first thing we did was...we felt since it was wintertime, it was February, maybe we should head down to Spain, because...

DOMUSH: Maybe warmer.

GALL: Yeah. We thought it should be warmer. So, we toured around Spain, and this is a time when border crossings required...[while] they [...] required passports [...], they didn't require too much. One of the things they required was that the owner of the car had to sign something, and that was—I owned the car, but, of course, my stepfather was paying for everything. So, when they asked me [things like, how much] my...I always said I don't have any money, you know. Anyway, that was a fascinating time.

Eventually, of course, one has to come home. This is when I found out that they...Ruth had gone off with her brother at some point. Her brother joined us, maybe in Sicily, and then...or somewhere or other in Italy, maybe Sicily. Ruth and her brother went off to explore some of the places that we weren't going to. [...] I don't know if she missed Greece or not—no, she didn't miss Greece. I remember her in Greece. But anyway, that was...I [would say] that was an amazing trip. It really was.

DOMUSH: I can imagine. Even just the couple of places you mentioned just now, it sounds amazing: Spain, Italy, Greece.

GALL: Well, the thing that I noticed particularly, the contrast between Spain—this is still under [Francisco] Franco [y Bahamonde]. So, way out in the country was still fun. The soldiers parading out, patrolling. But Spain itself was just immaculately clean. You couldn't drop a tiny piece of paper what somebody would pick it up. It was beautiful. Then we went to Sicily. Sicily was a mess. [laughter] I think maybe the Spanish sent everything over to Sicily. I don't know, but the contrast was quite great.

DOMUSH: Now, you said you were gone for about six months...

GALL: Yes.

DOMUSH: ...before you came back? Did you have a job when you came back, or you had...

GALL: No, no.

DOMUSH: You had quit your position at McNeil.

GALL: Yes. I thought, you know, maybe I would [try to get my old job back], but when I inquired, I think...anyway, the position was [...] no longer open. So, that was when I finally decided after some time that I probably needed some money. I had an apartment. I had sublet the apartment and whoever was there, fortunately, I had a good friend still in Germantown, [Pennsylvania]. She, I think, took care of the mess that the so-called renters had done. I don't know if they ever paid me, but that's beside the point.

Anyway, I finally decided that I probably needed some money. So, I applied at Strawbridge & Clothier's. I was in [their]...I was working as a saleslady in their pillows and hassocks department. Apparently I impressed the supervisor, and [so], at the end of my time,

they [...] offered me a job, [a] permanent job. I said, “No. I’m going back to chemistry.” But I was...I liked the compliment. I think the thing that probably got them was that I treated all customers, no matter what they looked like, the same, you know. Some of them probably <T: 20 min> had more money than books. But anyway, that ended that. So then I stayed in Germantown with my friend Ruth, who had an apartment [...]. I stayed with her for about a month while I looked for a place to live.

DOMUSH: Okay. Now, how long had you been in Philadelphia, [Pennsylvania]? Obviously, you’d been in Philadelphia when you worked at McNeil. But had you been there at this point, regardless of the Europe trip, for a couple of years, or...?

GALL: No. I mean, the only...the time in Philadelphia started really when I worked for Penn. But before that, see, my mother had been at the Baldwin School for Girls. [...] Her position was really a housemother. This is at the time when the Baldwin School had boarding students [at] the high school level. So, she was that. She had a house there that the school owned. She had the first floor of that, which is close enough to walk. I mean, really close. I can’t think...[it’s] just right behind the big Presbyterian church at Bryn Mawr Avenue.

DOMUSH: How nice. [...] We kind of skipped over when you worked for Penn. What did you do when you were at Penn?

GALL: Well, this is...we ran what was called the Liver Local. This is the medical students, or maybe they were graduate interns; they had a year that they did research work. I don’t know. I don’t know whether it was a standard procedure, but they [...] were part of the program. They operate on the white rats. They took out most of their...well, at least 50 percent of the rat’s liver. When I call it the Liver Local...well, then we ran the liver petri dishes down the hall, up the stairs, around the corner, and finally into our laboratory, where it was digested and treated. [laughter]

DOMUSH: So you were running livers around.

GALL: Yes. [...] We called that the Liver Local because we had to go [...the] laboratory was on the second floor, on the floor above where they were. So that was...

DOMUSH: Now, again, you said when you worked for Hayden Chemicals that you were hands in a laboratory. Would you say of your time at Penn that you were hands in a laboratory, just a different kind of lab work?

GALL: I think that was mostly it, I guess. We were, as I say, we were doing some of the nitrogen determinations of the whatever. The idea was this was a nutrition problem. But I don't remember [...] how they evaluated it, whether they evaluated it by the health of the rat or do they have to open them up again to find out how much the liver had regenerated, because it does. So the interns had to keep very good care of the rats.

DOMUSH: Right. Did you have any contact with the rats while they were alive?

GALL: Oh, sure.

DOMUSH: Okay.

GALL: I'm not a squeamish person. I don't scream when a mouse comes around the corner. I actually did one operation on [a] rat just to show that I could do it.

DOMUSH: Now, in this position at Penn, do you recall if there were other women that were working there?

GALL: Oh, yeah. The only other woman was...up in the laboratory there were women. Down in the main part, [...] this is where I met my friend, Ruth Brown. She was a histologist. She would [put] the things [...] into wax and then make the serial sections of them, that...

DOMUSH: Right.

GALL: And partly at that time, the two of us looked—were the same height <T: 25 min> and roughly the same coloring—apparently we looked enough alike so that most people thought we were sisters.

DOMUSH: And then, this is the friend that went with you to Europe as well?

GALL: Yeah. [...] She's still my friend. She's up in Cathedral Village, [Philadelphia, Pennsylvania].

DOMUSH: Oh, great. Wonderful.

GALL: I should say she's my oldest friend. But, unfortunately now all we can get together is by telephone.

DOMUSH: Yeah. Well, by telephone is better than nothing.

GALL: Yes. Oh, yes.

DOMUSH: Now, when you were doing the work at Penn, did you like that this had a little bit more, maybe, biological or medical aspect to it? Or did you just like that it was being in lab?

GALL: Well, I think it was just as being in a lab. [...] The head of the laboratory was a very, very kind and very intelligent man, Dr. [Harry M.] Vars. He helped us over...you know, if there was a problem, he would help us try to solve it. Then I remember one of the men in the lab was [...], I think, in part hoping that by working there he could get some credit toward getting into medical school. I think we used to make his life a bit difficult sometimes. I think his name was Melvin. He gave the two of us, Joan and I, he gave us each a copy of *War and Peace*.¹ I think he also took us, or maybe we took him, to *The Death of a Salesman*.² So, I don't know if he ever got into medical school. I wish I knew.

DOMUSH: So, I'm curious about after you worked at Strawbridge's, after your trip to Europe, they offered you this permanent position. You said, "No. I'm going to go back to chemistry." Did you have a job at that point, or were you just looking for a job to get back into the lab?

GALL: No. [Well, I'll] tell you, for a while there—I don't remember when, I guess before Penn—I lived with my friend Ruth while I was looking for a place to live. It took about a month to find an apartment that I thought was suitable for me. Then, the next thing was, well, I had to persuade the landlady that I was...my answer to her questions were, "I have an independent income." Then, I got the apartment. [...] My first request was to find a cleaning woman. I don't remember what the second request was. The third one was I thought I should get a job. That was the succession, if I didn't. So, you can see, I'm sure must have had some financial help from my parents, or my mother. I can't believe I existed on just Strawbridge's money.

¹ Leo Tolstoy, *War and Peace* (New York: Penguin, 1968).

² Arthur Miller, *Death of a Salesman* (New York: Penguin, 1976).

When I was at Penn, two very famous men were head of the department that supervised, I guess, only the [young] interns. One was I.S.[Isidor Schwaner] Ravdin and the other was Jonathan [E.] Rhoads. [...] My friend who worked there, she wasn't the one in the Liver Local laboratory. Anyway, the story is that she went and asked maybe...I don't know if she asked I.S. for a raise. I.S. said, "Well, you don't need any more money. You live at home." So, this is [their] feeling about men and women.

