Wisconsin Center for Film and Theater Research

Nitrate Motion Picture Film Oral History Interviews

Rosa Gaiarsa

(00:00 – 02:05) Introduction – Rosa Gaiarsa's background and training as an archivist at the Cinemateca Brasileira.

***MARY HUELSBECK*:** Today is Friday, August 7th, 2015, and I am speaking with Rosa Gaiarsa of UCLA Film and Television Archive. Rosa, why don't you start off by telling us a little bit about how you became an archivist?

ROSA GAIARSA: Hmm. It was still in Brazil, where I went to school. I went to film school at University of Sao Paolo, and after I graduated, looking for a job, I dabbled a little bit in film post-production, working as a film editor. And then the curator of the Cinemateca Brasileira, which is the film archive in Sao Paolo, it was a foundation at the time. It was maintained by individuals, not by the government. The curator invited me to work at the archive, and I thought it was a very good idea.

I had no experience whatsoever with film archives, but I knew film handling, and I worked there for approximately three-and-a-half years, something like that, and that's where I first handled nitrate in my life, because they do have a collection of newsreels that they maintained in vaults, and, you know, they didn't have a preservation program. It was too expensive at the time to try to copy the films on safety, but at least we tried to maintain the collection healthy by winding through it and identifying and, you know, keeping the collection safe.

HUELSBECK: *Sure. And when was this? What years was this?*

GAIARSA: Oh, my God. That was late '70s.

HUELSBECK: *Not that long ago.*

GAIARSA: Yeah. Late '70s, early '80s. Yeah, yeah.

(02:06 – 4:02) Gaiarsa's background knowledge about nitrate film and the procedures followed at the Cinemateca Brasileira.

HUELSBECK: *So did you know anything about nitrate film before you started working with it?*

GAIARSA: A little bit in film school, because we knew when they were projecting nitrate film. You know, it was a big deal to have nitrate film projected at the school. But I didn't know much about it. As a student, we were not taught anything specifically about nitrate. We only knew

there was nitrate film, and but what I learned was that the Cinemateca Brasileira, because they were a member of FIAF [International Federation of Film Archives], so as a member of FIAF, you know, you share the information, and you had guidelines for handling nitrate film, and so working at the Cinemateca, we followed the guidelines set up by FIAF.

HUELSBECK: *Okay. How else did you learn about caring and working with nitrate film? Was it just a lot of hands-on training?*

GAIARSA: Yes. Mostly hands-on training. There was not a structured class or a specified training for it. It was kind of an on-the-job training. You learned from somebody else on the job that explained to you how to handle it, you know. Don't wind it fast, be careful, you know, stuff like that.

HUELSBECK: *So what was your procedure there for handling nitrate?*

GAIARSA: Well, limits on how much you take to the workroom, and having one reel out of the can at a time, winding it slowly, segregating the deteriorated sections of the film. Basic safety, you know, guidelines, mostly. Yeah.

(4:03 – 7:56) Gaiarsa's early career at the UCLA Film and Television Archive in the late-1980s and 1990s, and the training she received there to work with nitrate film. Includes discussion of vault testing at the Library of Congress in the 1950s.

HUELSBECK: *So how has the approach of caring for and regulating nitrate changed since you started working with it?*

GAIARSA: Well, it changed a lot. Well, then I moved to the United States, and that's another long story, but when I came to the United States, my dream, I mean, since I worked at the Cinemateca Brasileira, I knew about the other FIAF members, and we knew about UCLA and the preservation project that Bob Gitt was working on. You know, UCLA was an example of what an archive should be in the '80s. In the early '80s, they were already famous in FIAF.

So I had a dream of coming to the United States and working at UCLA. And little by little, you know, trying. Actually, knocking at UCLA's door three times, and the third, I finally got in. And I started to work in the shipping department, you know, and the shipment department is not shipping and receiving. We also handle film. We prepare films for exhibition. We are the ones that page the film from storage and keep track of circulation, so it's much more than just shipping and receiving.

