

Narrator: Fred Harwin
Interviewer: Lise Harwin
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Transcribed by: Teresa Bergen

[Begin Track One.]

Lise Harwin: My name is Lise Harwin and I'm interviewing Fred Harwin for the OHSU Oral History Program. It is May 19, 2023, and we're recording this oral history at the Ed Com facilities in the BICC Library.

So, Fred. Let's start with your early life. Describe your childhood and your education.

Fred Harwin: I grew up in a big city, a thriving area with a lot of children my age. This was right after World War Two. It was a relatively new area in northwest Detroit. I had a lot of friends and played a lot of sports that were in season. I remember we counted the kids who could play on teams on one block – there were 15. That's how dense the area was and how many kids I grew up with.

I enjoyed looking at things. Pictures and books. Not necessarily reading as much as I was interested in pictorial images. I remember that I'd sit down sometimes, and I would draw them – copy cartoon characters out of comic books. I just enjoyed that as something that I found relaxing or interesting. That's how I was different.

In elementary school, we had actual art teachers for classes. Art was part of the curriculum. My fourth-grade art teacher said to my parents, "There's a special program in downtown Detroit, at the Detroit Institute of Art, for kids who are really interested in art or have shown some ability that should be taken further." The teacher recommended that I go to the class.

So, I went. It was on Saturday morning – a three-hour class that went from 9 a.m. to noon. I remember a lot of times my dad would take me down, because it was quite a distance from where we lived in Detroit. It was near downtown, and we lived in northwest Detroit. The classes were small, maybe eight or ten of us kids. Only two or three classes in all. We'd go around the museum and draw, copy artists' paintings and sculptures. We'd sit there with our little easels and draw or paint. I remember doing a lot of crayon drawings. I was really enjoying it. People walked by and they'd look at what you were doing. I thought about it, but after a while it just didn't bother me. Even on busy days, because it was Saturday morning at the museum, it was something I really enjoyed.

When I got home, I would fit in with the neighborhood group and we'd play baseball or basketball or whatever the sport in season was. I continued going on Saturday mornings from the fourth grade through high school. I enjoyed the classes. It was the only time that I was doing art that I wanted to do. I remember the teacher took one of my drawings and showed it to the other teachers. I said to myself, "Well, I guess that one worked." That's how I got more

and more interested in drawing and painting. I was the friend who wasn't available on Saturday mornings with my other friends.

Lise Harwin: So, you have an unusual combination of degrees. And your bachelor's degree is not in art. (laughs) Can you talk a little bit about the degree that you did get? And then also your master's degree and how you combined some different things in your college career?

Fred Harwin: Actually, it is in art. I ended up going to Wayne State University. First, I went to a special high school: Cass Technical High School. That was in downtown Detroit. It was a wonderful school for the arts – performing arts and graphic arts and architecture. My parents were concerned that I would be an artist and wouldn't be able to make a living, because that was the common thought about art. "Oh, you'll just be painting, and you won't be able to earn a living." So, they said, "Why don't you take architecture?"

I said, "Oh, architecture's cool." So, I took architecture in high school. Actually, when I got out of high school, I was ready to go into a drafting job for an architect. So that's what I did. I didn't really like it that much. I didn't find it challenging and, in some ways, I just wasn't quite that interested in it. So, I thought I'd better go on to college.

I checked out Wayne State University in downtown Detroit and ended up moving downtown. I had moved downtown before. Actually, I left home when I was young, when I was about 17. Got an apartment with a friend; one of the guys I grew up with. It was right near Wayne State University and the high school wasn't that far away. Fine art was my college major. They had a program called interior architecture. When completed, it gave a Bachelor of Fine Art degree. I took art courses. I took enough drawing and painting courses that I received a double degree – one in interior architecture and one in drawing and painting.

Then the question was, "Okay, now what do I do?" That's when things really changed. In the summers, I was always at camp. I started when I was six years old. This was overnight camp. The first time I went to camp, it was a three-week session. I didn't want to go home. They let me stay another three weeks, so I was away six weeks. I enjoyed the outdoors and enjoyed the opportunity to be on my own and make some decisions. It was a beautiful area. There was swimming and outdoor activities like the Boy Scouts would have. I learned knot tying and how to be comfortable in nature. That's what I did in the summer. Camping became an interest of mine. I would say, "Okay, I could go into this as my profession and not use any art or maybe I'll go on for an MFA in interior architecture."

Since I went to camp every summer, I ended up being a trip leader for the outdoors. I would take a group of 12 to 15 campers who were 14 to 18 years old. They were experienced campers, and I'd take them from Detroit up to Algonquin Park. It was one place we went in Ontario, about 250 miles north of Toronto. I did this for three years. Coming back, I was a junior then working on my BFA in interior architecture and art. We would go from where we were living outdoors in jungle hammocks and canoeing and portaging. When we came back, we needed to freshen up. We would do that by staying in a nice campsite near the national

Canadian exhibition that they had in August each year in Toronto. This exhibition was huge and quite beautiful. Different areas and different buildings for various exhibits.

One of the campers came back to me and said, "I just saw something interesting in the careers building." "Careers building?" I asked. It was about art as applied to medicine. "I know you enjoy science and being in nature and that you're an artist," he said. "You might be interested in seeing this."

I'm waiting for the other guys to get back anyway, so there I was. I thought, "I'll go over and see what it's like." That attitude of responding to serendipity has served me well throughout my career. When something comes up that sounds interesting, I could say, "Oh, I just don't have time," or I don't feel like doing it, and stay back. If I had never gone to that exhibit in the careers building, I wouldn't have known about the field of medical illustration. More so, the timing couldn't have been better. I went over to the exhibit. The exhibit was designed and made by the University of Michigan medical illustration department. Toronto had a school of medical illustration – the only one in Canada. While I was there talking to the person at the booth, he said, "Oh, Michigan made this." They asked me where I was from. I said Michigan. They said, "Oh, Michigan's opening up a medical illustration school."

"Oh, when is that?"

"I think it's a year from now."

That was interesting. All of a sudden, I thought, "Hmm...maybe I should look into that."

I went back and I looked at the prerequisites it would require. I needed to take a couple of science courses. Fortunately, when I had an opportunity to take an elective course, I took a science course. I had all but, I think, one course. I needed to take that in my senior year of undergraduate work at Wayne State to qualify to be considered for the program in medical illustration. So I did that.

Then I also had that year to do some study. I went over to the medical school at Wayne State and got permission to go into the lab with cadavers and to draw, to study, and to see if it was something I was really interested in. I went and applied, and the class was huge. Three people. Two students had already been selected.

I went for an interview, took my portfolio, and I got accepted. That was kind of like, "Wow, this is cool." All of a sudden, I jumped into that arena. I talked to the fellow who started this program, Professor Jerry Hodge. He had worked on establishing the program for over a decade. Back then, medicine – and physicians especially – were really sought after. Not that it isn't that way today, but then it was even more so.