DOMUSH: Well, [it's] a very interesting response.

Well, it's about 12:15 p.m.; we've been talking for quite a while today. I'm not sure, [but] I think you guys are headed to lunch at some point. I'm not sure if now would be a good time to do that. We can pick up tomorrow <**T: 30 min**> with talking about...I think the next place that you worked is when you went to work for Rohm and Haas. So it's up to you, if you want to keep going for a little while, or if you want to call it a day for today.

GALL: I don't know.

DOMUSH: Well, [should] we start talking about Rohm and Haas for just a little bit, and...?

GALL: All right, talk a little bit about that. How did I even know about them? I guess maybe I was just canvassing various chemical companies, because by then I was sort of committed to Philadelphia. So they hired me as hands, really, in the laboratory. [...] Most of the emphasis on that particular laboratory was trying to get formulations in order to be able to apply an insecticide to banana trees to control something called sigatoka. That was just a pest of them. You had to get something that was...you couldn't put it in an aromatic solvent, because that might damage it. So it had to be something that you could somehow disperse in water and be able to spray. I guess eventually they must have found a solution. But that was [...] part of what we were working on.

DOMUSH: Now, when you worked for Rohm and Haas, where [were] you located? Because of course here at the [...] Chemical Heritage Foundation, there's a Rohm and Haas building just down the street.

GALL: That's for the people who wear dresses—the women who wear dresses and the men who wear suits.

DOMUSH: Okay, for the bigwigs.

GALL: Yeah. Well, [...] some of them were just ordinary secretary types. But, anyway, that was definitely not a laboratory. No. It was out in Bridesburg, [Pennsylvania]. Bridesburg was famous for many things, one of which was that the Bridesburg plant made...oh, I should remember it. Anyway, made a compound, which they used in other places, but it must have permeated everything. So anybody who worked there, you could smell. It would get into their clothing and in their cars. It was not pleasant. But the other thing about working at [the] Bridesburg place was there was a blind chemist there. Frank [J.] Glavis and one of the rules was that nothing could be left out in the cars, anywhere, because he walked all around. [...] I mean, he knew where to go or how to get there, but they couldn't put anything in that would trip [him] up. He was somebody that...he had a friend who's a chemist, who is in the...by this time I was out of the laboratory, and I was now a part of the information group at Bridesburg.

Oh, let's go back slightly. When they built research laboratories...and at Bristol, [Pennsylvania], right by the Burlington-Bristol Bridge, they moved all of us out there from the laboratories. Then, I guess, I'm not exactly sure how it worked out. But apparently, they must have decided that maybe I wasn't as useful there as I could be back in the information group [...] attached to the library in Bridesburg. I think I'm patting myself on the back, but anyway. At that point, there was a Ph.D. woman chemist there who...I'm not sure what she did. I think she wrote up bulletins, information bulletins <**T: 35 min**>. I think that's what it was and...

DOMUSH: Do you recall her name by any chance?

GALL: Her last name was Tucker, and I'll think of her first name. Helen Tucker, maybe? Every day Frank Glavis, [who] was the blind chemist, would come [...by]—this is [in] the library, [but it] was upstairs on [...] a mezzanine [...]—Helen's office and she would read technical things to him. So, then when she retired—and this was at the time when Rohm and Haas and other companies, most of them had the policy [...] women retired at sixty and men retired at sixty-five. It was definitely that way.

So, Frank used to come there every day, anyway, maybe at a set time, I'm not sure. But then [...] she would read technical articles to him or converse about various [chemical things]. Then she retired and, anyway, I was able to inherit him. So he then—[it] wasn't much of a change of location, because I was still up in the mezzanine—[...] I would then read things to him, and [...] it was pretty good. I was pretty good at French. I'm not so good at German, but...

DOMUSH: Okay. Is that something that you had learned at Vassar, the French? Or [is it] something you had just picked up along the way ...

GALL: Well, to be a [...chemistry major], to be certified as a chemist, you have to have at least a year of German, and that was it. The French was...I've had French since the third grade. So French is one of the things that I think once you've been exposed to [it], you don't really lose it. You may not be proficient, but you don't ever really lose it. I know it turned out to be [reasonably] useful for me in Europe, because [...] in Spain, I found if I spoke French and didn't rattle off, and they spoke to me in Spanish, we would communicate. We could get [on] all right.

But anyway, then, as I said, when Helen retired, much to her...I think she didn't want to. She didn't feel any physical impairment. But, anyway, that was the rule. [And] then Frank would come to me, and I would read technical articles to him and patents that interested [us], or what would interest him. [...] And what I did when he wasn't there—of course, I had a job. The job was essentially writing, finding patents that were pertinent to various people in the company, and essentially writing up an information bulletin.

DOMUSH: Now, in terms of finding these patents, of course today you just go on the computer, do a quick search online, patents appear on the computer screen. But that wasn't the case when you were doing that.

GALL: Well, I mean, you may get them all online, but what do you get? I mean, what are you looking for? You have to look for something. You can't just...

DOMUSH: Right, right. So how were you doing these searches? Were you just going through...were you going through pieces of paper?

GALL: No, I must have had the...maybe, either it was some order that they came in, or maybe they actually had the patents. But searching the journal articles that I would read to him were ones that I just got circulated to me.

DOMUSH: Was there any sort of computer system in the library and information...okay.

GALL: [No.] This is still before...this is way before that, because I don't think I started on computers until I got to Mobil.

DOMUSH: Okay. So everything was by hand.

GALL: Everything was by hand or typewriter.

DOMUSH: Right.

GALL: In fact, you couldn't...the things that you could do now, they would look on and think, "Oh, my. How will you be so...", you know, "Why can't you do it this way? Why can't you do it that way?"

DOMUSH: Well, it's interesting, as we mentioned very quickly before we started talking in the interview, you know, we're in the Eugene Garfield Room where we're conducting the interview. We have a number of oral histories in the collection that talk about library and information sciences in the chemical industry. People have talked at various times about trying to figure out ways to do keyword searches, whether it be for patents or journal articles or just kind of in-house research in different locations and using punch cards, and using all sorts of different and evolving computer systems as they became available. It's just fascinating because, of course, like I said, today you just type your keywords into the computer and something appears.

GALL: Yes, whether it's useful or not, you have to know enough to find out. But anyway, Gene Garfield was really...he put out a publication, which was...I don't know if it was monthly or more often than that, of essentially summarizing various fields. He really started it. He really promoted the information products.

DOMUSH: That he did.

GALL: Is he still alive?

DOMUSH: I believe that he is.

GALL: Yes. I thought so. I mean, I hope so.

WRONSKI: Did you know him? Did you meet him?

GALL: Yes.

DOMUSH: Yes. We were lucky enough: we have two oral histories with him, which are quite nice.

GALL: Good.

DOMUSH: Quite informative about all of the work that he did, and all of the people that he...

GALL: Well, he was really, in this area—maybe more than just this area—he was really the originator of all this. He's admired by many, many people for all of the work that his great mind devised.

DOMUSH: Very, very true. Well, again, I'm going to ask the same question as before. Is it time to call it a day, and...?

GALL: I think. I think maybe it is.

DOMUSH: Okay.

WRONSKI: Okay.

DOMUSH: Okay. Well then, this sounds like a good place to pick up tomorrow ...

WRONSKI: All right. Okay.

DOMUSH: And we will do that.

[END OF AUDIO, FILE 1.2]

[END OF INTERVIEW]

INTERVIEWEE: Mary K. Gall

INTERVIEWER: Hilary L. Domush and Michael Wronski

LOCATION: The Chemical Heritage Foundation
Philadelphia, Pennsylvania

DATE: 27 March 2012

GALL: We stopped somewhere obvious, but I don't remember where.

