eclat

Tom Allen Oral History Interview, September 1, 2015

Title"A Life of Applied Imagination"

Date September 1, 2015

Location

Valley Library, Oregon State University.

Summary

In the interview, Allen discusses his family background - including his father's stint as a graduate student in entomology at Oregon Agricultural College - his upbringing in Madison, Wisconsin, and the early experiences that influenced his interests in plants and art. From there he describes his undergraduate years at Wisconsin, his Ph.D. studies at the University of California - Davis, his early work with electron microscopes, and his continuing pursuits as an artist.

Allen next recalls his conscription into military service during the Korean War and outlines war work that he conducted on the implementation of plant viruses as a mechanism of biological warfare. He then details his years in private industry at Stauffer Chemical Company and the circumstances that led to his joining the Botany department at Oregon State University.

In reflecting on his OSU career, Allen speaks of his contacts with several notable colleagues, including Roy Young and Helen Gilkey. He also comments on his initial impressions of the community and the university; his acquisition of an electron microscope and establishment of the Electron Microscope Lab; his specific work on plant viruses, particularly those that affect lilies; his collaborations with the Extension Service, Experiment Stations, OSU Plant Clinic, and colleagues around the world; and his creation and teaching of an honors course titled "Applied Imagination: Creativity in Art and Science."

The interview then turns its attention to Allen's work as an artist and champion of the arts. In this, he touches upon the progression of his own artwork, recounts the creation of the Corvallis Art Center and the Watercolor Society of Oregon, and shares his memories of becoming an artist-in-residence for the College of Agriculture. Allen likewise details the founding and forward evolution of OSU's Art About Agriculture travelling exhibit and competition.

As the session winds up, Allen describes some of his activities in retirement, including his involvement with Rotary and his involvement with the Sister Cities Program. The interview concludes with thoughts on change at OSU.

Interviewee

Tom Allen

Interviewers

Chris Petersen, Karl McCreary

Website

http://scarc.library.oregonstate.edu/oh150/allen/

Transcript

Chris Petersen: OK, today is September 1st, 2015 and we are with Tom Allen, who is a professor emeritus of botany and who was also deeply involved with art in the university and the community. And we're going to talk about all of that, but I'd like to begin a discussion of your upbringing in Madison.

Tom Allen: Oh, Madison. Yeah, well, I can give you just a little bit before I started. My dad got his master's here in entomology in '29.

CP: Here at-

TA: Oregon Agricultural College.

CP: Oh wow. Well tell me about that.

TA: When he got started, it turned to Oregon State College by then.

CP: Did he ever talk about that experience?

TA: Oh yeah. He and his brother had orange orchards, orange groves, outside of Los Angeles, and they came up here to learn more about agriculture, especially managing the insects part of it. Dad passed but his brother flunked, and he went back and bought himself an old tri-motor airplane, and put gas pumps on it in north Hollywood and became a millionaire. He bought a bunch of land in the San Fernando Valley. But my dad did not become a millionaire when educated at OSU; he got his master's in '29.

CP: In entomology, you said?

TA: Entomology, yeah.

CP: Did he ever talk about his experience here in Corvallis?

TA: Oh yeah. He used to – the farmers were worried that the pheasants are eating all the seed. And so his thesis was on what are the pheasants eating? And as a grad student he had to shoot pheasants and eat them. But he would dissect them and see what they were eating, and they were eating mainly insects and not seeds, so the pheasants got an ok to go. His brother was a good shot, but he left. I don't know how good a shot Dad was, but he had a lot of pheasant.

CP: So he moved to Madison after that?

TA: Yeah, after '29. He wanted to stay in Oregon, but in '29 he didn't have any place to work in Oregon. So he went back to an experiment station in Wisconsin called Gays Mills, and he stayed there and finally got a doctor's degree in entomology, and he ended up being chairman of the Department of Entomology at the University of Wisconsin. But I was born in '31. He got that back in '29 here, and in '31 I was born in Madison.

CP: Tell me a bit about your upbringing in Madison and community life there for you.

TA: Oh, community life. We lived a block from the woods and I really enjoyed the woods. I'd go out in the woods and play in the woods, and we'd build treehouses and we really enjoyed Madison. And I enjoyed the woods, I enjoyed nature, I enjoyed being outside. I had a lot of friends there and we'd go out and we'd build, like I said, treehouses. One fellow fell out of a treehouse about thirty feet up, but luckily he hit his head and didn't hurt himself. [laughs] He wasn't ever too sharp. [laughs]

But I was interested in all the plants and this is how I ended up later getting into botany at the University of Wisconsin, because I could find out more about plants.

CP: So that interest was spurred by these trips into the woods?

TA: Yeah, spending my time in the woods. The woods is gone now, it's all houses.

CP: How about art? When did that begin for you?

TA: In first grade I used to bring kids back and draw pictures of Superman for them. I've always drawn. We don't know why, I can't trace that in the family. In third grade my teacher called my mother in, which I heard about later, and it was a spelling test and she said, "Tom was scribbling all over his spelling test." So she showed it to me and showed it to my mother, and my mother said, "don't you see what he's doing?" Behind each word, I'd spelled it, and then I had a lot of extra time to try and illustrate the word, behind each word, and this teacher didn't understand that. I was scribbling all over the spelling test. She hadn't figured out, "oh, look what he's done." So that's some of my early work.

In the third grade I also had my first watercolor show out in the hallway, because I started painting watercolors by then. I picked watercolors because they're fast. A little harder to control, but once you paint a while you can do them. So I enjoyed that. And they were cheaper than other things.

[0:05:15]

CP: So that impulse to create art was always inside of you, as far as you can remember?

TA: Yeah, it's always been there, I don't know why.

CP: And this was something that your parents supported?

TA: Yeah, although my dad was kind of worried that he would have to support me. [laughs] I got instilled in me a fear of being a starving artist. Of course, when he was going to grad school, they were sending money off to his folks on the West Coast and her folks on the West Coast, besides this small allotment of graduate support he got. So they were very conscious about money. They didn't need anybody else's support.

CP: What was school like for you growing up?

TA: Oh, it was very enjoyable. I enjoyed it. I enjoyed going down the ice slides after school and mother wondering where I was, sliding down the ice slides down the hill after school. But I really enjoyed school and especially if we had some art or drawing.

CP: The ice slides.

TA: Yeah.