We were each taking one of the spots of a medical student in gross anatomy which we had to take in the medical school. It was a full year course where we were on the same grading scale

as the 213 medical students, which was quite a challenge. We were spread throughout the lab. I had three lab partners. We dissected a cadaver for the year. It's the first time I felt academically challenged to such a degree, I feel like I can even remember things from that class today. Not just where to look, the whole thing was so intense and wonderful. What could be more exciting than looking at yourself, what makes you up, and how the body works. I really got into it.

I'm not the best student, so I had to work very hard. I didn't have too much trouble with the visual component because I had visual recall. The writing portion of the exams was much more challenging for me.

By the time I finished graduate school, the work that I completed during the program made up a professional portfolio. Several pieces of that work are now in the archive here at OHSU. Professor Hodge said to me, "Some of the best drawings you're going to do are going to be created in this program. You're going to have the time and I'm going to see to it that the work gets completed to a professional level." He was right. There are some drawings that I look at now and say "Wow, did I do that?!"

17:11

Lise Harwin: How do you think having that experience with both an art education and a science education has served you going forward?

Fred Harwin: In some talks I give, I get asked that question or something similar. It's served me. Let's go far over to one side – that's medicine. That's about being precise. It's a given. The other side, art, is the opposite. It's a creative process. There's no given. Whatever one wants to do, you have the freedom to give it a try. In the field of medical illustration, I felt I could go anywhere between the two. It was liberating. Whatever I wanted to do. That's the way that I approached my field, or fields. Because as they evolved and something else came along, it wasn't a big change for me. Because I'm still within the parameters of art and science.

Lise Harwin: So, you talked a little bit about your path to medical illustration. Could you talk a little bit about your path toward working as an ophthalmologist?

Fred Harwin: This is another question of timing. Like here's this camper saying, "Hey, you may be interested in this." I was told by Professor Hodge that if I take a position at an institution, I should get a faculty appointment. Because this is a three-year program – very intense and a very small group. He said, "You should ask for a faculty appointment."

When I applied here, I said, "I need a faculty appointment." Some work had to be done to get that because I was 26 years old and not coming with a PhD or an MD, but with a Master of Science. I said, "Well, this is something I'm not interested in unless I can get a faculty appointment."

Fortunately, I was granted a faculty appointment in the School of Medicine, which I found gave me some opportunities. The major one was that I had more vacation time and was allowed to do some research, so I could extend my vacation and see other people in the field. I remember in Oslo and in parts of Sweden, I saw there were illustrators who worked for medical institutions. I would visit them and see what they were doing. I would make vacations into an educational experience.

As a faculty member, I was entitled to take a sabbatical leave for educational purposes. It made me think about what type of service was needed that would relate to my previous training. That's how I arrived at thinking about facial prosthetics. The only person in the state I knew of who was providing this service was Dr Leroy Nakayama. He was a maxillofacial prosthodontist. His training was in dentistry and facial reconstruction. Intraoral, in the mouth, and extraoral, like making noses and ears. He was in private practice, while I was thinking of a service to be provided by OHSU.

I thought that I would take a look and see what the potential was of taking a sabbatical, studying facial prosthetics, and visiting different institutions where that service was being provided. I would find institutions that would be receptive to my visit, where I could evaluate the field of facial prosthetics and how the service could be adapted to the OHSU setting.

I was granted a year's sabbatical where I visited 14 different medical centers in the U.S. Sara and I ended up getting a little motor home, one that was small enough to park at a parking meter. (laughs) We had everything in there for a full year. I got a lot of support from the staff who knew my work and thought this was a good idea. It was quite a wonderful opportunity.

I found a wide range of how the services were provided. One of the individuals most receptive to my visit was Jack Diner, director of the anaplastology service which was provided through the University of Arkansas Medical School in Little Rock, Arkansas. A really neat, talented guy. He also started off as a medical illustrator and then branched off into facial prosthetics. Arkansas was a really good state to compare with Oregon in terms of population needs for facial prosthetic services. I used a lot of data that I gathered from there.

The president at the time I left on sabbatical was Lewis Bluemle. Both he and his executive secretary, John Dupree, understood from canvassing a number of faculty – like Dr. Krippaehne, some of the surgery departments and Dr. DeWeese, who was head of ENT – that the service would be supported and utilized. The reason that the service didn't get started was that Dr. Bluemle and his staff had accepted a position at Thomas Jefferson Medical School during the time I was on sabbatical and were leaving OHSU just as I was returning.

I'd like to go back to a story that led me into the field of anaplastology. Part of our program at the University of Michigan included a class at the Natural History Museum. The class was given to us by Dr. Butch who was the creator and director of all the dioramas and their three-dimensional content. The class was in moulage – the casting of frogs and different animals – as

well as different types of foliage to make these wonderful dioramas. It was one of the classes that I really enjoyed. In fact, he actually offered me a job at the museum when I graduated.

For the first assignment, he said, "Okay, I want everybody to get a small object and cast it any way you want. Then bring it in and we'll talk about it." I went and got a snail shell, a shape I've always enjoyed and made a seven-piece mold of it. I thought about that experience when I got into ophthalmology. That interest and past experience was part of what brought me to the field.

At a medical illustration annual meeting about 30 years later, a fellow came up to me. He said, "Hi, I've been wanting to meet you. Dr. Butch retired. I've taken his position. He gave me something that he wanted me to use with students." It was my seven-piece mold that he used all the time in teaching moulage. So that was like, "Wow, what an honor." Then I thought about how that size of the snail shell was not much different than the size of an ocular prosthesis.

Let's revisit coming back from sabbatical. I already mentioned that the president, his executive secretary and his staff had just left OHSU for another job. I knew then that starting a new endeavor as a service department was not going to be even considered by a new administration.

I was thinking at that time, "Well, let's see...what else?" The timing again. Springer-Verlag wanted Dr. Albert Starr to do one of their first books in a new series they were thinking about. This was taking a surgical specialty and getting a top surgeon in the world in that specialty to create a manual or atlas. They were interested in Dr. Albert Starr. He was a brilliant surgeon, and his procedures were being published in journals and texts. As the medical illustrator for the staff at OHSU, I was already illustrating his procedures for publications. I was doing them in black and white. I learned techniques in medical illustration in black and white because color was too expensive for academic work. It was like four times what black and white image reproduction would have been.

Dr. Starr said, "Fred, do you want to do a book?"

I said, "What kind of book?"

"Well, Springer Verlag approached me and want to publish a manual that will illustrate my techniques in full color."

This was another crossroad opportunity. I hadn't actually decided to step away from my job at OHSU, yet I had considered it. Working on a book with Dr. Starr for Springer Verlag was an experience of a lifetime. I answered Dr. Starr with a yes but let him know that we needed to set up a working relationship.

He said, "How do you want to proceed?"

This was a unique opportunity to work with a surgeon who has very high standards and is tops in his field of open-heart surgery. The publisher, Springer Verlag, is one of the best publishers of technical information in the world. Their main office is in Heidelberg, and I would be working for the New York office. I could not think of a better opportunity to express myself as a medical illustrator.

I have always thought about visually teaching a technique in surgery step-by-step, removing extraneous material and just concentrating on making one major point per illustration. That would then lead to the next illustration. There would be a color palette that would be consistent overall. I needed to develop a palette of the actual colors that a surgeon would see. The point of view would be illustrated from the chief surgeon's perspective. This would be new, as most illustrations in color followed a convention for teaching anatomy with traditional colors. For example: red=artery, blue=vein, yellow=nervous system, green=lymphatic system.