DOMUSH: Yes. So let me just start out for the transcription, today is March 27th. It is day two of the oral history interview with Mary Gall. I am again Hilary Domush, and with me is Mike Wronski. So, yes, we did...we stopped. We were talking about your work in information and library sciences, I believe at Rohm and Haas. You had moved into this position, the senior librarian, the woman who read the technical reports and the journal articles to this chemist who was blind, she had retired because she had reached the mandatory retirement age. You kind of moved into this position. I wanted to start out by asking a little bit about how you got into the library from the laboratory. It doesn't necessarily seem obvious how one would make that switch. For so many years you had been, as you said, hands in the laboratory.

GALL: Yes. I've been trying to think of how it worked out. In part I think it may be that they just felt like I wasn't very useful in the laboratory, maybe that was it. Or that maybe this would be a more productive position to be in. So that's all I can think of.

DOMUSH: Okay. Do you recall...I was a little bit worried that perhaps it was something like they were trying to move you, as a woman, out of the laboratory into the library because maybe someone thought that was more suitable.

GALL: I don't think that was it. I think the more suitable was maybe they thought my abilities would be better used at that time. Two of my friends there were women Ph.D. chemists. This is, you know, the obvious thing of how I was aware that they were definitely discriminated. One of them, I'll describe her, [was], shall we say, the heavy one.

DOMUSH: Okay.

GALL: She was: physically. She said that she found that she had no trouble with people as being head of a small laboratory group. She did not find that there was a problem with the men who worked under her. But there was apparently a certain amount of resentment [that], obviously, she became aware of. The other Ph.D., I'm trying to remember what work she had, but anyway, she was...I think each of them was very smart, but I don't remember what the other one did, maybe I'll remember it in time.

DOMUSH: Okay. But it wasn't any discrimination that you were aware of against you, to facilitate this move.

GALL: No. [...] I think this is maybe a position that they thought they wanted to have filled, or that...and then...the [timing of] things are not clear to me. But about this time, [...] this is when my thyroid problem arose and I had a subtotal laryngectomy. As a result of that, [...] they recognized the fact that I had to have an artificial thyroid. So I've been on artificial thyroid ever since. But during the time after the operation, and until the doctor realized that I couldn't get...I would fall asleep easily, easily. At that time, also, I mean, I would be freezing cold when the temperature was about 100 degrees. Then once it got beyond the synthetic thyroid, then everything...it was stabilized again.

DOMUSH: That's good.

GALL: And maybe that had some influence, but I can't remember the time frames <**T: 05 min**>.

DOMUSH: Okay. Were you excited at, kind of, the new challenge of moving out of the lab into the library?

GALL: Well, I think...

DOMUSH: Because it certainly required all of your technical knowledge still.

GALL: Yes. Well in part, I guess I was...I don't know if...I started when Helen Tucker, who was the one that, in a way, I replaced. I was sorry that she was not still there, because she would have been a big help to me. But what I was doing was writing when I got into this position; then I ended up writing short pieces about various patents that were of interest, I thought. And I don't remember how the thing got circulated, but I know it was typed up. And so, I don't recall

whether I did any proofing. I don't know whether it was distributed...to whom it was distributed—probably the laboratory, the various chemists in the laboratories. But I don't know.

DOMUSH: Now, you said also at this time [that] there weren't any computers or anything like that.

GALL: Oh, gosh, no...

DOMUSH: Everything was paper and typewriter and you sorting through the patents by hand.

GALL: Yes, yes. I did not have to do any typing. It was a secretary who did all of that stuff.

DOMUSH: Okay. Now, if you wrote up an abstract of sorts for one of these patents, and maybe a couple of months later a chemist came in and said, "You know, you wrote about such and such patent. I need information about this." How did it work? How did you know where all those things were [...] without a computer?

GALL: What you're...the picture you're developing was not anything that I was aware of.

DOMUSH: Okay.

GALL: I'd say, once Helen Tucker retired and then my friend, Frank Glavis, came in...I mean, this was, shall we say, the person that if I influenced anybody, I influenced him by what I picked. Or what he asked me to do, or what I picked up from journals, textbook journals that he would be interested in, I knew he...or would certainly be interested in. Because of Frank, I even learned how...I'm not fast, but I also learned to write and read Braille.

DOMUSH: Oh, wow.

GALL: Well, he was blind, and I thought at least this would be a way that I could communicate with him other than the telephone, which of course, I wouldn't know if he was there or not. So, it was a skill that I have not tried to revive. I still think I can do a little bit, but it's a challenge.

DOMUSH: How interesting. I must say, I don't know anyone where Braille is their second language that they speak and read.

GALL: [laughter] I think it might be my third language, actually.

DOMUSH: Yeah. Well, yesterday you mentioned that all the years of Latin, the years of French, the little bit of German...

GALL: Yes. Well, the German was because in order to have an American Chemical Society certification of—I don't know what they called it—but, anyway, to be certified of having—I don't know what they called it—but, anyway, in order to qualify for that, one had to have German.

DOMUSH: Right, from your undergraduate degree.

GALL: Yes.

DOMUSH: Yes. I think that's no longer the case.

GALL: Yes. I'm sure it's no longer the case. But the thing that I found interesting about German, particularly reading the German patents, I [...] seemed to be more patent-oriented than I was [to] articles in German. But you'd start the sentence or the description of the patent [at the] top here, and then eventually you'd find a verb down here somewhere.

DOMUSH: Yes. [laughter]

GALL: I thought German was a trying language.

DOMUSH: Yes <T: 10 min>. German was a language that I studied when I was in undergraduate, and I never studied anything else, so I have no comparison. But it was difficult.

WRONSKI: They put these nouns that are three yards long. [laughter]

DOMUSH: Yes. You just stick a bunch of nouns together and make a new word. That was the easy part.

GALL: But the fact that you finally found the verb down here somewhere, [that] used to get me. [...] I don't know about articles, because I never tried them. I never had to abstract them, but patents were a challenge.

DOMUSH: Now, when you moved from Rohm and Haas to Mobil, you moved in your capacity in the library, in the information science area, is that correct?

GALL: Not really. I'm not sure...I'm not sure how I got to Mobil. I mean, I have my suspicions, because one of my friends was a chemist at Mobil. I think [...] maybe they were looking for somebody and he knew me. So he suggested that I should...and so it ended up that the transition from Rohm and Haas to Mobil was, like, over the weekend.

DOMUSH: Oh, wow.

GALL: Which sort of disappointed me, because I thought it would be nice to have a nice vacation, but I didn't get one. So I walked in and...where was I put first? I guess I was not in any laboratory. I was right in the beginning...[actually] it was [the] brand new beginning of the [...] information sciences. This meant computers and also the fact that they [sent] me up to New York to take a course in how to manage some of these databases.

DOMUSH: Do you recall which databases?

GALL: Oh, yes. They start out with—since it was a petroleum company—they started out with the...I'm trying to think of the name. Anyway, there's one petroleum database, [and] then once you get into the...once you log onto the thing, then [...] I guess you can get into the various other databases. But a new beginning it was, once I had had the course up in New York somewhere about how to manage some of these things. Then it was another real learning experience to try to figure out how to do it. Because among other things this worked, in the way you had to do it, by words. You had to do it by recognizable...recognized by database words. They had their own vocabulary. So that took a while...

WRONSKI: Did you say you...did you leave Rohm and Haas voluntarily, or was there a layoff?

GALL: Oh, this [was] a layoff. This is my first or second or third firing, you might say. This was a...they called it a reduction staff and about 20 percent of the research people were let go. It turned out in my case to be financially somewhat advantageous, because they still had the mandatory retirement for women of sixty and men sixty-five because I was not in that [age bracket], not even very close, actually, I don't think; I was credited with, I don't know, [it was] something or other. So I ended up with considerable more money as a retirement benefit, which also included, because of some sort of a pension plan that was also included, the stock. So that's how I started getting stock from Rohm and Haas. I guess you might say financially I made out all right.