And after a few years, then I was able to be promoted as Bob Gitt's assistant, which was a big dream of mine. So it was about three years later, so that was 1989 when I started to work at UCLA. It was probably '91 or '92 when I started to work in the preservation department.

So we had again, at UCLA, the training. Jerry Golden was the Vault Manager, and he did the training for handling nitrate. And the first thing that you do when you begin to work with nitrate, before you touch nitrate film, is to watch, I don't know if you know about the video of the Library of Congress. They have this video about the testing that was done in the '50s showing how they're trying to see what would be the best way to build the nitrate vault.

So they had, you know, vaults with no blowout shafts, vaults with blowout shafts, vaults with different constructions and ventilation systems and so on, and they put a lot of nitrate in there, and they set fire to it and see how it happened, you know, what happened to it. And that was part of their testing, I believe, for building better nitrate vaults. And so we watched that video, and you see the testing, you know, the ones with the blast shaft. You can see, it's almost like a rocket launch. It's very impressive, and it was, the video was shown to the newbies to impart the seriousness of working with nitrate film. It is true. It catches fire. When it catches fire, it is explosive. You know, there's no way to control it.

So after that, it's like, you know, wind film. We don't wind film on motor rewinds. It's just hand rewind at a slow pace to prevent friction. Again, control of the amount of nitrate we keep in the workroom, one reel out of a can at a time, and things like that.

(7:57 – 13:52) Changes in shipping and receiving regulations for nitrate film in 1998.

GAIARSA: But for shipping and receiving, that's where things changed, because we in the beginning, I mean, before, that was in the '90s. Yeah. We still shipped nitrate in the film cases, in ICC 32B shipping cases. And in 1998, the new regulation that was in the works for a few years, that's when it changed, that shipping in ICC cases was no longer accepted. That's when the Department of Transportation enforced the UN certified packaging material.

And that's exactly when I was promoted from the Preservation Department. Not promoted, I switched places with an employee. I left the Preservation Department to work as the vault manager, as the collection services manager. And it was exactly the year when the regulation for packaging changed, so it was a challenge for me to get up to date with the new regulation.

I have to learn much more about this than I know to be able to train the employees, and what I did was I did my own research. I sat down with the computer, you know, looking at the Department of Transportation, DOT, the CFR-49, the IATA regulations and so on, so forth, until I, I even looked at the history of the Department of Transportation to find out where, why was, you know, the packaging ICC's 32B no longer accepted.

And, you know, understand the Interstate Commerce Commission, and understand the new rules for the Department of Transportation, and the acceptance of the UN guidelines. That was part of the research that I did on my own to train my own staff. Yeah.

HUELSBECK: *Do you remember why those changes were made? What brought those changes about?*

GAIARSA: My understanding is that it's not specific to nitrocellulose film. It's every hazardous material that was manufactured in the world, you know, there was disagreement that you say, we're transporting this by ship, by air, by every, you know, every form of transportation, and it crosses borders. It crosses state borders. It crosses international borders, and if you put a symbol saying, this is flammable, that symbol has to be understood everywhere it goes.

And that was the intent of the UN, is to say, okay, here is the hazardous material, nitrocellulose film. It has specific properties. So it's assign a number that is specific to nitrocellulose, and the symbol is going to be the flammable solid, which is this diamond shape with the red flame, you know, with the stripes and so on. And if it goes to Brazil or Germany or wherever it goes, it will be recognized as, you know, it can be easily identified and dealt with.

And until then, until 1998, within the United States, the packaging, accepted packaging, was ICC, which is International Commerce Commission, which regulated train cargo.

That's the difference, because up to a certain time, I mean, in the, think about it. In the '20s and '30s, when film was distributed within the United States, how did it get there, from East Coast to West Coast and vice versa? It went by train. There was no airplane. It was too expensive to go by airplane, so it went by train, and that's when the ICC, which began actually, I did a whole research on it, which, you know, ICC began to regulate tariffs, cargo tariffs. The cost, I mean, you cannot, you know, charge whatever you want. There are rules on how much you can charge for cargo on a train. And then they realized that they had a responsibility too. They had to expand the responsibility for train accidents.