This manual would be developed to teach Dr Starr's techniques to beginning cardiac surgeons. The illustrations needed to be accurate and precise, so I developed a technique using a double sided, frosted mylar, working both surfaces using colored pencil, transparent watercolor, gouache and pastel. This technique allowed me to illustrate not only what the surgeon sees, but also deeper structures. It could show up to four layers of anatomy within one illustration. The technique was also forgiving, meaning changes could be made without destroying the surface of the paper.

I observed every surgical procedure in the operating room standing right behind Dr. Starr. Photography assistance was added when needed for reference purposes. There was always an opportunity to discuss some of the subtleties of the procedures with Dr. Starr and the assisting staff. I thoroughly enjoyed the three and a half years I worked on the two-volume manual. I even went to Donnelly Press in Indiana to press proof some of the procedures so that the colors could be used diagnostically.

The books were successful, and the first editions of both volumes sold out. The medical reviews that came in from all over the world were overwhelmingly filled with high praise and the books received several top awards. The importance of my involvement in the book was recognized by granting me co-authorship along with Dr. Starr and Dr. Harlan. I even wrote a preface for the books, which was quite an honor.

In 1979, director of Devers Eye Institute Dr. Richard Chenoweth – the first retina specialist in the state of Oregon and another brilliant surgeon – came into my office at the medical school with Dr. Tom Schultz, a neuro-ophthalmologist who I had known when he was a resident in ophthalmology at OHSU.

Dr. Chenowith said, "I understand you know how to make eyes."

"No, I don't."

“Well, you just went on sabbatical learning how to make eyes.”

“No, I went and observed how facial prosthetics, including eyes, are made by some. But I don't know how to make them.”

“Do you want to learn?”

“Hmm. Maybe. Yeah. Could be.”

“Okay. Is there someplace you can learn?”

“No. Individuals learn through apprenticeship which is passed through the families who established the field. I've got to teach myself.”

“Okay. What do you need?”

“What do you mean?”

“I'll sponsor you.”

“Oh, well, if I leave the medical school, I'll need a salary.”

“Fine.”

“I'll need to go some places I went on sabbatical where they were receptive to my looking over their shoulder and spend maybe a month at each.”

“Fine. What else?”

I just kept going. “Are you serious?”

“Yes, I want you. I want to fill out my clinic. We are missing a good ophthalmologist.”

“Well, fantastic.”

So, he sponsored me. I was learning that while working on the book. I said to him when I started doing it, “I'm going to need at least two years to learn this.”

My first patient during that time was a teacher who needed a prosthesis. I sat down with her and said, “I haven't made one for anybody yet. But I know what to do. I'll probably need to make several until I can find one that really works well and does what it needs to do. It might take a month; it might take two months. Of course, there will be no charge for it or anything. Would you possibly be interested in working with me?”

And she said, "That sounds like fun."

I learned how to make an eye with her. I spent a month with Jack Diner in Little Rock, Arkansas, and a month at UCSF in San Francisco with a couple of their ophthalmologists who really gave me a better understanding of materials. I found that I really enjoyed the whole experience. I did that for two and a half days a week, and the rest of the time I was working on the book. Or books, as it turned out to be a two-volume manual.

Lise Harwin: So, it sounds like you had a very equitable relationship with Dr. Starr.

38:44

Fred Harwin: Yes.

Lise Harwin: Talk a little bit about what you think medical professionals can learn from artists and what artists can learn from medical professionals when these careers intersect.

Fred Harwin: I've said a little bit of this. I think it has to do with the respect of another person having expertise in their field that will assist the task in having a better outcome by joining forces.

When I entered the field of ophthalmology, I often heard that "Anything is better than nothing as far as a prosthesis goes." I felt that, in many cases, results were not what they could be. This little piece of plastic is extremely important to the individual who will be wearing it. It can't "see," but it is "seen," and is an important part of that person's persona. What is right is learning how you can make this individual feel good and whole again. It takes a lot of work to make a prosthesis really well. It's like this: It takes 50% of the time to create something that is 90% of what it could be. It takes another 50% of the time to complete it that last 10% of the job, which would be 100% of what is possible. I'm a 10% person. Because that's what it should be, and that's what it can be.

As I mentioned earlier, the method for entering the field was through apprenticeship which remained with the families who established and maintained the profession. That meant that each individual who took on an apprentice taught only their own method by repeating step by step how they made a prosthesis. Of course, this could vary between practices with very little exchange of information and exploration into new ways of creating the work.

An academic approach was non-existent. I knew that my experience at University of Michigan in the school of medical illustration had given me a way to explore and develop not only as an individual, but as a person who could utilize an academic method to work out new ways to improve the field. I wanted to be part of applying this to the field of ophthalmology and found an opportunity by working with Johns Hopkins School of Art as Applied to Medicine, which had a service in facial prosthetics and was teaching a course to the medical illustration students. However, this course didn't include ophthalmology as it wasn't part of their service.

The director of this service was Juan Garcia, who was aware of my work as an ocularist through our mutual profession as medical illustrators. Juan invited me to work with him on his international program of working with professionals for upgrading and updating their professional skills in facial prosthetics, including ocularistry, which was to be my part of the program. I remember having two dentists come from King Faisal Hospital in Saudi Arabia. Juan joined them and was able to see my technique and how I taught. It was from that point on that I became part of his program. Shortly after that, I was invited to join the Johns Hopkins faculty as an adjunct assistant professor with the school of medicine.

Over the years, Juan developed the idea of having a graduate degree in facial prosthetics which would include ocularistry. I assisted in developing a curriculum for that portion of the program. Johns Hopkins now offers a two-year program with a Master of Science degree in anaplastology including ocularistry. I feel that I was instrumental in bringing this into an academic field of study.

I'd like to take a moment here to mention the two videos that were done about my work in ocularistry during my career. With each of them, I was approached by the filmmaker as a subject that they would like to explore and present.

The first experience came about with director Vance Malone of Food Chain Films. He had seen an article about my ocularist work and reached out to me. The film followed the procedure of making an eye for a patient from beginning to end. He also included me talking about my philosophy about what ocularistry meant to me. When completed, the video was entered into many film festivals in 2003. In fact, my wife, Sara, our daughter, Lise, and I were invited and travelled to the Sundance Film Festival in Utah to be a part of the Q/A at the screenings. I couldn't believe how special it was to participate and respond to the questions about the field at each of the five screenings. The film received an honorable mention in the Director's Choice category. Plus, it was shown at festivals around the world and received numerous awards.