DOMUSH: Yes. Well, and certainly if the benefits worked out in your favor, and you were able to...

GALL: Yes.

DOMUSH: ...you know, start a new position <**T: 15 min**> at Mobil right away.

GALL: [...] I'm not sure whether they said they recognized [they needed] somebody. I never...I was not put in the library. It was a separate area, separate set of [rooms]. But then, as I say, it was like going back to school again, because [one] had to learn how to use a computer and how to use all these different databases. The petroleum one worked on keywords, so you couldn't just go in. Nowadays, you just go in with any question you want and you'll get an answer to [it]. But there you had to go in with specific words that are in [the database]. We had, oh, like a manual, a thesaurus that you could look up the sort of things that you [could] ask. There, one of our main problems was the computer...where all the computer-working things were in California.

DOMUSH: Oh.

GALL: That was in their time zone, and our time zone was different. So it was just, you know, you were generally totally frustrated. You were burning up with the wires before they got to work that you could ask questions or find out why something was down.

DOMUSH: So the actual computers, the physical computers, were in California?

GALL: Yes.

DOMUSH: Interesting.

GALL: Well, I guess...well, anyway, the whole thing was handled there, to the point where one of the things when you have a bank account, or you have a credit card, you have to have a password.

DOMUSH: Yes.

GALL: So I used the zip codes for the California group. I figured, how many people knew the zip codes for them?

DOMUSH: That's funny. Probably not many.

GALL: No.

DOMUSH: Did you ever have to go out to California as part of work?

GALL: No. I had been there because of [the] American Chemical Society. I was a counselor, and I went to most of the Chemical Society meetings. At least one of them was in...somewhere, maybe, [in] Los Angeles, [California], possibly San Diego, [California], but I think it was Los Angeles.

DOMUSH: Well, I certainly want to talk about ACS, but not quite yet. I want to hear a little bit more about the information sciences and the work with the computers. I'm so intrigued about kind of this world of early computers. Now we, of course, rely on computers so much. And I know from some of the other information science oral histories that we have that people...not only did different companies work with different databases...you had to use the specific vocabulary keywords, because databases only had such, you know, this was the vocabulary and it didn't recognize things outside of it. But, of course, there were also certain rules that the computers understood and rules that they didn't. So if you typed in a keyword, could you use "and" or could you say "not"? Things like that to make your searching [more specific]?

GALL: I really don't remember that part. You certainly...you had to use the formal words that were in the thesaurus.

DOMUSH: Thesaurus, yeah.

GALL: Yes. It was a big, rather large book that you had to consult to find...and you couldn't—the computers or the databases at that time—you could not just ask a question. You could not just type in a word and find out. You generally got nothing back <**T: 20 min**>. You couldn't just ask for, say...or you couldn't say "Rohm and Haas," and you wouldn't get something back. I don't remember what happened, [...] whether just nothing happened or some error message came.

DOMUSH: Now, in the time that you were at Mobil and you were working with these things, did you have to go back to New York repeatedly to update your classes and your training? Or was it just that one time?

GALL: It was just one week.

DOMUSH: Okay.

GALL: It was a whole week. There was another...at least one other person, a man whose name I don't remember, from Mobil. There were two of us there. [...] Maybe there were others from other parts of Mobil, but I don't remember.

DOMUSH: Okay. Did you ever...you mentioned yesterday knowing Eugene Garfield.

GALL: Yes.

DOMUSH: Did you have any contact with other people in the Philadelphia area, other chemical companies or other universities maybe, who were starting to get into this information science field and starting to use the computers and the databases and things like that?

GALL: Well, I must have, because we were a small group really.

DOMUSH: Yeah.

GALL: [...] And so I did know some of them, [Cassandra] Sandy Burcham was one of them. I think she's still working in the field. I'm not sure how to spell her name. [...] I mean, I'm sure she's easily found. So it was a lot of...certainly we would get together at various things like, not just meetings [...] for the information people, but just like monthly meetings of the Chemical Society. This is the local one...

DOMUSH: Right.

GALL: ...and I think this is where a lot of us talked and exchanged information, so...

DOMUSH: So, now, since ACS has already come up a couple of times just in the short time we've been talking today: you are a long-time member...

GALL: Yes, yes.

DOMUSH: ...of the American Chemical Society. When did you first join ACS?

GALL: Oh, probably shortly after I got out of college. Then it was a time when I actually physically resigned from the Society. I wrote the letter to Alden [H.] Emery, I guess it was at the time, because they had raised the dues and I said I couldn't afford it. So sometime...I don't remember what the result of that was. I don't think they ever really dropped me in spite of my, shall we say, throwing them away.

DOMUSH: Now, you've been very active in the Philadelphia American Chemical Society. Tell me a little bit about what the meetings of the Philadelphia American Chemical Society were like and what kinds of things that you did.

GALL: Well, we started out with a...most of them at that time were held at either the Franklin Institute or out at [...] Penn [...] at the museum. They always started out with a social hour first, and then dinner, and then after dinner there would be a technical talk by somebody. Sometimes it was [...] like a separate dinner talk. One time they tried their best to have programs, separate programs, that would interest the wives of the chemists. That worked for a while, but, no, it takes a lot of effort and a lot of enthusiasm to get something like that really going.

DOMUSH: Right. Of course, the assumption with that is that the wives of the chemists are not chemists themselves.

GALL: Yes, because if they were chemists, they would just be part of the...

DOMUSH: Part of the regular...

GALL: ...group, right.

DOMUSH: Okay. Now, <T: 25 min> when you were going to these networking meetings fairly early on, did it seem like most of the people were from academia or industry? [Because], of course, here in the greater Philadelphia area, there's so many universities and colleges, but also so much industry, whether it be petroleum or chemical.

GALL: My feeling was they were all industrial. I don't think they...I don't remember academic people. If they were there, [...] they didn't register on my radar.

DOMUSH: Of course, the next question is, do you recall how many women were there? Was it just a couple, or was it hard to tell because men brought their wives?

GALL: [You mean at the] regular monthly meetings?

DOMUSH: At the regular monthly meetings.

GALL: Well, the women who were chemists generally came. I mean, the two that I knew quite well from Rohm and Haas, they were generally there. In fact, I think one of them often was the one who ran the social hour. Running the social hour means that you have to somehow [or other] get the liquor, and you have to make arrangements to get it to the meeting place, and so forth. Because there was one wonderful story, when all the things for the social hour were in the trunk of my friend's car, and it was on the—she was one of the Rohm and Haas chemists—the car was parked in the parking lot just beyond the railroad tracks, and [there] was a train that was just stopped right across, so...

DOMUSH: Blocking [all of the]...

GALL: So they...and I think they dashed out and found the engineer and asked if he could move the train. But he looked at them like, you know. They ended up passing over the couplings between two cars all the stuff for the social hour.

DOMUSH: And the social hour was saved that day.

GALL: Yes. It was saved.

DOMUSH: That's funny. So it certainly seemed like you were not the only woman at the ACS local meetings...

GALL: No, no.

DOMUSH: ...[that] there were others.

GALL: Yes.

DOMUSH: But I'm going to assume that it was a minority.

GALL: A minority, definitely a minority. The efforts of getting the male chemists to bring their wives was mostly not successful. Very occasionally it was when we...the few times that I think we offered an alternative program after dinner that really interested [...] them. One of the ones was on jewelry, and another one was...you know, some of them were also attracting some of the men too. The jewelry one was fascinating. I can sort of remember that. What was one of the other ones? I don't remember. But there was at least two of them that—the second one I'll probably eventually remember—that were interesting enough to draw out the non-chemist women, generally the women. But, as I say, most of the time the meetings were definitely male.

DOMUSH: And those meetings were monthly? Or...

GALL: Yes.

DOMUSH: ...every couple months?

GALL: No, monthly. I think it was the third Thursday. It was every month except summertime.

DOMUSH: Oh, okay, kind of, on the academic calendar, even though it was mostly industrial people.

GALL: Yes.