CP: We don't have those here.

TA: Yeah, in Madison, boy, one year I was there and it rained on top of the snow and it froze, so you could put on ice skates and skate all over any place, on top of the snow that was frozen. So that was neat. So we did a lot of things like that back then.

CP: Did you always expect to go to college?

TA: Yeah. I was expected – have to go to college. So I went to the University of Wisconsin because I could live at home and it didn't cost me as much. They weren't offering me a lot of money to support my education, so I went there. And being afraid of being a starving artist, I didn't major in art. I majored in botany because that was all about plants, and I enjoyed plants. Out in the woods you would learn about plants and then here you found out a lot more about plants.

Then I worked with a professor in plant pathology in Agriculture, and he worked with diseases of plants. So I thought, "oh my, plants have diseases!" That was interesting. Some graduate students there, when I was washing dishes in the Botany department, they were looking for jobs and it wasn't too good for a Ph.D. botanist, it was a hard time to find a job. And some of them were hanging around there a long time, looking. I heard then of plant pathology and I figured, "oh that's nice. Let's work with plant diseases." It's something I could handle.

CP: You minored in chemistry and English as well, is that correct?

TA: Yeah, that's right. I liked English and chemistry, kind of everything's based on that.

CP: Did you have the time to create art still, as an undergraduate?

TA: Oh yeah, I created art and I took – as an undergraduate at the University of Wisconsin – I took art as an elective, two years of art. They wanted to keep all my paintings there – there were a couple of them – and I said, "no, I want to take them." I entered them in some shows in San Francisco and they liked them, so that was good. But I really enjoyed the art.

CP: I'm interested in knowing a little bit more too about the broader environment at the University of Wisconsin at this time. This is not too long after World War II, were there a lot of GI's there?

TA: Oh yeah. Well, we had GI's. So in chemistry for instance, that was really competitive, because you had GI's who were older than we were, and they were hard to beat in chemistry. Most of them were very serious and they were more knowledgeable than we were. It was interesting competing against them.

CP: How did you make the decision to continue your studies after Wisconsin? You went to Davis and you went immediately into a Ph.D. program.

TA: Yeah, at Wisconsin I decided I'd like to go into plant diseases, because I worked in the field with them with a professor in Agronomy. And it kind of fit in with botany and plant pathology as I'd work with these diseases, so I applied. They wanted me to stay at the University of Wisconsin to do graduate work, but I started kindergarten in Madison and that didn't appeal to me.

So I wrote to the University of California-Berkeley, and then I got a response back from the University of California-Davis. Which I'd never heard of – "Davis, I don't know, where's Davis?" They offered me a scholarship, a fellowship, to go up there, so I went out there. In the meantime, I'd gone to ROTC and every six months they'd order me in – this was during the Korean War. And every six months they'd order me in and I would ask for a delay of call, and about a month before I was supposed to go in, they'd give me a delay for another six months. So that's how I went through graduate school.

[0:10:57]

CP: What was the adjustment like for you, moving to California?

TA: Oh boy. Well, the first thing I did, I came into our Department of Plant Pathology and the head there – and I had my coat and suit on and tie – and he looks at me, "what are you doing? This is California. You're supposed to have a nice short sleeve shirt and forget about all this other stuff." So I had to adjust that way, which was alright.

CP: It was a more relaxed environment.

TA: Oh it really was. They were very friendly, very nice. And I got into graduate work, I had to use an electron microscope – they didn't have any at Davis – to see a virus, and the viruses were new, so I decided to go look for viruses. So I went down to use the electron microscopes at Berkeley. So I went from Berkeley to Davis and back and forth. I did end up doing some work at Berkeley.

CP: Was that your first time using an electron microscope?

TA: Yep. It's very visual and I really liked that, I was very visual. Here you could actually see viruses and see things, and that was nice. That worked right in with my art. In fact, I would take some pictures, not of the virus but of the cracked films, if some of them had a nice design. So I've got some of those photos still with me.

CP: So your research was on barley yellow dwarf virus, is that correct?

TA: Yeah.

CP: And how did you identify that as something to study?

TA: Well, it was a virus that was a serious virus out there; barley would just get all yellow and die. So we had to identify it and get around it if we could. So we had a plant breeder, he had some resistance to barley yellow dwarf, but I found the virus in his resistant plants. He didn't change his publication.

So then pretty much all my life, of university life, I've been trying to get virus-free plants, starting with the barley yellow dwarf. Barley yellow dwarf is different from humans; when you get a plant that's infected, you can tell because it's yellow and it's small. You can pull it out because aphids are attracted to yellow, and they go feed on that, and they go feed on healthy plants and transmit the virus – the aphids are transmitting it. So we can pull them out. Now we can't do that with people, so it was a little handier with plants. [laughs]

CP: Did you have a mentor during this time?

TA: Oh, I had major profs that were very good. My major prof was gone most of the time, so I got another one who was Dr. Hewitt who worked with grapes, a very kind person, really very supportive and helpful.

CP: I would imagine that you continued to make art during this time period as well.

TA: Oh yeah. They had a picnic day at Davis and I had to make all the signs for the department and illustrate what was happening, so when people come and find out things they can see it in cartoons – most of them were cartoons. We had a lot of fun. So I did that and the department still has a number of my paintings and publications. Other people gave talks, they'd tell me what they wanted to talk about and I'd give them an illustration, usually with a little humor in it. The talks went over big.

[0:14:55]

CP: Wow, that's interesting.

TA: Yeah, so I was always doing something like that in combining art and science.

CP: For your own personal projects, were you mostly doing watercolors still? Or were you branching out into other media?

TA: I did watercolors. I started watercolors because they're fast and not a big problem to set up for or clean up after, like oils. But I just got hooked by watercolors because they're so fresh and free. The electron microscope, I had to work with things I couldn't see, because if you could see it you couldn't see it with an electron microscope, it was too thick, electrons had to go through it. So I decided watercolor was a freedom from the close work, so my watercolors were nice.

I tell people about watercolors, I say, "one thing about watercolors is it's like a teenager, you can tell it what to do but it's going to do what it wants to anyway." And sometimes that works out good in watercolors. [laughs]

CP: Did you do any teaching at Davis?

TA: Yeah, I always taught. I was a research assistant, but I taught. We had a professor that came up from Berkeley, but half the time he couldn't come. So I was a teaching assistant while I was a research assistant, so I would teach the course, help him teach about half the time.