[\(OCULARIST \)](#)



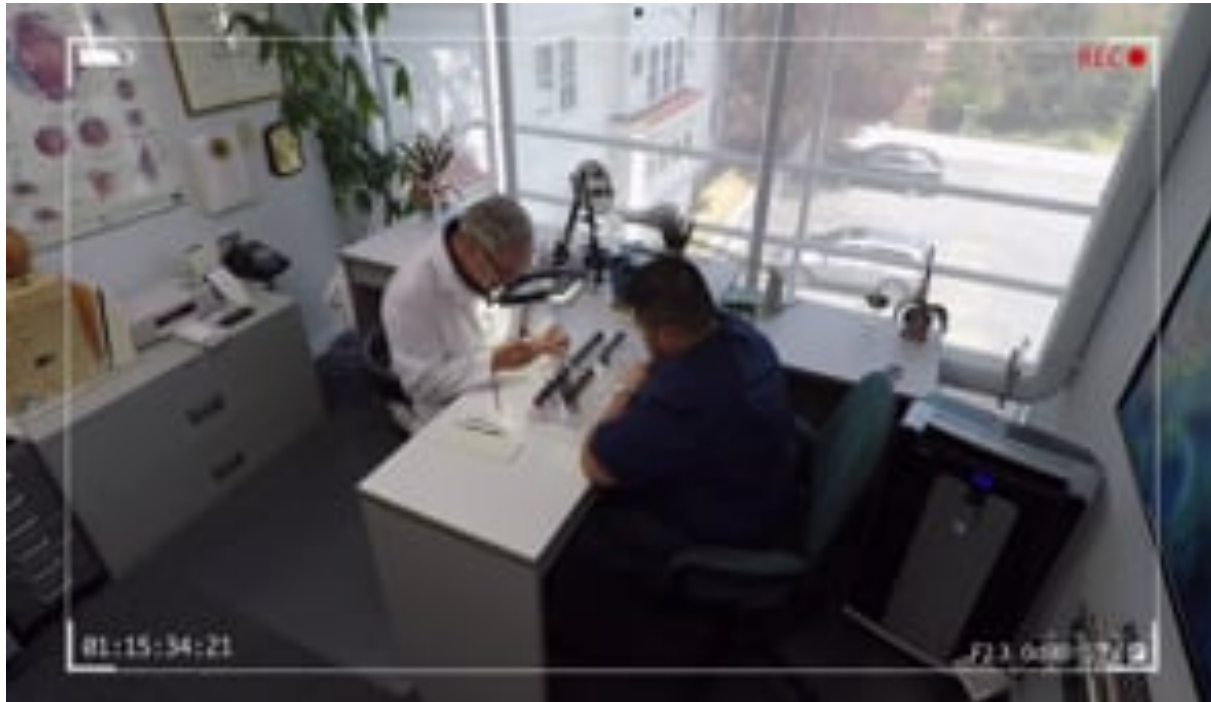
The second video came about when Eric Slade of Oregon Art Beat – a program on Oregon Public Broadcasting – approached me to do a segment on a show that was focused on art within science which would launch the 2017 season. I remember when Eric and his team came to my office to do the filming. It was one of the hottest days of the summer and the building was being remodeled. The air conditioning wasn't working, the crew had lights placed all around that were creating additional heat. The sweat was pouring down my face which had to be wiped by the crew. The fellow who I had selected to be the patient receiving the prosthesis was so excited to be part of this special experience.

When the video first aired in the fall, it was also posted on the station's Facebook page where it received several million hits. It moved from there to PBS's Facebook page where the audience response was even greater – millions upon millions. The best part were the comments about how sensitive and special the video was.

(<https://www.facebook.com/NPR/videos/10155856412449939/>)

But that wasn't the end of it. When Oregon Art Beat turned 20, they did a special where the producers picked their favorite videos from their complete library. Eric chose the one he had done on me to be shown along with one on Beverly Cleary, a nationally awarded children's

book author and Wil Vinton, filmmaker and creator of Claymation filming. ([OPB Art Beat Staffs Pick - Fred Harwin Hand-Painted Window to The Soul](#)). Quite an honor to be in the company of these individuals. Plus, the film was nominated for an Emmy.



My eyes also made it to Hollywood and the big screen. The first time was in 1985 when I was contacted by Wil Vinton, the Academy Award-winning creator of stop action and Claymation filming, whose movie studio was here in Portland. The eyes were to be for the British actor, Nicol Williamson, who played the Gnome King in *Return to Oz*. He wasn't going to wear the eyes, but they would be part of the animation that would go between the Claymation and the actor's actual eyes. At one point during the transition between the two, one of the eyes that I had made filled the entire screen.

The second time I was contacted to make a set of eyes for a movie was in 1993, when I was contacted by a film company in San Francisco who needed a set of eyes for an Orca whale. It was an unusual request, so I did some research, then made a set of eyes. My assumption was that it was a little low budget movie because they weren't too specific about details. It turned out that the Orca was *Free Willy*, the 1994 winner of the Young Artist Award as an outstanding family motion picture.

Lise Harwin: You talked a little bit about making this seven-piece mold and mixing plaster, and then line drawings with pens and then the added expense of color and the full range of color. We're now in an era of technology and using computers to do medical illustration. How do you feel about the technology that's now behind medical illustration?

Fred Harwin: Well, Marshall McLuhan wrote a book titled *The Medium is the Message*. I think it was written in the mid '60s, and the medium – meaning the technology or method of creating work – was more important than the message or information being presented in many cases. “Oh, let’s do a videotape, it’s got to be great.” It’s a videotape. It’s another tool. Technology’s another tool.

In the cardiac surgery books, it was as much about what I didn’t show as what I showed. One step, one illustration, would give that pertinent information without being cluttered up with extraneous stuff. But that decision still needed to be made by the individual who is the content creator and illustrator. AI will be not able to make that call.

A lot of things have changed. Medical illustration, of course, is not what it was. Black and white illustration, pen and ink and carbon dust still are still relevant. At Johns Hopkins, they still teach those techniques as part of their curriculum. But most of it is computer-generated illustration. Most of it is animation at a very high, sophisticated level.

But it’s a tool. The problem is, when the tool becomes the message, you lose. Then quality becomes mediocrity. And the quality, that decision-making, still is the individual choice. What tool you use doesn’t matter.

We do that in entertainment. The Van Gogh immersive light show exhibit included animation. There were two different levels of images going around an entire room. The floor, the walls – that is to show what experience this technology can give you. Like a painting can give you a certain experience, and this can give you another experience. I think that’s good use of technology.

In medical illustration, I’m obsolete. My work is something else. What is happening, though, is people are going back to vinyl for listening to music and they are also going back to film for photography. I think we get to a point where I’m hoping some people will be interested in the technique I developed for the open-heart surgery books, and artists will want to see what was done before.

I really appreciate Maria and the archive and special collections. I’m really quite honored to be a part of that. If somebody comes up and they want to see this old stuff, here it is.

Lise Harwin: Well, let’s talk more about that. First of all, those things are collectibles, so they’re special in their own way. They’re important to preserve, right? And as part of that, you donated some of your materials to the OHSU Special Collections. And some of them were displayed as an exhibit. What was that experience like? How did you decide what you wanted to donate? And what do you hope that library visitors can learn from seeing these pieces in the special collection?

Fred Harwin: There is an interest after you get to a certain point in technology of going back. I'd like to think that some people will be interested enough to go back into what was done previously and this will have some meaning. They might even pick it up and want to do it themselves. I don't know what's going on with cameras right now; I just hear there's more film being used. Why are we going back to film? Digital is so much easier. Well, because you can get different results with each process.