So that's where the safety, you know, the packaging, say what is proper packaging to transport by train? And that's where ICC, you know, regulate, oh, nitrocellulose film. Okay. How is it transported? Film cases. How sturdy are the film cases? The ICC 32B are actually thicker steel film cases, so it would be able to withstand, you know, pressure and not necessarily fire. It would not contain the fire, but it was sturdier than the regular film case to be transported by train. So that's, you know, that's a progression of the new reality of transportation, how they stopped using the ICC to start to accept the UN. Yeah.

(13:53 – 16:04) Testing by the UCLA Environmental Health and Safety on the hazards of gases released by deteriorated nitrate film.

HUELSBECK: *Okay. Have you ever experienced an emergency, such as a nitrate fire or buildup of noxious gases?*

GAIARSA: Personally, I did not. There was some concern at UCLA at some point where people that were working with nitrocellulose film, deteriorated nitrate, that had concerns about, you know, is it unhealthy? What kind of results? So UCLA Environmental Health and Safety did testing on areas where we stored deteriorated nitrate, on workrooms where employees work with deteriorated nitrates, and we did the testing where the employee worked with nitrates with a sampling device on the lab coat lapel so, you know, it would measure very closely any off-gassing.

And after several testings were done, people realized that film cleaner is much more dangerous than nitrocellulose film. You know, the off gassing doesn't have a permanent effect. You know, if it is, you may become a little light-headed. You know, some people actually relax a little bit working with nitrocellulose film, but the film cleaner is much more harmful, so the concern shifted. You know, people say, oh, it's not a problem. Nitrocellulose is not that much of a problem in this environment, and we concentrated more on controlling off gassing, or not off-gassing, the evaporation and, you know, the containers for nitrate.

For film cleaner we changed the containers. We established procedures for, you know, ventilation of the rooms and how many hours you work with it, and so on and so forth. So with nitrate, again, I didn't experience any emergencies, but I know in the history of the archive there were some incidents.

(16:05 – 18:28) Accounts of a nitrate film fire in a projection booth at UCLA, the changes in regulations governing the preparation of nitrate films for projection, and UCLA's policies for projecting nitrate films.

HUELSBECK: *Okay. Do you remember when those were?*

GAIARSA: One was before my time or very close to when I started at UCLA, but it was on campus. Actually, it was in the projection room. And one of the, during the projection of the nitrate film, one of the reels of the projector caught on fire. That caused a lot of damage. Nobody got hurt. It damaged the equipment. It damaged the room. They shut down the projection room. They fixed it, and then reviewed all the regulations, the safety regulations, for nitrate.

Now, there was a time before my time again, and I don't know how much. You know, my understanding is that films were prepared for exhibition in the booth. They changed it now. It's not done in the booth anymore. It's done in the safer premise in the archive, so when the film goes to the projection booth, it's already prepared for exhibition. The projectionist just checks the changeover cues to make sure that the show, you know, goes without incident, and as soon as the projection is over, the film is removed from the booth and put in cold storage.

HUELSBECK: *Okay. So UCLA is still projecting nitrate prints today?*

GAIARSA: Yes, we do. Occasionally we do. Not as often as we used to do. We used to, for example, have a print of *Casablanca* that we showed every quarter to the students. We don't do that anymore. For many reasons, not necessarily safety. It's because the wear of the print that the, you know, the projection is causing. I mean, it's too much of, you know, a wear and tear on the film to project it so often.

And now the students are much more aware of the value of the original material. Even if it's a print, if it's not a negative, sometimes they have to pick up sections of sound or something that they need the prints for, so they're much less willing to allow us to use their prints that are on deposit.

(18:29 - 20:40) Account of a nitrate film catching fire while being inspected at UCLA and the change in procedure for winding film prints.