CP: Was that something that came pretty naturally to you?

TA: Oh yeah. It's something I really enjoyed. I enjoyed students. I enjoy things that are creative, whether it's in science or art, so it was pretty exciting watching kids learn. And really those that get excited about something, you can just see it in them and that was a real pleasure for me.

CP: You completed your doctorate and you were eventually called into military service, it sounds like. Can you tell me about that time period?

TA: Oh yeah. I got out of my doctorate and – during my doctorate, every six months, they'd call me in – and finally, after three years, then I got the doctorate and then they had to promote me because I'd been three years since my second

lieutenant. So I was a first lieutenant, so I went in as a first lieutenant, which you're supposed to know something about the military if you're a first lieutenant. So one of the first things they had me in charge of was one of the parades. That's the last time, I think, they had me in charge of one of the parades. "Scooch over to the right!" [laughs] If they didn't go to the right spot, I didn't know how to change them.

CP: You mostly did scientific research though, it sounds like.

TA: Yeah, I was in the research camp and there was a company captain that didn't like me very well, because I was kind of informal, I wasn't marching along with all of the rest of them, I was at the research lab. So he'd call me in and tell me how bad I was and what I was doing, and by that time I had learned you don't argue with a senior officer. So I'd say, "yes, sir. Oh yes, sir. Yes, sir." The more times I'd say, "yes, sir," the madder he'd get. Then I went back to my laboratory and talked to our colonel and told him what happened, and the captain never bothered me again. So you learn how to operate without irritating people – let the colonel take care of him.

CP: What types of projects were you working on at this time?

TA: Well, at that time, we were – most of the stuff has been declassified by now, thank goodness, so you can talk about it – we were trying to figure out how to eliminate crops in China at that time, rice crops. Well, if you study it you found out if you plant at all different times of year, there's no way you can get a general thing to eliminate the rice crops. I was in the biological part of it, none of the diseases were really going to work. While I was doing it, I found a virus inhibitor, where I got a patent on the virus inhibitor at the same time. So that worked pretty good, but the Army really didn't appreciate that as much as if I could figure out somehow to kill all the rice. So that's when they ended up with the Agent Orange, because here's a chemical that could kill things at any time. So they gave up the biological control of crops.

CP: So you were essentially trying to find a virus that was going to kill things, but you found something that inhibits viruses.

TA: Yeah, right. That wasn't approved really, but it got patented, so that was nice.

CP: So you were in the service for two years and in '58 that ended. How did that come about?

[0:20:00]

TA: Well, I was in the service, but when I first went in the service – I graduated in '53 – the Korean War was over. So I didn't have to go overseas, so I went to the biological research labs there. Biological warfare labs, they called them.

CP: So by '58 you had just fulfilled the terms of your obligation?

TA: Yeah.

CP: And you went from there into the private sector for four years?

TA: Yeah, I went to Stauffer Chemical Company on the West Coast, below San Francisco, beautiful area. And they wanted me in there for research and they said, "well, if you work real hard, you can be head of a section." Well, it took me a day. They didn't want to pay me that much, they were hiring for the head of the section, but I didn't know it. I had also gone down to UC-Riverside, they wanted me to go down there, but I hadn't heard from them for six weeks, so I decided "I'm gonna have to go for Stauffer Chemical Company because I haven't heard from UC-Riverside." And the day after I decided to go to Stauffer, then UC-Riverside, the department chair had been sick and they hadn't been able to get in contact with me. I said, "oh, it's too late, I'm going into industry," which I think was a good move, really. It gave me a little different – if you get all book learning and no practical, like in industry, then you're kind of a lopsided person.

CP: And so what sorts of work were you doing as the head of the section?

TA: Down there we were trying to control diseases, mainly fungus diseases there. And we patented a compound that could control rust on grasses, which were a lot of the problem out there. And we patented that compound but they just decided not to develop for some reason or another. I think a reason was the fellow on development was an entomologist,

and they had a lot of systemics, and this was the first systemic fungicide. But it didn't click with him, which is too bad. It also had a lot of fluorine in it, which people didn't like then, so that could be a reason too. But boy, it worked before you got the rust or after you got it, it killed the rust, and stunted the grass a little bit which meant you didn't have to mow quite as much. So that what was nice.

I had a couple other patents there too. Trying to get other people to understand what works – it's funny, some people don't see outside the box. I was always outside the box, which caused me trouble sometimes. People like to have you in a box. Especially in grade school – you better stay in that box.

CP: Don't scribble on your spelling test.

TA: Yeah, that was bad. [laughs]

CP: You were involved in some gallery shows in the Bay Area at this time?

TA: Yeah. I took paintings I did – when I was in the Army I was in Maryland, and I painted there – and I took some paintings that ended in [unintelligible] Museum in San Francisco in a show, and they put them in there, had two paintings in there, which is nice. No prizes but I got them in, which I thought was really nice. And then the Crocker Museum in Sacramento, I had some paintings in there. It was amazing. I just always painted and I don't try to copy anybody or be like anybody else, I kind of paint for myself. And if they like them that's good, if they don't, that's their hard luck, because I know what I like. So that makes it hard. I know there are a lot of shows where they go for illustration more than something creative, and I try to stay away from those.

CP: Well you were at Stauffer Chemical Corporation for four years, it sounds like, and then in 1962 you came to OSU. How did that come about?

TA: Well, I was at a meeting of our Pacific Division of Plant Pathology in Davis, and the chairman of the Department of Botany and Plant Pathology in Oregon State University was at the meeting. He wanted me to drive him down to visit his daughter down in the Bay Area, where I already lived. So on the way down, he offered me a job at Oregon State University with the same money I was getting in the Bay Area in industry. Which was good for Oregon, for Corvallis, it went a little farther than the San Francisco area. So that was nice.

[0:25:11]

He was an outstanding person. He was a unique department chair and he went on to other things.

CP: This is Roy Young, correct?

TA: Yep, Roy Young. What a wonderful guy. He never said a bad thing about anybody or a negative thing. I was really amazed because in the chemical company, as soon as a fellow would walk of the room, you'd hear [makes grumbling noise], they'd say something about him. But Roy Young was just a real winner.

Karl McCreary: He was president too, for a little while.