I hadn't even given it a thought to have this in the OHSU archive. I didn't know what to do with these drawings. I was going to give this to my daughter and say, "Here's all the work that I've done as a medical illustrator. Do what you will with it. I don't know what to do with it."

I was really pleased that this ended up the way that it has. Because if I was 30 years old and there was an archive that had something that I might be interested in as reference, I could see myself visiting it to see what had been done before as part of the research into my work. Not what I can do with technology, but what was done before. It has validity and has meaning.

It's like looking at paintings, oil on canvas. I like to look at what some would call the Old Masters. What were they doing? Why is that important? There's a whole learning process that can happen when one goes back into history. I think that should be valued.

Lise Harwin: On a related note, you talked a little bit about going to Little Rock and you talked about the mentorship in this field that was offered to you. And I know you have also been a mentor to others. So, talk a little bit about the role of mentorship, both toward you and that you've given others in your career.

50:49

Fred Harwin: That's something I don't forget about. I was part of four medical illustration faculties: Georgia College of Medicine, Johns Hopkins, University of California, San Francisco Medical School, and Cleveland Clinic, whose medical illustration program included classes within the Cleveland Clinic and the Cleveland Institute of Art. The programs would have students who were looking for summer internships. When I was here at OHSU, I would take at least one student on every summer. I felt it was very important to provide that opportunity for students.

With the academic background that I had experienced, mentorship and internships were a part of my educational experience, so it was natural that I took that on as a part of my commitment. However, when I entered the field of ophthalmology, these were not a part of their agenda. In fact, ophthalmology had just the opposite commitment – individuals were not allowed to train or bring people into the field in an informal way.

However, I found a way around that to assist individuals who were already in the field by partnering with the international program that was happening at Johns Hopkins. I worked with them for about 10 years. I think mentorship is extremely important in all areas.

Lise Harwin: Thinking about those students who either came to work with you as interns or that you taught in classes over the years, what advice do you give them if they are interested in pursuing a career in medical illustration or in ophthalmology?

Fred Harwin: Pick something that's easier to get into. (laughs) It's very challenging in both because they're such small niches. My advice is that if you are a visual person and you think of yourself as a visual artist and you want to pursue that, look at what society needs in that arena. And specialize. Find a little niche. I found two niches. The ophthalmology was actually a smaller one (laughs) than the medical illustration, which was small enough. And I feel very fortunate to have stumbled into those.

Over the years, I've been contacted by many students in art and fine art looking for advice on something to do with their art other than join the gallery circuit, which can be difficult to live off of. You have to be so committed, like some of the artists that we know. They were people who were driven. They had to be working all the time. And that wasn't me. I feel I was so lucky to have found these two niches and the timing was just right. When I look back on it, I say, "Wow! What if I didn't follow what that kid said? What if I decided I wanted to do something else instead? What if I decided, 'Oh, I can't get a sabbatical, I'm not a doctor.'" So I went after things that I felt I could learn from.

Right now, I'm not working in terms of having a clinic anymore. I'm not doing medical illustration, though I'm still on the faculty of the Johns Hopkins program and will probably give a Zoom lecture to their students in the near future. If somebody contacts me, it's my pleasure to work with them. I've seen so many people over the year to respond to their inquiries, it's wonderful. You can put on Zoom. They might say, "I'm having trouble with this prosthesis," or something. I still like doing that and helping out. Others have helped me, and I think we need to pass that on. I think mentorship is extremely important.

Lise Harwin: You talked about a few of the different people here at OHSU that had an impact on your career journey. Are there any other memories of colleagues – maybe some stories – of different people that you worked closely with here at OHSU?

57:27

Fred Harwin: Yes, there are probably a lot of them because I do enjoy being among a group of thinkers and doers. I enjoy the research as well. I got to know a lot of people who were really committed to their research – almost like the painter who's committed to doing just that. There were several people in that arena that I got to know fairly well and worked with. And some people who I really enjoyed and became friends with.

One, of course, is Dr. Starr, who is a brilliant, unique individual and is committed to his work. In some ways, I feel I wish I could be like that. In other ways, no, my life has been full of other experiences, interests and commitments. I like that Dr Starr was open to my participation in the development of the book. It was a real honor to be able to work with him on a project that had a worldwide impact.

Sam Niles was a cardiac pathologist and a fun guy. He utilized a technique to transfer tissue accurately into a wax model. He'd loan models to me to take home and use as reference for my drawing for the book. I could only see so much in surgery, so these became an additional tool for maintaining accuracy.

Another person was Bob Bacon, who was an anatomist and was a very socially conscious individual – conscious about all those things that I believe in in terms of environment and treating people well. I heard from several of his students that he was one of the best teachers they had ever had. Bob was an anatomist. Sam was pathologist. At that time, I was working for Springer-Verlag and mentioned to them, "Hey, you guys should do a book together." And they did.

I had a friend and fellow medical illustrator, Joel Ito, who lives here in Portland, illustrate it for them. I was busy doing other things at the time and wasn't available to illustrate it. It was really nice because their collaboration was from a unique perspective. Bob wrote about what anatomy is, while Sam wrote about how it can change to pathology. It was a successful book and I enjoyed seeing an idea I had for a book come to fruition and developing it by working with three friends.

Let me take a minute and explain what my position was here at OHSU for 10 years. I was hired to be the director of the medical illustration/graphics department. It was the function of the department to provide informational and educational materials for the entire campus from simple graphics, medical illustrations, exhibits, two- and three-dimensional models all the way to a campus map that lasted over 30 years. Most of the work was the visual component for publication of writings that the staff and faculty wrote.

I enjoyed the opportunity to meet interesting and dedicated people while working here. Some of them were Dr. Krippaehne, chair of surgery; Dr. DeWeese, chair of ENT; Dr. Benson, chair of OB/Gyn; Dr. John Berry, urologist; and Dr. Harper Purse, urologist. All these people were surgeons. Some of the research staff who I really enjoyed working with were Jack Vernon, Bob Brummet, Miles Edwards, Jim Metcalf and Ken Thornton.

Though it had been at least 40 years, it was nice to recognize two of the doctors – John Berry and Ken Thornton – that I had worked with when they attended the opening of the show of my work that is now in the archive at the library.

And it wasn't all work. Jack Vernon and Bob Brummet invited us to go sailing with them on Thursday nights. They would make dinner sailing up the Columbia and float back while watching the sunset reflecting off Mt Hood.

I came here from Michigan where we used to play a game called paddle ball. But when I got here, Bud Dockery – who managed the student activities building – said, “You’ve got to learn squash.” He taught me how to play squash. I enjoyed the student activities building as it added an element of fun and physicality to my day.

Lise Harwin: You talked a little bit about your work with Springer-Verlag. Do you want to talk a little bit about your work with Gore?

1:06:25

Fred Harwin: There was a publication called Communication Arts. It is the premier publication in the world in terms of professional illustration. If your work is published in the magazine, it's like getting an Oscar. They did a six-page spread on my work as a medical illustrator and as an ophthalmologist which resulted in numerous medically related companies inquiring about my availability to work for them.