GAIARSA: That's not the only incident. Again, there's another one that, it was before my time, and it was when a film was being wound for inspection that it caught fire on the bench. Again, it didn't cause any, it didn't harm anyone, and the film reel just burned itself out and caused some damage, but nothing more, and again, lucky enough, or on purpose, I would say, the sprinkler head was just above the bench. So the water, of course, it didn't put out the nitrate fire, but it controlled the fire enough that it didn't spread.

HUELSBECK: *Right. And were they ever able to figure out how that started?*

GAIARSA: My understanding, again, I spoke to the person that was winding through the film, and he's well known in the archival, you know, world. He was director of an archive at some point. And he said, I was just winding very fast because I had a lot of work to do, and as I was winding through the film, I noticed that the reel pack began to emit this kind of bluish haze. It was not even smoke.

And he said, there was a sign that something was wrong, but he didn't slow down, and, whoosh, the reel just caught up. So we believe it was the friction. Not necessarily we're thinking,

is that static electricity? Friction? What is it? Actually, we don't know. We were never able to replicate it. We don't want to replicate an incident, so we changed the procedure, that any nitrate film cannot be wound on motor rewinds and cannot be wound fast, to prevent it from happening again.

(20:41 – 24:01) Account of a nitrate film fire inside a vault at UCLA.

GAIARSA: And the third incident the archives had was a fire inside a vault. During the weekend, what I believe was a summer day, so warm and, you know, a little muggy, and we're called by the security of the property, the security guard, and said, one of the vaults, you know, the sprinkler system was triggered. We don't see any smoke. There's nothing we can see from outside, but the sprinkler was set off. I was not the vault manager at the time. It was Jerry Golden, so he went with the curator to the vault and checked, and there was no smoke.

They shut off the sprinkler system, and there was one can, actually two cans of nitrate, because the one can caught fire, and there was another can stacked on top of it. So the lower one caught fire just by itself in the can, and it damaged the one on top of it. But again, the sprinkler system set off, controlled the fire. It didn't spread. There was a lot of mop-up that had to be done, but, you know, it kept the film safe, the vault and the sprinkler and all the, you know, safety devices supposed to prevent an accident, worked as we hoped it was going to work.

HUELSBECK: *And did they ever determine how that started?*

GAIARSA: It was self-igniting. It was, definitely, because there was nobody, nobody at the premises at the time. So that fire, it was definitely a self-ignited fire. The reel just caught up. But the problem is, the reel is completely burned out, and so, you know, how do you know, how do you, if there is nobody to see it, there's nobody to witness how it happened.

And unfortunately, I'm curious myself. I said, what film was it? What, you know, it's like, is that Kodak, Fuji, Agfa, domestic, international? Because we have all kinds in the archive. We have a lot of foreign film stock. We have a lot of domestic film stock, all from different manufacturers, from different vintages, color, black and white, fine grain, so what was it? I don't have that information. I don't know that that information was collected at the time to give an indication of, you know, oh, it was a black and white silent from the '20s, it was a Technicolor, you know. We don't know. Unfortunately, that's lost to history, I'm afraid. Yeah.

(24:02 – 25:41) The comparative instability of nitrate film manufactured during WWII.

HUELSBECK: *In your experience, do you notice a difference between the different film stocks? Does one hold up better than the others?*

GAIARSA: We know for sure that film that was manufactured during the Second World War is more susceptible to deterioration, and we believe it is because of the lack of chemicals, the lack of materials for production of the film stock, because everything was geared for, you know, for the arms and for the war effort. And so although film was important, an important industry at the time, there was less material available for the manufacturing of film.

And so there is definitely, and we know this especially from the newsreel collection, because we do have the Hearst Newsreels at UCLA, and they span from the teens to the '60s, so

we know that nitrate, and '60s, I'm talking about safety film, of course, 16 mm newsreels. But we know by experience that there's a, you know, from the '40s to early- to mid-'40s, the material is more at risk. It does deteriorate more easily, and we've lost a lot of material from that period from that collection.