TA: Yeah, he should have stayed. He was head at Nebraska, where our football coach is now. He headed up that whole thing, but he said everything was football there though, it had to be football. If it wasn't football – botany football. [laughs]

CP: I'm interested in knowing a little bit more about him. As Karl mentioned, he became OSU's president a little bit later on, as an interim president.

TA: Yeah, we wanted him to be full president, but we had a dean at that time, Dean Ward, and Dean Ward didn't like him at all. And he kind of nixed that, which was a sad occasion really. Dean Ward later had to leave, he was drinking a little too much and he left, got in trouble.

CP: What was Young like as a department head?

TA: Young as department head? Well he was interesting, I'd go in there and he'd have an idea of what I was supposed to do and I'd have an idea of what I was supposed to do, and I'd go in there and, "I'm gonna educate this guy." And I'd come out fifteen, twenty minutes later, agreeing one-hundred percent with him. He was an amazing fellow, he really was. He was a real gentleman.

CP: Well, so you took this drive with him and he offered you the job, you took it and you came to Corvallis. I'm interested in knowing your initial impressions of the university and of the town.

TA: Well, I liked being raised in a university town. And being down below San Francisco, which was a nice area, but everybody was worried about money where, at a university, you don't worry quite so much about money. Maybe they ought to, I don't know. So much is just aimed at money down there with industry and everything else.

I was the head of a science seminar down there, it was the same thing. We had people, profs from Berkeley and Stanford in the seminar, and we'd assign students and try to get them – boy, they were sharp. That's when I really knew I wanted to deal with students, was through that science seminar. And then coming up to OSU, we had students again, which just was great. Nothing like seeing a student all the sudden get excited about something you're talking about. That was a real bonus.

CP: What was Corvallis like at that time?

TA: It was smaller. It was smaller, but when I first got here it was all fogged in. For the first two weeks, I couldn't figure out where I was.

CP: You came in the winter, right?

TA: Yeah, I came in the winter and was really surprised. I finally figured out where the campus was, so that was nice. Corvallis was small but I really enjoyed it.

CP: How would you describe the state of the department when you arrived?

TA: The state of the department was that it was under Roy Young then and it was great. It's interesting, they had hired a lot of their own graduate students which, I was from Davis and they didn't do that, they didn't ever hire their own graduate students. But they did here and they had some top ones. I guess I was the second one they had hired from outside Oregon State, who had done graduate work outside Oregon State. And they were kind of worried about me, some of them at least, because I was from industry. You never know. But I got along, we did great. I enjoyed them and they enjoyed me.

CP: Well, we've talked about Roy Young, I'm interested if you had any encounters with Helen Gilkey, she was still alive then.

TA: Oh yeah, Helen was upstairs on the fourth floor. We'd go up there and talk with Helen. I don't know how old that she was, she was an advanced age. She was still sharp, she still had her brains, which was really nice.

[0:30:06]

CP: The two of you have a lot in common.

TA: Yeah. She was an illustrator and she worked with dead bodies. You can tell by what plants are around a body or what fungus, you can tell how long that body had been dead. And that was one of her specialties on the side there. Something I didn't get into.

KM: Was she brought into forensics? Like cases?

TA: Yeah, she was. It's amazing, you probably haven't heard of that. Yeah, so she was very good.

CP: Did you guys talk about illustration a fair amount, I'm guessing?

TA: Not really, we didn't talk too much about illustrations.

CP: She was just a colleague.

TA: Yeah. See, my illustrations weren't very photographic and hers are really on. I was probably a little too wild for her in illustrating.

CP: What do you remember about her personality?

TA: Well, she was a nice person, but boy she knew the facts. And she told you. But she lasted a long time there. La Rea Johnston worked with her and filled in for her after she retired. La Rea Johnston lasted a long time, she's still around.

CP: Who were some other colleagues that were important to you from OSU?

TA: Let's see, they're all dead. Most of the OSU is gone now, the old colleagues, and we've got new people now that I don't know. There was Jack Horner, who died, and Jack Horner was USDA plus state. And he was a very creative guy and he was very good. It's impressed me how good the faculty members were at using their heads.

I worked with a fellow that was half USDA and half state – McWhorter was his name. And McWhorter was always doing something to get attention. The first thing he'd do is challenge you to throw a rock across the Willamette River. He says, "go ahead, pick it up." And you'd throw it and it would get almost across and he'd say, "wow, that's nice. Here, try it again." So I'd throw it up and couldn't quite get it over. So he gets down on his knees and goes [makes whooshing noise] and way across the river, bounce, bounce, bounce. I had heard about this; this is his standard thing to do. And he had a wrist – I watched him, because I heard what he did – his wrist would go way back to here and he'd just snap it out there and whooo, the rock would really go. He said he used to pitch baseball but nobody could handle it; nobody could catch it, [laughs] which I believed. Yeah, he was a character.

CP: Tell me about setting up your research program. It sounds like you had an NSF grant and you got an electron microscope with that.

TA: Yeah, we had to see viruses, because viruses are different shapes and sizes, and it helps you identify them. So I wanted a grant, and they said, "well, you'll have to show you have experience with an electron microscope before you can get a grant." And I says, "but I need this to get an electron microscope, so I can see things." And they said, "no, you have to have experience." So we had an old RCA-2 in Chemistry down in the basement, but it worked sometimes and sometimes it didn't, and there wasn't the best resolution. When it worked, I got some nice virus pictures from it.

But then I found out about -I went up to Portland and at the Animal Science Center they had, west of Portland, they had three new electron microscopes, one being a Phillips, which they just got. They had many so they let me use one. So I got experience on an electron microscope, so they sent me over to Amsterdam or Holland to check the Phillips electron microscope, which was the best made. And so we went over there, went to a big building that was like a flying saucer, and they had this electron microscope over there. So I checked it all out and then got a grant for one here.

[0:35:05]

And that was through Dean Ward. When Roy Young said, "Dean Ward, we put in a grant for an electron microscope, what's happened?" So Dean Ward called back to the NSF and said, "well, what happened to that?" And they said, "oh, it's in our file here. They've done nothing. Do you really want it?" And Ward says, "yeah, we want it." So I got the electron microscope. It's interesting the way things operate sometimes.

CP: Where was it set up?

TA: You can't have vibrations with it and my office was on the fourth floor of Cordley, so we went down to the basement where there's a solid pad. So that was good except across the hall there's a big electrical panel that interferes with it, so we had to insulate all that and put lead across there so it could do that. But they're still using the same area for electron microscopes.