Gore-Tex was one of the companies that called after the article came out. I remember the call from them. They said, “I know everybody's calling you. But we really want you. What do you want from us?”

And I said “Wow, that's cool.” It's always cool to be asked and to be wanted. So, I said, “Well, what do you want?”

“Well, you tell me. Here's what we're doing now. Here's what we'd like to do.”

And I got involved with them like I got involved with Springer-Verlag. I ended up working with W. L. Gore for 15 years as their illustrator.

I worked for Springer-Verlag because the manual was so successful. Actually, I coordinated nine manuals in surgical disciplines. My job title was Illustration Managing Editor for the New York office of Springer-Verlag. My job was to hire the illustrators for the manuals and to supervise the work up to completion and publication. A number of the illustrators were interested in learning my color technique of working on both sides of mylar to create the illusion of depth.

I got involved with these two companies at the same time. I'll go back to Gore-Tex. They were at a spot in their communication where they wanted to show their new products. Now Gore-Tex – we know about their outside breathable material. It's a wonderful story of W. L. Gore, who worked for DuPont, and how he discovered Gore-Tex in his research lab. It turns out its properties are useful for a multitude of purposes inside the body as it is completely inert.

It was being used by the medical division to make shunts, tubes, patches, sutures while they explored new uses for the material.

They wanted to show surgeons their newest products and how to use them in advertisements in medical journals and in exhibits at medical conferences. Their brand became recognizable through the distinctiveness of my drawings. The W. L. Gore brand stood out when you'd open a journal to one of their ads. The layout, style of image and palette were all dependent upon the drawings that I did for them.

Now let's get back to Springer. The heart surgery manuals that I co-authored were so successful and during the time I worked on them, we developed a great working relationship. They wanted to create a series of additional manuals of surgical specialties using the same format of illustrations, design and text. I said, "There are really brilliant, wonderful medical illustrators out there. I'm talking worldwide. They all come to this one meeting that's usually here in the United States. I know a lot of these people. These are the illustrators you want to have to go with the quality of your company and what you go through to really keep it at that high level."

They said, "We'll have them bid for the project."

I said, "Do you also have the printer bid on the project?"

"No, we have been using the same printer and have been pleased with the results."

"You're bidding for the illustrators. Using the same printer. Why don't you bid the printer, put more money on the illustration end, and get the best illustrators?" It made more sense for the success of the books to invest in the creative component of the project.

Springer-Verlag was the first publisher to support medical illustration meetings as a sponsor. I said, "You guys are going to the American College of Surgeons and other medical conferences. You throw a reception for them. We want the best illustrators. Why not throw a reception for the AMI-Association of Medical Illustrators?" And so, they did. No company had ever been a sponsor or thrown a reception at the AMI meeting before.

So, then the best illustrators wanted to work for Springer. That was great, and it was great for me because I had a chance to really get involved in this whole series right from the beginning of the process by becoming an important part of the Springer team. I worked for them for over a decade.

So those were two large clients that I had while I was at my ophthalmologist practice. I had finished the books on open heart surgery. But I still was doing eyes. I enjoyed the two and a half days a week. So, I ended up expanding that to three days a week. That was my eye practice. It was always three days a week. If I did it right, I could be very productive and still give the patient a lot of time. It wasn't about how many I could do; it was about how well I could do them. I figured out this is not something I'm doing as a product for money. Even though I did get paid,

yes. But this is something that's important. It was like having an opportunity to help another person, and help another person with themselves, with their image, with their life. It was so rewarding that I was teary with quite a few of them. It was a beautiful experience. I was very honored to have that opportunity.

I made eyes for over four decades, over 40 years. I worked as a medical illustrator for over 30 years. They overlapped. It's like, "Okay, what do I do next?" Well, I go bye bye. (laughs) But what I do next, I'm painting now. I'm also running into the usual age scenarios. I should not be making eyes now. I would be fighting with myself because my eyes are not what they were 10 years ago. My hands aren't either – carpal tunnel comes in. Trigger fingers come in. Arthritis comes in. You're just not at that point. I think what's important in any work like that is to know when it's time for you to say, "Okay, I've done it," and go away. I say that my three-point shot is still going in. Then I left the court. I was fortunate to be able to do that.

I'm honored to be involved here with the archive, not knowing what I was going to do with these drawings in the first place, and to have made the time to actually go back over all the work which brought so many memories and experiences to mind. What's been interesting is some people know me as the eye guy. I've been fortunate to get some nice visibility and publicity on that part of my work experience. But my illustration career was in a totally separate part of the medical community. I remember in some of the publicity that Maria distributed, somebody saw it and said, "I didn't know you did all that!" Now I'm very fortunate to be painting in my own studio for myself.

Lise Harwin: What do you want your legacy to be? Or what do you want to be remembered for? I mean, in 50 years when you're not here. Because you have a long way to go.

1:19:25

Fred Harwin: Oh, yeah. A long way to go, right. (laughs) I'm working on it. That's a good question. I feel that, and I think a lot of us do, in terms of reasons for being whatever we're here for other than procreating, is that what I've tried to do is to be a giver. I like helping. That's what I've tried to do, so that's why being an ophthalmologist meant so much to me. Because there's an opportunity where you can really help somebody.

I also had the opportunity to teach surgery in a way that really makes it clear. As an example, a friend was visiting us and told me this story. He was in Bangkok and was in a car accident and had some chest problems. He went to a chest surgeon. During the appointment, the surgeon pulled out a book – the Manual of Cardiac Surgery. My friend said, "Oh, I know this guy! I was one of his former campers when I was a kid!" The surgeon said, "Oh! This is the only book I use for reference because I can count on its accuracy."

Just to hear that story after four and a half decades since completing the work is a reminder of how all the effort in creating such unique illustrations was a very worthwhile endeavor that had a lasting impact that went farther than I could ever imagine.

The other thing I didn't mention about the manuals was that in doing the illustrations and working out a palette for the color, I chose to use colors whose values were equivalent in black and white reproduction so the images would reproduce well and maintain their informative relationship without losing the subtlety that was so important to their success. The books were published in five languages: English, German, Spanish, Japanese and Portuguese. Three were in full color and two – Japanese and Portuguese – were in black and white. An additional handbook in English was also published in black and white.

As far as a legacy, I don't even know what that means. We all go through this short life. We think it's a long one when we're young. As we get older, we know that it's not that, (laughs) it's not that long. I'm just pleased that I've been able to do what I've been able to do. I'd like others to think about themselves and what they would like to do and want to do and not think about how much something costs or is valued. Just because something costs a lot doesn't mean it's valuable.

Over time, the emphasis changed from valuing quality to how much something costs. That has really done us a disservice rather than a service. We're here, we're social animals, we should be helping each other, and we should be giving.

I knew that my ophthalmology work was helping people by touching their lives, but I have never thought of the individuals I had touched with the illustrations as part of my helping people until I read the reviews and heard this recent story about my friend in Bangkok. So, I've been blessed to have these experiences.

Lise Harwin: We were talking about legacy, though.

Fred Harwin: Yeah.

1:27:30

Lise Harwin: And this program with Johns Hopkins is legacy, right?

Fred Harwin: That's right. It is legacy.

Lise Harwin: Talk a little bit about that.