DOMUSH: I guess people go away for vacations still.

GALL: Well, it was just...it just wasn't practical. They had [...] the meeting...the monthly meetings were often designed around something such as giving awards to high school students or one of the ones was for chemistry teachers. Then there was another one for the fifty-year members, fifty-year members of the ACS, and things like that. So <T: 30 min> the meetings were generally...they were organized every year by the chairman-elect of the section.

DOMUSH: Now, did you serve ever on any of the official roles in the local ACS?

GALL: I was the secretary for two times, and then, shall we say, they twisted my arm and got me to do it a third time. I said that was enough. I'm not a stenographer or anything like that, but I developed a speed writing type of thing. Then [...] the section had an official secretary who would then transcribe things, so that they went into the monthly *Catalyst* publication.

DOMUSH: Well, I imagine that you'd been going for so long, you probably knew a lot of the people very well. So it was probably easy to...it's always easier to take notes when someone is...

GALL: Oh, yes, yes.

DOMUSH: ...speaking, and you know that person, you know the way in which they speak.

GALL: As I say, we had a paid secretary of the section and she would, I'm sure, correct things that I didn't get right or just expand on them so that the minutes of the meeting were legible.

DOMUSH: Now, do you recall if the industrial people, your fellow chemists who were at the local ACS meetings, were these laboratory chemists like yourself, people in information sciences in the chemical industry, or were some of these people higher ups, some of the VPs [vice presidents] and CEO [chief executive officer]-types of the local chemical industry?

GALL: Well, I guess it's, shall we say, the usual answer: it depended. Sometimes there would be a reason to ask, specifically ask somebody higher up like a research director or something like that. I remember we had Ralph Connor—he was one of the research directors. There were other...I'm sure there were others. Then there were...I remember Arthur H. Thomas [Company], the company that supplied chemicals and equipment and things like that. They were very active in the section, and I think helped sponsor some of the social hours.

DOMUSH: Okay.

GALL: I think Thomas is still around here, aren't they?

WRONSKI: What's the question? I don't [know].

DOMUSH: I don't know either. I'm sorry.

GALL: Yeah.

DOMUSH: You said very briefly a couple of minutes ago, that you do think that you went out to California one time for one of the national ACS meetings. Did you regularly attend the national ACS meetings?

GALL: Yes, yes. That was because I was from the Philadelphia section. I was an elected counselor from the section. Whichever of the companies I worked for were supported by my efforts, and paid my way, and allowed me the time. Now I think they have a slightly different setup where possibly they would get reimbursed by the big main company, main society, for people's expenses. But at that time, it was you were on your own.

DOMUSH: Did you get to travel to many places around the country then? I mean, now the...

GALL: Yes I did...

DOMUSH: ...meetings are in many places.

GALL: ...both for the ACS and also for [...] the [American] Petroleum Institute, since I worked for them. So I got to be at places like Houston, [Texas], and, oh, various other places.

DOMUSH: I would imagine that the Petroleum Institute meetings, many of them are in Texas and maybe along the parts of the gulf coast and parts of the west coast where the big refineries are, if they're not...the meetings aren't here, of course <T: 35 min>.

GALL: Well, as I say there was...I know that was part of the thing that got me as...what was my position? I had some position that was why I would travel down to Houston or travel somewhere else.

DOMUSH: As part of the Petroleum Institute?

GALL: Yes.

DOMUSH: Okay. Now, was that something that you started doing early on, because you didn't mention that earlier? It hadn't come up yet, [...] the Petroleum Institute.

GALL: If I worked for Mobil, you know, you just automatically...you're petroleum, and you're automatically tied in with that. I guess that was part of it. I'll dig around somewhere up here and get some more information.

DOMUSH: When you went to the ACS meeting...I've talked with some other people. They said that when they first went to ACS meetings—and some of this was in the 1960s and the 1970s—they said that they used to go to the Women Chemists Committee lunches And that they were very small, and of course, over the years that they've been going, they've grown tremendously. Now at the Women's Chemists Committee lunches, of course, now they have breakfasts and brunches and lunches and things. But at the big lunch there's usually a couple hundred people there, couple hundred women. Some of the women I've spoken with said that

when they first started going, it was only a handful. When you were going to these ACS meetings as an elected counselor from the Philadelphia area, do you remember seeing many other women at these meetings, or do you remember if you were interested in them?

GALL: Well, I certainly went to the Women Chemists luncheons. There were always an adequate number of them. There wasn't...I mean, it wasn't just a little tableful of people. [...] And there was a speaker, [...] generally the one who had won the Garvan [Francis P. Garvan-John M. Olin] Medal. So I guess I [...] must have known a lot of the women there, not all of them, of course, but many of them. So it was not a little clique. It was a rather large group.

DOMUSH: Okay. A decent sized lunch.

GALL: Yes. Oh, yes.

DOMUSH: Okay. There were people that you saw, these were women that you saw regularly every year.

GALL: Oh, yes. Oh yes.

DOMUSH: Okay.

GALL: Some of the better [known] ones, that was Mary [L.] Good, was one of the better-known ones. I'll think of many of the others as life goes on.

DOMUSH: That would be great. Mary Good: we're lucky enough to have one of her oral histories...one of our oral histories is with her.

GALL: I hope so.

DOMUSH: Yes. It's a very good oral history.

GALL: Brilliant woman.

DOMUSH: Yes, very much so.

GALL: Yes, and also attractive, physically attractive.

DOMUSH: You know, I've only ever seen two pictures of her. We have just a couple of pictures of her in our collection, one from very early in her career and one from kind of the middle of her career. She, of course...she is very pretty, but it's just two pictures. So it's always funny at CHF because people do donate their pictures and things like that to us. The images that we get of people in our minds are just the pictures that they give us, you know, so I have very specific images of all of these chemists in my head. But they're just the photos in our collection. They're not real people, as we say, they're just photos.

Now, I know at some point you married John Gall...

GALL: That's right.

DOMUSH: ...who I believe was a Ph.D. chemist. Did you meet him through work or through ACS, or just...?

GALL: Through ACS.

DOMUSH: Okay.

GALL: Because we knew each other already. [...] You know, he was at most of the monthly meetings there, so I think.... He also was a...I think he was a counselor from the section. So I don't ever remember us connecting [at] the national meetings, but the local meetings, definitely. At some point, somebody said, did I know that he was a widower? <T: 40 min> I think this...maybe this got started at that point. I think I had been going out with another chemist, Jim Gessel, almost sounds like the right name...

DOMUSH: Okay.

GALL: ...who [...] moved—probably retired long ago—but moved then out to one of the companies in the Chicago, [Illinois], area. But, anyway, John, when we got together...[we] had chemistry as a bond, and also I guess general interest. He, shall we say, he got me out of doors, since he was very active in a local trail club.

DOMUSH: Oh, okay.

GALL: He just liked things like that.

DOMUSH: Now, where did he work?

GALL: He worked for Penn. While I was in...he started out at Pennsylvania Salt Manufacturing Company, which is down on the Delaware [River]. They became Pennsalt. Then they bought Wallace & Tiernan, and I guess maybe became Pennwalt. I think [...] after he left [that] then they all were, sort of, absorbed by a French company, whose name I don't remember.

DOMUSH: Interesting.

GALL: But he was at Pennwalt. He was...I don't know what. His field was fluorine chemistry, so [...] he was consulted often for his expertise in fluorine chemistry. He gave talks sometimes at the Chemical Society, the local Chemical Society meetings. I know he did a lot of traveling for his company, probably. I don't know exactly what the purpose was, but he was...I'm not absolutely certain what his position at Pennwalt was, but he was in charge of some section of the research.

DOMUSH: So you had this bond about chemistry.

GALL: [laughter] Yes.

DOMUSH: Not to play on words at all, "bonds." But you said that he was interested in hiking and things outside.

GALL: Yes. Well, [...] I think he [would], as I said, get me out of the house into the wilderness.

DOMUSH: The actual wilderness, not just going outside.