CP: Not the same apparatus though.

TA: I don't know if they have that one or not. We've had several other electron microscopes; some are standing scopes, a different kind. And I don't know if the original one, I don't know if they still have it.

CP: So yours was the second one on campus?

TA: Yeah.

CP: And you became the director of the Electron Microscope Lab?

TA: Yeah, I says, "how are we gonna pay for this? Because it costs, what, \$10,000 a year in maintenance, what are we gonna do?" And so I said, "let's open it up as a facility for use." And I hired a fellow who was very good, Al Solner [?], as a technician, and put him under me in charge of the lab there, and he did a wonderful job. But we had to pay his salary and the maintenance charge, so we decided to charge departments and so on. Well, they said, "you can't do that at a university." And so we said, "well, if we can't do that, this is what it's going to cost you, dean or director, this is what it's going to cost you." So they decided that maybe charges were ok. It's kind of an independent facility, paying for itself, as it worked out.

CP: And there was a demand for it, I'm sure.

TA: Oh big demand, yeah. Al Solner was very good. He could really operate it and lots of people were on campus – engineers, various guys came over to see "what happened? Where did that crack?" You know, you can see that. So that was very nice. So it opened a facility that we didn't have before.

CP: You talked about using this device to see viruses, what specifically were you looking for when you were looking at the viruses?

TA: Well, viruses come in different shapes and sizes. And when I started with lily symptomless virus, because it didn't show any symptoms, it was a long virus, 650 nanometers long. And then they have two abridging viruses, which makes yellow in the lilies, and that was 750 nanometers long. Then we have bacilliform viruses and round ones, so we could see what viruses they had. Or if we want to see if a plant had a virus, which we got into, we'd just take a little bit and see if it has a virus particle in there. And in Holland, why they don't want any viruses in their tulips or lilies, and here they didn't know about that, so...

I've got an interesting side story – you can bring me back to the normal here. They had a virus-free program for some clients in Scotland, so I went to Scotland and I made an appointment with this fellow who was in charge of the program. I went to the gate and they called up his office, and he said, "I don't know – who is he?" "He said he made an appointment with you." "Oh, well ok, let him come in." And so I came in and this guy is sitting behind a desk, you know, and I looked, behind him was a big painting that had his name on it. And I says, "oh, that's a beautiful painting you have there." And he says, "that's not so good." So right away, I said, "I paint too and here, I have a couple prints." I showed them to him and he showed me all his virus-free stuff and took me out, I learned to drink some things I had never drunk before, in Scotland. So the paintings once again helped in science, which is amazing. So he really melted.

[0:40:24]

CP: You did a lot of work on lilies, is that correct?

TA: Yeah.

CP: Why did you decide to focus on lilies?

TA: Well, Al Roberts in Horticulture worked with lilies, and McWhorter – the USDA fellow I told you about, the stone-thrower – he worked on viruses of lilies. Every time he saw a different symptom in a lily, he'd give it a different virus name, which was wrong. So I took over the federal money that McWhorter was getting to work on lily viruses. So I went there.

The coast of Oregon is just loaded with Easter lilies and ornamental lilies down on the southern coast; a tremendous set-up. A lot of these people were Dutch growers, so I got to go down there and meet them. I've never met a dumb grower yet – they were sharp, they were really sharp, and they were interested in getting healthy plants, so that's good. We found out that the Oregon Bulb Farms – which was out of Portland, east of Portland – they had ornamental lilies. And we took some and developed a technique to make them virus-free, and they had thirty percent more blooms and thirty percent more height. And they said, "this is just like the old lily was, before it had the virus." So it was really nice. So a thirty percent yield – the same with potatoes, we worked with virus-free potatoes – if you can get a thirty percent more yield, you can be making money rather than scraping along or losing.

CP: Were you engaged with Extension and Experiment Stations? Because what you're talking about, it sounds like the work an Extension agent would do.

TA: Oh yeah, with Extension, with the various people at the Experiment Stations, branch Experiment Stations. We'd set up plots out there and test these things out and see if they're working. We had to see if they work in the field. You can get a theory and see how it works, and then will it really work in the field? And so we'd grow – they're still growing virus-free potatoes – we'd scan them and look at them with the electron microscope, and we developed this crop, it's all virus-free. And so then you put it in a cold climate, because aphids don't like the cold climate, and aphids are transmitting sixty percent of the viruses.

So they're still doing that. And then they put it out in the field and you can put it one year and here come the aphids, get rid of a few of the viruses. And about the third year, they'd be one-hundred percent virus again. So you had to keep feeding it in, every year or two. Just the way it works. We don't have any immune plants, you don't have any GMOs.

CP: Well it sounds like it's a very collaborative effort that you were engaged in.

TA: Oh yeah, that's for sure. Yeah, lots of people involved. Everything I've ever been involved in, I don't do it just myself, there's a lot of people involved.

CP: And you worked with woody ornamentals as well?

TA: Yeah, I worked with anything that had a virus. And we had nurseries from the Los Angeles area set up to get rid of viruses. We got rid of viruses in Fred Edmonds – no, what is it – one of their plants. They hadn't named it, Fred Edmonds, or got rid of the virus, but then they figured, well, they sold too many of them with the virus and they didn't want it, so I planted them in a place over here in Corvallis and we've got all kinds of virus-free rhododendrons up there now. Fred Edmonds, they come out pink and they turn white and, well, Fred didn't want them back.

CP: You were also involved with the plant clinic here. Can you tell me about that?

TA: Yeah, well we tried to identify any viruses, and then using our techniques to identify viruses, they got very good at it. And so that went right into a practical use for them to see if we have a virus. We had some interesting cases, they had a virus of a waffle plant and it was a plant that had all kinds of yellow designs on it, this waffle plant. I figured, "gosh, I sure hope I find a virus because we can call it the awful waffle virus." We couldn't find a virus. [laughs]

[0:45:31]

CP: Did you have any connection with the herbarium?

TA: No, not much with the herbarium. They just collected plants and dried them up and put them in there. We never went up with any of their things.

CP: From looking through your files, it also looks like you took a short sabbatical in Denmark, is that correct?