Fred Harwin: You're right. It is a legacy. There are two students and one that's graduating. If I still had the clinic, they would be out here working with me. Ophthalmology is a part of the facial prosthetics curriculum. I helped to initiate the anaplastology program to include ophthalmology because I think people with backgrounds like medical illustrators that come from highly academic environment of art and science with a level of skill are what's needed in the field of ophthalmology.

Lise Harwin: Do you want to talk more about how the program at Johns Hopkins got started?

Fred Harwin: Well, it got started by my being a persistent person. Juan Garcia – who’s a former graduate of Hopkins and is the director of anaplastology/facial prosthetics there – understood the importance of adding this into the program and wanted to learn ocularistry. He came out here to study with me several times. He’s the one that started the international program for individuals already in related prosthetic fields. It was through his efforts that I was appointed Adjunct Assistant Professor in the department over 10 years ago. Juan is a wonderful artist and a really good person. I have enjoyed our collaboration.

I do have a very interesting story. There’s a professional group called the International Anaplastology Association. It is an international group of those who do facial prosthetics. Some of the members are dentists, some are sculptors, some are medical illustrators, and some are ocularists. Then there’s the Association of Medical Illustrators, another international group.

Well, this happened because that year both organizations were holding meetings in Cleveland at the Cleveland Clinic within days of each other. Juan Garcia was one of the chairs and both organizations were interested in showcasing a workshop on ocular prosthetics and invited me to do the presentation for their members. They decided, “Let’s put the meetings together and have them overlap and Fred will give his two-day workshop so members of both organizations could attend.” That was really cool.

Case Western Dental School is part of that complex of the Cleveland Clinic and that was where the workshop could occur. They let us use their complete lab. Part of the workshop was a presentation by a local oculoplastic surgeon demonstrating how the eye was removed and prepared for a prosthesis. He had a patient whose eye had been enucleated and she had been waiting months to receive a prosthesis. We set up in a room, got in a little room with a desk and everything. I had brought supplies with me. Juan brought supplies. I made an eye for her. It was about two-and-a-half-day complete workshop which went from fitting, casting through receiving the eye. I had a group of 30 to 40 people.

While I was making her eye in a small office, the group was in an auditorium where they could see what I was doing and ask me questions about the process. I had enough materials with me so that I could make the prosthesis for her. In fact, I have film of the entire procedure that an archive might want to have. They shot the whole time that we worked on it. We finished the prosthesis. Put it in. It worked out well. Brought her some flowers. We celebrated with a Pepsi because we were in an institution. It was a success.

Years later, I heard from one of the directors at the school of medical illustration at the University of Illinois in Chicago that she had been in that class, and it was the best class she had ever taken at a conference. So that’s really exciting.

I’ve been very fortunate to have situations like that – I feel that is my legacy. Those people who were there, who remembered. It’s like somebody said, “Well, what have you done? What’s

your legacy?" It's not what I have done; it's what I have given to others and what they do with it. That's the legacy. That's the way I look at it. I've had an opportunity to do a lot of that.

I'd like to mention my predecessor. Clarice Ashworth Francone was a medical illustrator who trained at Johns Hopkins in the first program in medical illustration. She studied with Max Brödel, the fellow who is remembered as the father of medical illustration. He brought the field over from Germany. She was here for 42 years and did really nice work – a wonderful person. It was time for her to retire, so that's when I came on board. Her work is also in an archive here. She was involved in the Portland art community and taught a class on watercolor technique to staff here with a fellow named Charles Mulvey. There's a technique he taught everybody to paint Mount Hood with fir trees. People who had never done art felt really good about having a picture that looked so recognizable. It was available to anyone who worked at the school from surgeons to staff.

When I came here, I had the opportunity to be accepted by the art community – not only the medical community, but the whole art community. I ended up teaching at Portland State University and at the museum art school. I had a show at the museum and a show at Portland State. I ended up having a show of my work at Catlin Gable when Lise was there. (laughs). The show had work from my early drawings when I was a little kid all the way through the books. Had the same thing at Oregon Episcopal School. I gave a talk to the entire student body at both of those institutions and enjoyed the opportunity to interact with the young students.

I remember being asked if I wanted to join an evening life drawing group of professional artists that was held at Portland State University. They would bring in a model once a week for a drop-in session with about eight people. Who was there? Louis Bunce, Mike Russo, Harry Widman, George Johanssen. I didn't know it at the time, but I was with some of the top names in the Portland art community. So that was really nice to come to a community where we did not know a soul and actually be well accepted. I think a big part of that was that the field of medical illustration had a unique place in the art world.

1:39:40

Lise Harwin: Do you want to talk a little bit about starting the Center for Ocular Prosthetics?

Fred Harwin: I was with Devers Eye Institute for 15 years up until Dr. Chenowith retired. When the new administration came in, they wanted to use that space differently. It was time for me to move and start my own independent practice.

Up the hill at the Lovejoy Medical Building were two ophthalmologists that I knew: Dr. Marvin Green and Dr. Paul Wilkins. Two older gentlemen who were both nice people and good ophthalmologists. They had just set up their offices at the Lovejoy Medical Building. They had some extra space, so I ended up moving there and we shared space. I had all the room that I needed.

Now the practice needed a name. Well, a lot of ocularists use their own name, but I liked the idea of being a center. So, I came up with Center for Ocular Prosthetics. I like the fact that I was part-time, and I had one part-time employee. That was the entire center. How big was it? It was just us. (laughs) So it was very small. I then found out what it was to be a separate business in terms of licensing and various things I had to join. One thing hit me after another. I said, but we're only part-time! That didn't matter. That was the start of the Center for Ocular Prosthetics.

1:44:25

Lise Harwin: Could you just say a little bit about the personalization of the eyes?

Fred Harwin: This is actually very important. Individuals would come to the clinic either needing a replacement prosthesis or to be fitted for a new one. Over the years, I encountered quite a number of individuals who had tried to adjust their physical presence to cover up a prosthesis that was not properly made. They might turn their head away in a different direction or use their hair to cover their eye. It was an extremely unfortunate situation that impacted their lives unnecessarily.

When someone was coming to me for the first time, I would bring them into my office to discuss the process of making an eye from the beginning to their receiving it, what it would and would not do for them, and how they and their families could help to make it as successful an experience as possible. Here's a story about how the individual personalization of each prosthesis got started.

Early in my medical illustration career, I was asked to do a butterfly poster by Crown Zellerbach, a paper company here in Portland. I put that poster on the wall behind me in my ocularist office. Shortly after I started working at Devers, a woman who had come to me for her first prosthesis came in and saw the poster. She said, "Oh, I love butterflies."

I said, "Oh, what's your favorite?"

"A monarch."

"Hmm. How would you like a monarch on your eye? Let's personalize this for you."

"Really? You could do that?"

"Of course."

I painted a monarch butterfly to designate the top of her eye that's covered by the upper eyelid. That started the whole thing. I had kids bring in pictures of what they wanted to have on their eye. I made a big thing out of making this personal, and having the individual participate in the experience. It was especially successful when I invited kids to help me paint their eye. In

many cases, involvement in the personalization would soothe the anxiety that almost always was present to some degree.