GALL: Yes. Well, among other things, he belonged to a hiking club that a friend of his had gotten him into. After he retired from Pennsalt, I think he felt sort of miscellaneous for a while. Then he taught chemistry part- or, maybe, full-time at what was then the Textile College, Philadelphia College of Textiles and Science [now Philadelphia University], which now has another name which sounds exactly [like] the Pharmacy College. They both sound identical, so I don't remember. Anyway, the friend of his there at the Textile College in the chemistry department there was a hiker, and he got John into [...] belonging to that hiking club. So the hiking club, which still exists, runs hikes, I guess, on Saturdays and Sundays—maybe not so much summer, but all the rest of the week. Sundays, of course, are advantageous because of Pennsylvania's blue laws.

DOMUSH: Oh.

GALL: In other words, no hunting.

DOMUSH: Right.

GALL: No hunting on Sunday.

DOMUSH: No. That's certainly...you don't run afoul of hunters while you're hiking.

GALL: Yeah. The awful thing right now is that most of the hiking clubs are, I guess, hoping to reverse the rifle <T: 45 min> groups: they're trying to get the restriction on Sunday hunting rules, so that people can go shoot you on Sundays.

DOMUSH: Interesting. Well, I don't want any hikers being...

GALL: No.

DOMUSH: ...hunted accidentally. You have to wear orange, the color of my folder.

GALL: [laughter] Anyway, so he was...I thought he was active enough with the local hiking club. He also got, I guess I should say, arm-twisted into being the one who...well, it was a long story. But anyway, he took over from somebody else who had been doing the work on the

Appalachian Trail in Pennsylvania. This person had been the one who had been...he and his wife had been the ones [...] running the work. Work means you have to buy...you have to keep monitoring the trail to make sure that it's open, trees haven't fallen down on it, and the signs are still visible and things like that. Well apparently, this couple who was...he was being transferred by the service down to Georgia, so he could no longer do it. So then they had great discussions at one of the meetings of, you know, would they just give it up and hand it back to, I guess, the big AT, Appalachian Trail. Now the Appalachian Trail Conservancy, [they] used to be...they added "Conservancy" on; they didn't use [to be] that before. A man at the meeting was a very vocal supporter of the trail, and he was a very active hiker (I can't actually remember his name). But, anyway, at that time, [he was] one of the oldest people who had ever hiked the trail. So anyway, they decided...John offered to share the responsibility with somebody else. I don't know who the other person was. Then that got the two of us involved.

DOMUSH: Did you take to the hiking easily? Is it something that you enjoyed? I mean, yesterday you spoke about how, when you were little, you would go to Holderness, New Hampshire, and you would spend time with your grandmother kind of hiking around and looking at all the outdoorsy types of things. But, of course, as time goes on and one gets busy, things like that often fall by the wayside. So was it something that you were excited to try again?

GALL: Oh, yes. It was nice to be part of what [we] might say is a very important, major project, the Appalachian Trail from Georgia to Katahdin in Maine. [...] You know, you sort of feel almost privileged to be part of something as continuous and ongoing as that.

DOMUSH: Did you get to hike other parts of it, other than just the Pennsylvania parts?

GALL: Oh, yes. Well, yes, when we were down south, anytime we were somewhere near it, we would hike a part of it. So we always claimed that we, maybe, if we put all of ours together, maybe we hiked the whole thing. But I think that was a thing. There's parts of New Hampshire that we've done and parts of Maine we've done.

DOMUSH: Did you do the Katahdin part in Maine?

GALL: No, we never got to Katahdin.

DOMUSH: Never got to Katahdin. I've heard that that's beautiful. But I've heard that that's...

GALL: Yes.

DOMUSH: ...I've heard it's a difficult hike.

WRONSKI: We were talking on the way over though that you climbed Mount Washington and...

GALL: Yeah. Well, the trail goes through Hanover [New Hampshire], but it does not go up over Mount Washington. But Mount Washington is something that I have attacked always [by] car, cog railway, and foot.

DOMUSH: Wow.

GALL: I've only hiked up it once.

DOMUSH: I've not done any of those things. I hiked one of the other presidential [mountains]. I think it was [Mount] Adams, but...

GALL: Well, that's pretty high.

DOMUSH: It was. That was my one attempt at hiking <**T: 50 min**>. [laughter]

GALL: Well, one of the ones that I really liked was the one he said he hiked, [Mount] Lafayette.

DOMUSH: Okay.

GALL: And Lafayette was also on the group, so that if you go up by the flume and get on the ridge trail that goes along, you end up at Lafayette.

DOMUSH: Now, did you ever get to do any hiking, maybe on the west coast or other parts of the country?

GALL: Oh, when we were out there, we would find something. So we've done a very short thing of the...what's it called? Anyway, the one that goes...the thing that corresponds to the Appalachian Trail in the west coast.

DOMUSH: The Pacific Coast Trail, the Pacific Crest Trail?

GALL: Yes.

DOMUSH: One of those perhaps.

GALL: Something like that.

DOMUSH: Something like that.

GALL: I think it's maybe the Crest Trail, but I'm not sure. Anyway...

DOMUSH: It's all supposed to be so beautiful.

GALL: But parts of it, I'm sure, are desert by the time you get down to the southern parts of the Appalachians...of the...

DOMUSH: Of the Pacific one .

GALL: Of the Rockies [Rocky Mountains].

DOMUSH: I imagine that there are mountainous and...

GALL: Those are Sierra, probably Sierra Nevadas.

DOMUSH: Yeah. Well, that sounds very fun. Perhaps it would be a good time for us to take a break. We've been talking for almost an hour. It seems like a good time to take a pause.

GALL: Good idea.

[END OF AUDIO, FILE 2.1]

DOMUSH: Okay, returning after a...

GALL: Now, where were we?

DOMUSH: ...after a break. Well, we've been discussing hiking and the Appalachian Trail. If it's okay, I want to leave the beautiful world of hiking. We can come back to it, if you so desire. But I wanted to talk a little bit about women in chemistry, and women in science, in general. You, of course, have been a woman in chemistry and woman in science for a long time.

GALL: Right.

DOMUSH: And I assume that you've seen some changes; perhaps it's a change for the better that you've seen more women entering the field, but perhaps it's not the case. I'm just curious if you can talk a little bit about some of the changes that you've seen related to women in chemistry and women in science.

GALL: Well, my feeling is that certainly if judged by, say, the attendance of the national ACS meetings, there are a lot of them, a lot more. I think the bigger names like Mary Good and so forth are more helpful in bringing people in that might not be active otherwise. Mostly, I'm not saying active as a chemist in industry, but I'm saying just active as a chemist in the society. There have been a lot of problems with women chemists in academics. [...] They claim they're not getting tenure, and there have been certain actual lawsuits on this, where I'm not sure if that helps, because, as I mentioned before, I felt in a way that I was lucky that I was too unfocused or, shall we say, lazy. I did not struggle to get a Ph.D. I don't think I had the...I certainly don't think I had the stamina or the real drive that you have to have to do that.

DOMUSH: [...] Did you ever consider trying for a Ph.D.?

GALL: No. The only thing I considered...well, actually two things [...] while I was still in college. I actually thought of medical school. I told you that. Then I decided that was just too much of an effort. It was too much prejudice and too difficult. So I guess I should not have given up, because one of my classmates who had a, shall we say, a different handicap than just being a woman. She also was black. But she was, shall we say, a fair-skinned black [who] could have passed [for a white woman]. The only reason she didn't is when she got to college, she was in my class and lived therefore in the same dormitory. She made certain, and when her mother came in, they made certain that we all, all of her classmates, knew that she was not just a white person of color. She was a black person, which I thought was...I don't think anybody paid any particular attention. They accepted this, and that was just fact. I thought it was interesting that she made certain ahead...now, she was the one who really must have had quite a struggle, because after she graduated from Vassar, she went to medical school and became a doctor. I'm not sure what she's doing now. By now she's probably retired. But this should have been a big example of it.