TA: Yeah, we thought we had different diseases in plants besides virus, called mycoplasmas, and the National Science Foundation had grants for going to a laboratory to check out these things. And so I thought, since you only had one page to fill out, that was a good deal. So I gave ten of them out in all fields of science, and I got one. So I went to Denmark to

the mycoplasma institute there, their lab, and I worked with mycoplasmas and I published things on animal mycoplasmas, but our plant mycoplasma didn't turn out, unfortunately. I got a mycoplasma publication but it was not on plants.

That was really nice in Denmark, that's a nice place. They have technicians there – at twelve years old you decide whether you want to be a scientist or a helper, a lab assistant. Then they grow up and they get very smart, but they can't go over there, they have to go back to when they were twelve and work their way up, which is too bad. Because the lab assistants – a lot of the scientists left at four o'clock and the lab assistants were working away there. The [unintelligible] were pretty good because they had long black twisted cigars I smoked while I worked. [laughs]

CP: In looking at the classes that you taught, it occurred to me that you were very cross-disciplinary. You taught classes in botany but you also taught a class in electron microscopy, and a very interesting-sounding class called "Creativity in Art and Science." Do you want to tell me a little bit about that?

TA: Yeah, we titled that "Applied Imagination: Creativity in Art and Science." That was in the Honors Program, and we had a big table in the room and we had room for, I think, sixteen students to sit around the table, and it was taught that way, around the table. And we always had over twenty that wanted to get in there, from all schools. We had engineers in there, we had art. We had an artist major and he was, at first, he was kind of back-offish, but he found out we were serious about this and he really got into it. The first thing I asked them is if they thought they were creative or not, and why, just to start a discussion. And most of them would answer this. One said, "I don't know what to say." I says, "what do you mean, you don't know?" "I don't know what you want me to say," he said. And that started a lecture from me about parrots and using your own head. Too often a professor wants you to parrot what they say and, I said, "this isn't that type of set up, up here. We're really interested in what you think."

Then we'd pair them up and work on a project of something creative, and then at the end we had a "thing show," and the thing show was something that would fit in the room that was creative. It could be theirs, it could be a friends, or something else, but just anything that was creative. It was written up in the *Barometer* and that was fun, it was fun. And I think we spoiled some students for profs that wanted them to be parrots, because we wanted them to think.

CP: I'm interested in learning a bit more about the Honors Program back then, because it was different from what we know now as the Honors College.

[0:49:56]

TA: Yeah, I don't know what they're doing now. What you [did then], you design a course, you put it there, and if the Honors students qualify to be an Honors student, then they could pick the course. It was a one-credit course in this case. Almost anything, but I liked "Applied Imagination" because that was what I do. I taught the course plus I brought somebody from outside who was very creative who was not associated with the university. Once we had a gal who was very creative and she also played the musical saw. She really came up with some interesting things. So we really had a good time; I had a good time.

CP: So the Honors Program, for you, was an opportunity to be creative in your instruction?

TA: Yeah, that's right. And I hope we made some people's light come on and start thinking.

CP: Let's talk a bit more about art now. I'm interested in how your own personal work progressed during your OSU years.

TA: Well, it's really, I don't know. I've always painted watercolors because I can do it quite rapidly and it's not a big job to set up or clean up, so I can always paint it all the way through. I taught watercolor in Linn-Benton Community College, and on the weekends we'd take a van down to the coast with students. It was very interesting because I'd have them look at a subject and most of them were worried about seeing so many different things – "how can I paint all that?" Well, you don't paint all that, you choose, you be selective. If you like something over here, you can move that right over in your painting. If you don't like this, get rid of it. You're not a camera. So a number of them afterwards, we'd go back and forth, and as we're going down the coast they'd say, "we keep going by here but we've never seen all this before" – the things along the coast, all the trees and everything going on. So they're picturing it in their minds and then they go on. So it makes more of a person.

CP: Was it mostly a weekend activity for you?

TA: Oh, yeah. Well, I used to paint until about two o'clock in the morning and I got too old for that. So mostly weekends, yeah.

CP: So if you were doing it until two o'clock in the morning, you weren't necessarily out at a location somewhere, painting.

TA: No. Well, in the winter time I painted acrylics, because it was kind of hard to paint out in the rain. Water, you know, you paint on the paper and pretty soon it's all on the ground and you've got this paper you can still use. [laughs] I did a demonstration in the rain once and that didn't work.

CP: But you were outside in the rain painting?

TA: Not usually, no. I'd be under a cover. I've tried it and it doesn't work.

CP: I'm interested in learning more about the art scene in Corvallis during those years, the community of artists that you were involved with.

TA: When I came here, the Art Department was pretty much it and the people on the outside didn't have a chance to even show their paintings. The Art Department controlled the galleries and they said what went in there and what didn't, so the amateurs – quote – didn't have a chance. Then Marion Gathercoal got ahold of me when I first came here in '62, or in '64 I think she got ahold of me, and we had a chance for this big church that the paper had that they would give away. We could make an art center out of it for the locals. So I was president of the art center when we moved that.

CP: This is the Corvallis Art Center, next to Central Park?

TA: Yeah, Corvallis Art Center. We wanted that set up for locals and we had all the various groups – the garden club did the gardening outside – everybody was involved and it was very nice. I always get everybody involved in things, which really is nice.

CP: So you and Marion kind of headed up the creation of the art center?

TA: Well, she was the real driver of everything, Marion Gathercoal. And the one who made it legally was Bob Mix, who is another fellow is a really creative guy, who helped out on that. So those are the two biggies of that one. So we got the art center going, and all volunteers, and it was for local. Then over the years sometimes it kind of, somebody got in there and they wanted something very important – this is a big center of art here – and they brought paintings from other places, and the locals were no longer. But they're back to locals, or a lot of it is locals now, thank goodness. That's what the idea was.

[0:55:33]

CP: Did you develop close connections with faculty in the Art Department?

TA: Yeah, I went in there and got to know both of them. I sat with John Rock as a print maker – he was strong because he used big limestones – and I got to know them all there. In fact, they made me an adjunct professor of art to teach watercolor over there. I never did – they made me one, but I never taught watercolor over there. Although one of the departments said I was the best watercolorist in the Northwest, and he's a good friend.

CP: And who is this?

TA: Gosh, I'm trying to think. Berkley Chappell. He gave me a nice letter, he wrote it to the dean, and when the dean made me artist-in-residence for the College of Agriculture, Berkley Chappell wrote that letter. It was neat. I always had a lot of friends.