(25:42 – 32:16) Logistics of constructing and description of UCLA's new nitrate storage facility. Includes discussion of importance of temperature and humidity control for preserving nitrate film and problems with shrinkage.

HUELSBECK: *Okay. Now UCLA just recently moved into a new facility, correct?*

GAIARSA: Yes, we did. We're still moving. Yeah.

HUELSBECK: *So what are some of the challenges that you've faced in managing and planning a facility specifically built for nitrate film?*

GAIARSA: In the planning phase. Although I did participate, it was, the planning was more a discussion. First of all, our film vaults are almost a mirror image of the nitrate vaults in Culpeper, Virginia, the ones from the Library of Congress. The architects that designed that facility are the same architects that designed our facility, and so there was already a, let's say a mode for the film vault. They knew how it had to be built. They knew the guidelines, the standards, everything. It was just a matter of discussing with the local fire department to get the proper permits to have that big a facility with that storage of hazardous material.

So it was very much a discussion with the Packard Humanities Institute, the architects, the local fire department, to say, okay, how is this going to work? And sit down and get into an agreement on, you know, again, discuss all the procedures, the safety procedures, and again, the vaults, our vaults are state of the art, or it's the best possible. I mean, they're designed to store a collection, and it has all kinds of safety precautions, safety designs to work in the event of a fire.

You know, from what they call the Vesta system, which is a very early smoke detector apparatus, which is actually a sampler that sniffs out the air samples from the vault and shoots a laser beam to measure particles, you know, to see if there's any smoke, a hint of smoke in the air. And, of course, fire wires, sprinkler systems, and monitoring 24/7 of each individual vault that sends alarms to a cell phone if any conditions change within the vault. So it's very sophisticated in the way that it protects the facility and tries to prevent an incident from happening before it happens.

So the challenge is more, now the dispute is maintaining this facility in shape, you know, maintaining all the systems active, and but it's beautiful. The temperature, the humidity control, everything works so well, and we already know that maintaining the film in temperature and humidity control is actually slowing down the process of deterioration. It doesn't stop it completely, but when the process starts, if we remove deterioration from the reel and put it back in storage, it doesn't progress as rapidly as if it's in a, you know, room temperature vault with no temperature and humidity controls.

So we know that because we've been there for, what, seven years now, and we have tested some films that were treated by removing deterioration and putting it in a specific vault, that we go back two or three years later and check it again and see if there's any deterioration that continued to develop in the film. And we, in some cases it does, but in most cases, it does not.

Now, the only, there's another problem we have though, that we have to figure out how we can deal with, because, because of the environment is so dry, and the balance, the hygroscopic balance of the film, it takes a while to adjust, what we notice is that there's a lot of, there's a little bit, not a lot of, a little bit of shrinkage that results from keeping the film in cold and dry storage, that we haven't had a chance yet to see if it can be reversed, if the film can be rehumidified at, you know, a steady pace to relax a little bit and recover from the mechanical shrinkage that has happened because of cold and dry storage.

And that's one of the reasons we're not showing nitrate as much as we used to, is because the film has shrunken enough that it cannot be projected anymore. That's one of the challenges that we have. So every time we plan to show a nitrate film, we have to do a careful assessment, and the first thing we do is check for shrinkage. And sometimes, we can't show the film because it's too shrunken to project. It's still good to scan, to, you know, because most scanners nowadays don't use the perforations to register, to keep the film in register, so it's more of an electronic stabilizer that works in the scanning. So the perforations are not critical, and the shrinkage is not an issue.

(32:17 – 36:00) The logistics of transporting UCLA's nitrate collection to the new facility.

GAIARSA: That's, that's one of the things. Now, oh, and the transportation that, that was very interesting. The transportation from one facility to the other. We actually went to the Department of Transportation directly and said, listen, here's the deal. We have this flammable film. We prepared for this move for about three years. We actually did a full inspection of the collection, and I'm talking, that was like we had at the time 76 nitrate vaults with an average of 1,200 cans per vault. So we hired extra help. We inspected the whole film. We re-canned all the film in new cans, relabeled everything, in preparation for the move.