I became aware of how important our eyes are in our communication with others. That individuals with prostheses needed to learn a new way to turn and direct their head when greeting or communicating with another person. That type of counselling became an additional part of my work. My job was to make it so you couldn't tell the difference between their eyes. The job of the individual is to make the lack of movement in the eye that is the prosthesis go unnoticed by changing their habits.

I would have families working together to make this successful. I would suggest that the family create a sign or signal as a reminder to the individual wearing the prosthesis to turn your head when addressing another person so you're always looking straight at them. This made it so the eyes stay directed in the center while the head turns to direct the line of vision. The prosthetic eye will never have the same movement back and forth. Really, it's a question of that person retraining how they look at people to help themselves. So, I made that part of my mission.

Over the years of painting irises, I developed a technique that gave the illusion of a dilating pupil by utilizing the principles of light, color, reflection and refraction. It is a very tedious process, but it can be very effective for individuals with light irises. I have been working with an ophthalmologist in Los Angeles to transfer the principles I had been doing by hand to digitally printed irises and making these in base colors available to ophthalmologists.

Here's an example of how this dilating pupil effect works for a person with light eyes – blue or blue-gray – in a low light situation like most restaurants for dinner. You're sitting across from somebody. Let's say it's a date. You want to impress this person and feel comfortable with this person. You're looking at them. Without the dilating pupil effect, the pupil of the prosthetic eye doesn't change, and the other eye dilates because there's not enough light in the restaurant.

Well, we eliminated that by getting the area around the pupil of the prosthesis to create the effect of a dilating pupil. I wrote it up. I talked about it. I was trying to get other ophthalmologists to understand the difference it could make for an individual's self-confidence.

To me, it's very important for these people when that eye looks like it dilates. I took pictures to show the technique's effectiveness under differing light conditions and you can see the difference. You can see that it gives the illusion of dilating. It's all done with ambient light and how the viewer perceives it. We worked out a pattern that would give the illusion that could be printed successfully. The pupil would be larger. Then there would be these little lines on top or little dots on top. At a certain amount of light, everything would look darker. With more light, it would bounce off those top surfaces of the little lines. It's effective.

Painting an iris to look like another iris is extremely difficult without understanding the principles that come with a background in art. Light, color, reflection, mixing pigments and application of color over color, like glazing, are all critical to successfully painting irises.

Over the years of attending the annual Association of Ocularists meetings, I shared my experience and wealth of knowledge with the group by giving classes and workshops. After each workshop there were a lot of questions, which led me to think that many of the questions were because of a lack of understanding of color and color theory.

This led me to a question about developing a color palette of limited dry pigments that could be made and marketed specifically for the field. I worked for over a year with Robert Gamblin of Gamblin Artist Colors to formulate 18 colors in total. Six were developed with subtle gradations of cool to warm and gray to brown and were called “base” colors. These base colors were to be used initially in the painting process to lay down the first layer of paint that would match as closely as possible the other eye. The complete set was marketed to ocularists under the name Ocu.Color. The feedback I got was that they were helpful. In fact, all the ones that were made are sold out.

Lise Harwin: Let me just say, that is also a legacy. Right? This new technique.

1:54:03

Fred Harwin: It is. Yes, actually it is. (laughs)

Okay, Guadalajara. This woman came up to me at an ocularists’ meeting. She was told by somebody to talk to me. English wasn’t her first language, so when she approached me, she said, “You teach me.”

I said, “Well, who are you?”

“I am an oculoplastic surgeon in Guadalajara, Mexico. I cannot get a decent prosthesis. I’m removing somebody’s eye. I’m taking their eye away. And I can’t get a good eye to put back in. And there’s nobody that can do this work. I want to learn. Will you come for a couple days to teach me?”

“Oh, okay. And you’re in Guadalajara?”

“Will you come down to Guadalajara to teach me to paint?”

I looked at her and I said, “Yes. Let’s make it at least a week to 10 days.”

She gave me a very big smile. Then she asked me how much I would charge to come and teach. I liked that she wanted to learn to make prostheses for her patients. I felt that there should be no charge for my time if she would take care of the expenses of the travel.

I had a very warm reception when we arrived there. (laughs) Sara and I stayed in a casita behind her house. Her office and lab were a part of her home. Dr. Arlette Amador is her name and she's a wonderful lady.

I said, "Okay, let's get to work. We're going to paint. Show me how you would make a prosthesis."

I had packed all the painting supplies and brought them with me. Because she had only asked me about learning to paint, I assumed that she would have the materials and equipment to make prostheses. However, I found that this wasn't the case. So, we located and visited a tool and die company and a dental supply company to work with us on getting the supplies and tools needed. We were down there for 10 days.

She had scheduled patients for a week. I looked at the schedule for the first day and said, "How many do people do you have coming?"

"Well, we've got two people in the morning, three in the afternoon."

That stopped me in my tracks. I recognized that she had no idea of how much time to devote to each patient with the method that I use.

"At my clinic, we usually have each person come for four visits over a three-day period. I see, at most, one person in the morning and one person in the afternoon to start the process and complete two to three eyes in a week."

We had a lot to accomplish in a very short time. Fortunately, she had invited an experienced ocularist from Buenos Aires to join us who wanted to learn my painting technique and was fluent in both English and Spanish. He was helpful with translating. With his help we were able to successfully accomplish all that had been scheduled. We went through the week seeing patients until wee hours of the morning. Many were so grateful to be a part of this experience, that they brought us gifts and one family even made us all dinner.

I asked her, "Do your patients usually bring in presents?"

She said, "Not usually. Because you aren't charging me, I am not charging them."

That reminds me that within my practice of seeing patients, I tried to not let their ability to pay be a factor in receiving a quality prosthesis. There had been a couple who lived in Medford, Oregon, who had originally immigrated from Ukraine. They were back there visiting and encountered a neighbor who had a daughter who had lost her eye and needed a prosthesis. They had seen an article in the paper about me and, upon their return home, called to inquire if I would make the young woman an eye. They ended up sponsoring the trip for her and her mother, while I sponsored her eye. The story was reported in the Oregonian.

I ended up going back to Guadalajara twice. Arlette came up to Portland at least twice to work in the lab with me. She's very talented. She calls me Teacher instead of Fred.

I just spoke to her recently and she's going to come and visit at some point. We went down there a few times and she's been up here a few times. So, I guess that's another part of my legacy.

Lise Harwin: That's a good, positive note to end on. There are now going to be professionals in the world who really can do both pieces, thanks to you going to Guadalajara and helping her gain that skill.

Fred Harwin: I think that's a big part of what we're here for, to help others. I'll extend it to help and work with other living things, including our environment. People who forget that – it's unfortunate. Getting involved in a small field with a one-to-one relationship – there's nothing more special than that. I feel very, very fortunate that I had these things happen to me.

One of the most important things is when I went down to see Arlette and spend time with her, she wasn't the doctor and I'm the non-doctor. I wasn't the great ocularist and she was just somebody wanting to learn. That's not what it's about. You have to really have respect for each other and understand that we all have strengths and weaknesses. Let's use our strengths to help others.

2:01:21

[End Interview.]