KM: There's Nelson Sandgren too.

TA: Yeah, Nelson's really good, I've got one of Nelson's paintings. I convinced him he ought to sell paintings. He says, "no, artists don't sell!" So he finally decided to sell some of his paintings shortly before he retired and I bought one, which I have up in Lacy now. And then I went over, with the Sister Cities Association, and we went over to Uzhgorod, Ukraine with their art and everything. And the second time I went over they wanted me to bring another artist, so I invited Nelson. So Nelson was over there too and he really enjoyed it. He made a nice little painting for me over there and he wanted to go back, but he wasn't feeling too good and I was afraid that most people who went to the hospital in Uzhgorod never came out – they weren't too sterile, the equipment and everything. So he never got to go a second time and he died a short time later.

CP: Tell us a bit more about the Watercolor Society of Oregon. This is something that you helped to create, is that correct?

TA: Oh yeah.

CP: In the mid-1960s?

TA: Yeah, that's right, and they're having their fiftieth anniversary. Yeah, I was in the watercolor society down in California, down in the Bay Area. And when I came up here they didn't have any, or they had one except it was run by Maude Walker out on the coast and all the meetings were on the coast and everything. So I thought, "gosh, it's hard to go," and she had her own favorite people – she liked her own students. So we decided to take the watercolor society away and give it a different name and have it in Corvallis, where I was. So our first meeting was in Corvallis. And at that time we decided that we would open it up twice a year and have it at a different place each time, and that really worked. I didn't know it would work that well; we would go all over the state. Art About Agriculture ended up the same way too – once you opened it up and took it all over the state, we got people from all over the state enjoying and helping. I was a people person, I guess, I always got a lot of people involved.

CP: So the Watercolor Society would put on these touring exhibits?

TA: Yeah and they still do – two a year.

CP: And you were closely involved with making that happen?

TA: Yeah, I had the first meeting here in Corvallis and I was president of the Amateur Watercolor Society, then they wanted me to be president of the new one and I said no. I talked Fred Smith in Salem into being the first president of the Watercolor Society of Oregon. He didn't want to. He and his wife were both very good though, so he did a good job.

[1:00:08]

CP: So the activities of the society haven't changed a lot over the years? Basically that's the primary-

TA: Well, that's the way it started out, but then we had local juries – like our department or University of Oregon, various Art departments jurying. But now they go and they get professional watercolorists, and it's gone bigger. The watercolorists come in and will give lessons during your meetings if you want to sign up for the lessons. And they have shows and they have prizes. At first we started out and I'd said, "we don't want money prizes, all we do is give ribbons," but now they give money. People like money. But I wasn't depending on money for my art, thank goodness.

CP: You mentioned becoming artist-in-residence for the College of Agriculture in 1984. That's a unique position.

TA: Well, we had for Art About Agriculture, they had some money given to us by an agriculturist over in eastern Oregon – I have to back up just a little bit – and he wanted an art show about agriculture. And the Art Department, they didn't know what to do. And they went there and they said, "who has art shows around here?" So someone came to me, so we set it up. In three months we set up an art show; we had to set it up or this agriculturalist was going to take the money back. So we set up the big show and it's been going ever since, and we sent it all over Oregon too. It's not too much different from Watercolor Society. What I liked about it, when I first started we had a children's division and that brought all kinds of people out to every place we went – Hood River, we'd fill their Carnegie Library there, it was nice. But they dropped the children's part, which I think is sad.

CP: So with Art About Agriculture, they would send out a call for submissions and then they would jury it and it would go around the state? And it was all based here at OSU?

TA: Yeah. So it was good. We had letters from various universities – agricultural colleges of the universities – wanting to know how we set this up. And so three or four other universities have set up those things. I hope they're still going, I don't know.

CP: Who else was involved in the early planning of this, besides yourself?

TA: Well, I was involved in it and I'm trying to think of the ones who were over there in the College of Agriculture who were doing all the advertising and promoting. They had two people there who were very strong into that.

CP: So you had basically this marketing or support wing on one side, but you were doing most of the actual organization?

TA: Yeah and at first I was doing all the moving of it too, because they didn't have any money.

KM: Tom Weeks looks like he was involved in some of the design. [holds up a poster created by Tom Weeks]

TA: Yeah, Tom Weeks did our posters. He did for a number of years and people were collecting the posters and have complete collections of posters. He was really good.

KM: Yeah, we're happy to have them. We've got them in the collection, a series.

TA: Yeah, that's good. Oh isn't that nice.

CP: So you were actually moving the paintings around the state and setting them up?

TA: Yeah. [laughs]

CP: Where were you going?

TA: Oh gosh, we went to every city that wanted to show them. We'd write around to everybody and we didn't miss much of Oregon.

CP: That sounds like a pretty big endeavor.

TA: Yeah, well it was more complicated unless you did it yourself, and then it wasn't quite as complicated then, if you moved it around.

KM: Was there much overlap between some of the artists that you knew through the Watercolor Society and the Art About Agriculture?

[1:05:00]

TA: Yeah, if you look at your book there, you'll see a bunch of watercolors. So there's overlap among watercolors – that's the nice little book you brought in, let's see. [flips through Art About Agriculture book, *This Bountiful Place*] Yeah, see that's not watercolor, there's prints. We had all kinds of divisions. There's a watercolor there. Ian Cope has his here in Corvallis and there's another one there. He doesn't come out of his house very often, but he sure does beautiful paintings. [laughs]

KM: This was published in 2006.

TA: Yeah, it was 2006. They published it while I was gone – they're smart. So I didn't get involved with the publication.

KM: It does give a good sense of the amazing art that's been-

TA: Oh yeah, some people with a wild imagination, like "Buttermilk Sky." She's a watercolorist. So we had all the arts involved in here, including some very creative ceramics that are really nice. This was Dean's daughter over here, Doris

Frischknecht, she did that beautiful sculpture there, wood. So there are all kinds of neat things. So we're looking first for things that are creative. Then we had Art Department members here, both of these. So everybody entered, Portland artists, all sorts of them, and the watercolorists were part of it. This is done by a Corvallis artist here.

KM: Was it difficult to choose, as a juror?