The only other thing that I really did think about was possibly going more into bacteriology. But I don't know. Chemistry, I guess, seemed better...

DOMUSH: Well and as you said, that if the decision to not get a Ph.D., if that decision was yours because you didn't necessarily have the drive to do it, I mean it's <T: 05 min> ...

GALL: And I think...don't you think that...

DOMUSH: ...very challenging. You need...

GALL: ...in order to do that you have to select a professor as your mentor and drive and things like that. I guess I wasn't sure. I don't think at that time that Vassar awarded Ph.D.s, so I'd have to go into another college.

DOMUSH: Yes.

GALL: So, they may now, but they didn't at that time.

DOMUSH: So many of the peers that you've talked about, of course, you were in industry, and you said that many of the people in the local ACS were in industry. So the other women that you talked about, the other female chemists also were in industry. Did you ever have any women in chemistry friends who were in academia? As you said, the women in academia have tended to complain a little bit more vocally ...

GALL: Yes, more.

DOMUSH: Perhaps.

GALL: I was thinking...I guess at the moment all I can think of is the industrial ones, one of the Ph.D. chemist friends of mine. She left Rohm and Haas and went and formed with another male chemist—was it a chemist? I'm not sure—formed a company (reasonably successful) on water treatment. But because one of the projects that she worked on at Rohm and Haas was ion exchange resonance [...] I suspect she really did well, but even then it was not easy sailing until she proved she was more competent than the other people.

DOMUSH: Right. Do you have a sense of what challenges women still need to find ways of overcoming? Or do you think that perhaps today, in 2012, we've reached high enough numbers that maybe we shouldn't necessarily be concerned with women in science and women in chemistry, but just make sure that there are enough people in chemistry and science?

GALL: I think the latter is probably more correct. I think the women in academia are the ones who have more problems. This is what I read. You don't read about the people in industry who might be having problems. But getting tenure apparently is a real challenge. [What was it?] One of the western colleges, I guess, didn't she sue the school for...?

DOMUSH: There was a lawsuit [*Arkin v. University of Oregon*], I believe, at the University of Oregon a number of years ago.

GALL: Yes. I don't know the outcome of that, but all I know is that reading about it, and thinking, "Oh, that poor person."

DOMUSH: Right. As you mentioned, I'm not necessarily sure that things like lawsuits help to solve the problem.

GALL: Yes. I think that tends to be more prejudicial than helpful. But not having had to even consider something like that...

DOMUSH: Well, and it sounds, from the things that you've talked about yesterday and today, that the people that you worked with were perfectly fine with you being a woman in chemistry [...].

GALL: Well, I think once I got to Mobil and in the information thing, I was their help. I was somebody that they came to for help. I think that the man who was my boss there, I think he sort of tolerated me. I'm a pusher, not too blatant, but I'm a quiet pusher. So I made certain that I got that done or this position or something. But my <T: 10 min> position at Mobil was really, shall we say, it certainly boosted my ego, because people came to get help, and I was the source of giving them help. And also, because Mobil was a big company, I would get calls from a branch, say, in South Africa or somewhere in Indonesia for help. Or they'd send a letter for something that they needed. So I think they didn't consider me as a woman. I was the person who answered their questions.

DOMUSH: What about before you got to Mobil? Were there situations, maybe at Rohm and Haas or even earlier, where you felt that you were being treated differently because you were a woman?

GALL: Well, probably somewhat at Rohm and Haas. I don't think I was at my relatively brief time at McNeil Labs. There [were] a couple of other women too, but I think if I ran into any prejudice at all, it was probably at McNeil.

DOMUSH: At McNeil?

GALL: Or was I...did I just contradict myself? [laughter]

DOMUSH: I think you might have.

GALL: Yes. No, I guess it was maybe at the beginning parts of Rohm and Haas. I think maybe I wasn't...I probably wasn't a good enough chemist to continue in the position that they had initially put me in. I think [that] is, in part, why I got into the information end of it, which is a help to me.

DOMUSH: Yes.

GALL: I was not...some people say, “Well, you were a librarian.” Well, I’m rather firm about that. I was not a librarian.

DOMUSH: No. No. Because the things that you needed to do in the information sciences, you had to rely on all of your technical knowledge. You couldn’t have just stepped into that from library school. It’s something very different.

GALL: Yes. One time—I don’t know where I was working...I don’t know where it was—but I decided I should take a course at Drexel [University] in library science or information. Well, I lasted...I don’t remember it [at] all, and besides it was boring. So I left. Way, way back when, when I was at Hayden, I used to go by bus and subway to Brooklyn Polytechnic [now Polytechnic Institute of New York University] to take some courses. It must have been polymer science courses taught by a well-known chemist. I think I finally dropped out, because I thought he was not a very good teacher.

DOMUSH: Do you recall the name of that chemist?

GALL: I should. Eventually I would. I’ve seen him other...had seen him since then [in some] other place, but never brought up that. A well-known polymer chemist, I may recall his name.

DOMUSH: Was it by any chance Herman [F.] Mark? I know he was at...

GALL: I guess I never thought about that. Maybe it was Herman Mark.

DOMUSH: I know that he was at Brooklyn Polytechnic for a while.

GALL: It’s likely it was Herman.

DOMUSH: That’s interesting, because many of the people in our oral history collection took classes at Brooklyn Polytechnic either during World War II or right after World War II. Of course, most of them [were] in chemistry and then specializing in polymer research. So that’s interesting that you were there as well, and no idea. You probably ran into some other people in our collection without even knowing that.

GALL: It must have been Herman Mark, because I know it was Brooklyn Poly, and it was definitely a well-known...

DOMUSH: Yeah. It's funny always <T: 15 min>, some of the biggest names in the field, they're renowned as maybe speakers or, of course, for research, but they're not always the best teachers.

GALL: No. Teaching is a real challenge. I don't think you just can be a good something or other to be a good teacher.

DOMUSH: No. It's a real skill, all on its own, to be a good teacher.

GALL: Yes.

DOMUSH: And very few scientists I think are blessed with having skill sets in both teaching and in...

GALL: Yes, I think the professor at Vassar was excellent. I regret to say I can't remember her name.

DOMUSH: Was it a woman, your professor at Vassar?

GALL: Yes, it was a woman.

DOMUSH: Were most of your professors at Vassar women?

GALL: No. It was at least...maybe he succeeded her. There was a man, I can almost picture him, and I can't quite remember his name. But no, they weren't all women.

DOMUSH: Some of the other women that I've spoken with, a number of them went to Smith [College]. They were there—let's see if I can recall offhand—probably in the 1960s. They said it's interesting looking back on it now, because everyone that went there loves it, and has these wonderful stories and wonderful recollections. But they said that they're surprised looking back

because almost of their professors were men. When they did have a professor that was a woman, even if she was a Ph.D., they always called her Miss, Miss So-and-So.

GALL: Oh, that sounds...

DOMUSH: She was never Professor, she was never Doctor, whereas all the male professors were. They said they never thought about it until recently when they recollecting these types of things.

GALL: Yes. Well, my stepfather taught at Amherst, a professor there. I think he started out teaching Latin and Greek, and then I think the head of the College said he should really do something different, because that was really not...no longer the preferred language to concentrate on. So he went into something, I think, like, something that we would call political science. Anyway, so.

DOMUSH: That's interesting.

GALL: Yes.

DOMUSH: Now, when your mother got remarried and lived up in the Amherst area, did you spend much time up there? [Because] that's a beautiful area.

GALL: Yes. Well, sort of, a yes and no. Vacations or some holidays, I probably was there. Yes.

DOMUSH: Okay. I believe, I think I've heard there's beautiful hiking up there.

GALL: Oh, it is beautiful. I think I was not so much of an outdoor person at that point.

DOMUSH: Right.

GALL: I hadn't been introduced to the outdoors.

DOMUSH: Reintroduced. You were introduced when you were young by your grandmother.