TA: Well, we had three jurors – we had an Art Department juror, myself, and somebody in Agriculture. And we each got a little sticker to put on there and if you just had one, you probably didn't get in. But if you had two or three, then you got in. If you had three then you start considering people for winning an award, if you had three little pieces of paper on a painting. So that's how we juried it. And then at the end, each juror got to pick one that hadn't been chosen. So if they had their favorite one there and nobody wanted it except just them, you got to put that one in. We were very democratic all the way through this process, so it worked pretty good. And people really enjoyed the show; we got all kinds of compliments on that.

CP: Can you tell me more about the artist-in-residence piece? How did that happen?

TA: Well, artist-in-residence came about – I have to go into background of that again there. When I went to high school, I had to hike five miles to high school, and I passed an artist-in-residence house for an artist-in-residence of agriculture at the University of Wisconsin, and see the beautiful work he was doing. And so, "gosh," I said, "I always wanted to be an artist-in-residence." So up came this money and this show, that I arranged, and the dean – Briskey at that time – said, "gosh, we can't pay you for doing this." And I says, "well, you can make me an artist-in-residence." He says, "ok." That's how that came about.

CP: So what did it mean to be the artist-in-residence?

TA: Oh gosh, really exciting, because I'd always admired the artist-in-residence in agriculture, and to be an artist-in-residence was really a real treat. I was artist-in-residence in Yellowstone, and then I was artist-in-residence here, and I was an artist-in-residence two times over in Switzerland, so all kinds of artist-in-residence.

CP: And was it mostly instruction that you were doing?

TA: Artist-in-residence was a title.

CP: Were there activities that were specifically associated with it?

TA: No, it's just a thank you that I got a show going. Nothing to do with it, no money, it's just a title. You get a lot of those at OSU, you get a lot of titles with no money. [laughs]

[1:10:16]

CP: Well you retired in 1991 and I'm interested in your thoughts on how Botany changed at OSU over the course of your career.

TA: Well Botany, I retired and I was getting old fashioned, because almost everything was chemical now – basic chemistry of what was happening, chemical changes and everything. The visual has pretty much disappeared in botany, so it's really changed as far as I was concerned. I came during the right times for me. My visual, between the art and science, wouldn't work quite as well now. People get down to the chemical level and the molecular level and then the visual level. So that's how it's changed.

CP: You've been very active in retirement though, heavily involved with Rotary.

TA: Rotary, yeah. I have to be active, I have to be doing something. You don't want to just be sitting around. TV isn't that good; I know there's Public Broadcasting, there's some good ones there.

CP: There's Rotary, there's the art groups, and you also mentioned the Sister Cities Program you were involved with as well, back in Corvallis. Any standout memories from any of those?

TA: Oh yeah. Well, I painted over – I always took my paints – and I painted over in the Sister City Program in Uzhgorod, I painted the city over there. I was out there painting Uzhgorod down there, it was beautiful. And this lady came up to me, this Ukrainian lady, and she says [makes gasping noise] and finally she wanted to know who I was. And so I got out my card and she says, "Oh! Corvallis!" This is in Uzhgorod, Ukraine and they're appreciating the things that Corvallis is doing for them over there. And then she wanted me to sign the card and everything, and that really got me. A little place in Uzhgorod, a little peasant lady out there, and she knew Corvallis.

CP: You were also a resident of Corvallis for many years until fairly recently you moved to Washington. I'd like to know your perspective on change here in Corvallis as well.

TA: Change?

CP: Just the ways that the city has changed for you.

TA: Well the city, I don't know that it's changed that much. It's gotten bigger but there are still nice opportunities to get out and still a lot of wonderful places to paint, in and around Corvallis. So it's really a very nice city and being a university city is a real bonus.

CP: How about changes at OSU?

TA: Well, I don't know. I may not have been involved too much with changes at OSU. I guess it's gotten bigger, but I don't know – since my dad's time, it's gotten a lot bigger. But you've still got all the nice university things. My dad sang in the men's glee club and the men's chorus and the quartets, and I sang in a quartet – in addition to all the rest of this – I sang in a barbershop quartet and barbershop chorus here in Corvallis. I just did everything – it was fun!

CP: Was that something that was campus-based?

TA: No, my dad's was but I wasn't. No, this was just outside. I got into Rotary because I made signs for the retired military so they put me in Rotary. And I said, "I don't know if I want to be in Rotary with all those stuffed shirts downtown." And I found out I was wrong – it was great and I enjoy it. Rotary was very helping in assisting other people; it was really nice, it was a good move.

KM: On campus, did you ever have any association or were brought in to do anything for the Craft Center?

TA: I was in the Craft Center, I knew who headed up the Craft Center. But I never interacted with or didn't get involved in that. I missed that: I don't know how I missed that. I didn't miss much.

[1:15:13]

CP: Well Tom, I want to thank you for sharing your time and your memories with us. Unless Karl has any more questions, I've reached the end of my list.

KM: It's been great to hear all this and I'm interested in – I know a lot of what you do is landscapes – were you ever inspired to paint plants individually, like Helen Gilkey?

TA: No, I really never did much individual plants – that was too much like my work. The botany, I could do that. I really haven't painted much individual plants. I've done a couple down in Arizona now where they have these seeded wildflowers out there and they have a beautiful culmination. I did some down there. I sold it, so maybe I ought to do more. Usually a watercolor was a relief from the detail work I was doing, so usually I kept it separate.

KM: And it sounds like you did a lot of plein air stuff?

TA: Yeah, that was my favorite.

KM: I know that they've had a lot of shows at LaSells Stewart Center and you probably were part of some of those.

TA: Oh yes, I've always been. They were very good. Once the Art Department – what happened, the Art Department was hanging a bunch of nudes and things that were beyond nudes really, in there, and they didn't like those at the LaSells Stewart Center. So they cut off their connection with the Art Department, so that's opened all this – local people got to show. So they started putting out requests for local people to show down there, which was nice. Before, locals couldn't show there because the Art Department had control of it.

KM: Interesting, I didn't know that.

TA: Yeah, a lot of people didn't. Because we were amateurs and they were professionals. [makes grumbling noise]

KM: And now there's two annual shows down there.

TA: That is great, that is wonderful. I used to enter those. My last show I entered just before coming up was in Tubac, down in Arizona, and I got best in show down there. They gave me a thousand dollar award and I sold a painting for \$1,200, so maybe I can be an artist after all. Fool my dad. [laughs]

CP: Thanks a lot, Tom. It's been fun.

TA: Yeah, you're welcome.

[1:18:11]