GALL: Yes. Oh, yes.

DOMUSH: Let us not forget that. Again, just turning back to the issues of women in chemistry and women in science, you said very briefly that perhaps we should be focusing more of our energies on making sure that there are simply enough people to do chemistry and to do science. Do you have any sense for how we can encourage more people to be doing chemistry and science?

GALL: Well, I think from my experience, I would say that the more inspired professors are the ones who help, [the ones] who do that. You know, a dull professor will kill whatever subject they're teaching. I think Vassar and the ones I had there, and I think back in my high school, that it was an inspiration. I don't think any...there was no, I'm sure there were no other girls there who went on to chemistry <**T: 20 min**>. In fact, the only other person I can remember probably in his class was my friend who lived right across the street—male.

DOMUSH: It's interesting, because the question of how we get more people into science, if the answer is better teachers, more inspiring teachers, of course, then the next question is...

GALL: How?

DOMUSH: ...how do we get that? But perhaps that's a question for a different day. But I think that you're right. As you said, you took classes at Brooklyn Polytechnic, and it wasn't really worth continuing because the professor wasn't that interesting.

GALL: No, no.

DOMUSH: It makes the subject not that interesting.

GALL: The subject was probably interesting, but he did not inspire us, apparently.

DOMUSH: Do you recall if there were any other women taking classes at Brooklyn Poly?

GALL: Hmm. Maybe the woman who was my roommate, she may have gone with me to that, because I think she went on...I think eventually she left Hayden and went somewhere in the Midwest to school. I think she ended up getting a Ph.D.

DOMUSH: Oh, wow. That's good.

GALL: I can't think...I should be able to think of the name. I can see her. She was very pretty.

DOMUSH: Well, there's plenty of time, if you think of their names, we can always fill them in later. That's always the curse of the recording devices: people immediately forget names. It happens to everyone.

GALL: I think it's too bad, the fact that we can picture the person in our mind. We can't project the picture. Maybe somebody would remember who the person is.

DOMUSH: Maybe. I'm sure that technology is only a number of years away though.

GALL: It won't help me, I'm afraid.

DOMUSH: It's amazing though how much the technology changes. I mean, just...of course, we've mentioned here and there about the computers that you've seen change and evolve over the course of your career.

I think in many ways, I am out of questions. So are there things that we didn't talk about that I should have asked you about? Of course, Mike is the other person sitting in the room, if there's anything that you wanted to ask about that didn't come up, this is a good time. But if there's anything we didn't talk about that we should have, please...

GALL: At the moment, I can't think of anything. The thing I was thinking about is one of my hospitalizations. I had been working, as I told you, at Penn at the nutrition laboratory, I guess it was really called. I don't know what it was called. Anyway, as far as...

DOMUSH: Right, when you were doing the Liver Local.

GALL: Yeah.

DOMUSH: The Liver Local, that was at Penn, right?

GALL: Yes.

DOMUSH: Yes.

GALL: But there were a lot of lovely stories from there, all involving some of the men. But I told you one about, one of the...I.S. or the man who told...

DOMUSH: The one about Ravdin and Rhoads.

GALL: Yes, who told my friend that she couldn't have a raise, because she lived at home. She didn't need a raise. [...] But there was no...I don't think there was any discrimination against me; but I wasn't asking for raises, maybe if I had been.... I don't think they [...] were necessarily discriminating against her when she asked for a raise. They gave her that flip answer. I think she just went on back to whatever she had been doing before. And I guess one tends to maybe accept things at a certain level of stress, maybe. You tend not to fight <T: 25 min>. I guess that wasn't worth...she didn't think it was worth fighting.

DOMUSH: It's true, though. I think people [...] become very accustomed to things and they don't want to fight. They don't want to...

GALL: They don't want to rock the boat.

DOMUSH: Exactly, exactly. That's exactly what I was thinking.

WRONSKI: I don't necessarily have a question, but I had the pleasure of spending time with you. One thing that impresses me about you is that, first of all, you have a great sense of humor. You always see the humor in things, but you also have a very inquisitive nature, whether it's history or flowers, or that, as you're traveling, you noticed the architecture of the building. You're curious when you meet somebody about what they are. I don't know if it's a philosophy...I also know that you're obviously generous to the Chemical Heritage Foundation, that you're a charitable person with your church and an active volunteer. I don't know if you

want to talk about that. But I kind of like your approach; you have some wisdom in your years about how you approach life. It seems like you're a happy person. I don't know if some of the things about your life in science and your inquisitive nature all combine in some way to...

GALL: Well, possibly, but I guess most of it is, you know, don't fight what you can't change is maybe part of it. [...] And I make a point of not being upset or worried about things that aren't really important enough to bother me. I mean, there's one thing that sometime within the measurable future, I guess I will probably move out of a single room, which is what I now occupy into what they call a winter suite, which will be a living room, bedroom, and a small utility kitchen, and of course a bathroom. People keep asking me, "When is it going to happen?" Well, it will happen, but, I mean, why upset myself to worry about it. Somebody will come and tell me. I can't see any point in...they keep asking. They keep saying, "Well, why don't you push?" My feeling is all it does is really...all it would do is upset me, and I don't think it would [get me] a good answer, or it might be antagonistic. But I guess my feeling is take life as it comes.

WRONSKI: What about your...you have [...] an inquisitive nature. You know, [...] you read the paper every day. You're up on the current events and you're a curious person.

GALL: Yes. Well, one of the things that I do, and I used to say to people, "I read the newspaper with scissors," because I cut out things that I then send to my nephew or my sister-in-law, my financial person, or somebody else that I know well. Actually, Kimball [Leiser] is one of them that I think would interest them. So that's why I [say I] read. My philosophy is I have the scissors, and they have a wastebasket.

And also I belong to a book group that discuss...well, I belong to two different types of book groups. One of which is to select books for the library. We have, at the moment, at Waverly, there are two libraries. There is a fiction library and a nonfiction library. They are physically at opposite ends of the first floor. But my interest seems to focus on nonfiction. I don't know whether I'm...they always claim that I should branch out more. I seem to be more interested in real life, maybe. I don't know.

WRONSKI: My other <T: 30 min>...you're a charitable person, and I don't know, [...] in terms of your interests in environmental issues, your service on ACS, as a volunteer, your active involvement with the church, you seem to be very external in thinking about our world and how it functions. And even talking with a fellow, I notice you were very curious about what he does and what is...so I'm curious, how does that shape? I mean [how does] that shape you as a person, giving back, I guess would be...

GALL: Yeah. People are interesting. People who...I know my sister-in-law says that she doesn't know what to talk about to a stranger. I said, "Just ask them anything." I find you get anybody to talk about themselves or about what interests them. You don't have to do anything more than give them a couple of questions and off they go. So I think that's interesting. It's interesting to me what they're doing. Most of them, most people, love to talk.

DOMUSH: That's very true. As an oral historian, I agree.

GALL: And they don't always have to be prodded, sometimes just a little push will do enough.

DOMUSH: Well, I think that sounds like an excellent place to stop. We've certainly talked for a long time. We've certainly gotten a very complete picture of your life and your experiences. I know Mike and I both really appreciate all the time that you've given us. I think this will make an excellent contribution to the oral history collection and the women in chemistry collection. We just really thank you so much for all that you've given us.

GALL: Thank you. I hope that maybe this encourages, maybe, more women. I wish I thought it would, I'm not sure.

DOMUSH: I think one of the things that we're trying to do in the Oral History Program is figure out ways that we can get aspects of the oral histories to teachers and students. We think that there are a lot of stories, whether they be the women in chemistry stories, or some of the other stories in the collection, that can serve to inspire students. We just have to figure out the best way to get them, to package them, and get them to [those] students. So I certainly think that it will serve that purpose.

GALL: I think that's probably the best plan that you've come up with. As I say, most people are curious about other people, so...

DOMUSH: I agree [...].

[END OF AUDIO, FILE 2.2]

[END OF INTERVIEW]

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