Then we went to the Department of Transportation and say, listen. We have this film collection. It's hazardous material, flammable solid, but it was just inspected. There's no deterioration. Can we move it? How can we move it without having to package every single film or put everything in metal drums? So we, the associate curator at the time met with the Department of Transportation and say, okay, how, they asked, how do you usually transport the film? And we say, well, we do it in what they call machine carts, the wood carts with shelves that are used in some libraries to move material, you know, and moving companies use them too. They said, no, you cannot do it in wood carts because of the risk of flammability.

So we actually researched and manufactured metal carts. The support is a metal bar, but the three sides, instead of being wood, they're metal mesh. So we manufactured 90 metal carts to move the collection. So we would put the film in the carts, shrink-wrap them. We still had to put all the specific labels for transportation, the flammable solid, with a note of, what do you call it when we have a regulation? There's a waiver, a special waiver by the Department of Transportation that you can get, but every packaging has to have a note of that waiver to transport it in a very specific way.

And this is on record with the Department of Transportation. They can inspect it at any time and see if we're following the guidelines set for that waiver. So we're able to move the collection in metal carts in refrigerated trucks, because it was just 30 miles from one facility to the other. And so it was done. It was done without incident. It was done. You know, it took a while, but it worked out perfectly.

HUELSBECK: *How long did it take?*

GAIARSA: I'm trying to think, and I can't remember. A couple of months? I think we used to do 2 truckloads a day, with about 24 carts per trip. Yes. But I can't remember the exact timeline. Yeah.

(36:01 – 39:59) The importance of regulations for nitrate film because of its hazards, and the need for greater education to prevent both overestimating and underestimating the danger of the material.

HUELSBECK: *Okay. Based on your experience, do you think nitrate film is regulated and handled properly? And are there any changes you'd like to see in the regulations or the care or education of nitrate?*

GAIARSA: Well, I'm not sure that I can say that the regulations are not proper, are too strict or not strict enough. I don't think I can say that. I can see from the point of view of the fire department that they don't, they can't afford the liability of accepting something different that will, you know, put them at risk of being responsible for an incident. So they have to adhere to those standards and regulations, and sometimes they're even more strict than the recommendations because of the liability issue. From our day-to-day handling of the material, there's nothing so restrictive that impedes us from doing our day-to-day work.

There is a concern about the Material Safety Data Sheet that was released by Kodak, that says that the deteriorated nitrate, especially in the powder form, that is shock-sensitive, which is something that everybody that works with nitrate knows is not true. But we don't know why disproving that, you know, statement will help us. I mean, if you think about it, the way we transport nitrate today, you know, what they call the pizza boxes, you know, with the outer packaging, or the metal drums, unless you're doing huge volumes of it like we did, it's perfectly acceptable for material that is, not unstable, but could self-ignite.

And so because of that potential, we have to treat it with respect. For people that deal with it, I would like to see more education to everyone, because we have the two sides of the spectrum. It's like people that, oh, nitrate film, and they have a cigarette in their mouth and say, oh, let me see it. You know, it's like they don't take the necessary precautions.

But there's also the other side. The local fire departments, they think nitrocellulose is like a grenade with the pin off, and it can be set off at any minute. So I like to inform people of what it is, the risks, but it's not a grenade. It's not a live grenade. It is, you have to treat it with respect. You know, you have to treat it with the necessary precautions to prevent an accident. That's all.

And that's true of any hazardous material. You know, household cleaners. It's everything. It's phone batteries. Everything requires a certain precaution when you're dealing with hazardous material. So it's normal in our, you know, daily routines to handle hazardous material of different kinds. Nitrocellulose is just one more of them, you know?

(40:00 – 41:06) Importance of understanding the degree of seriousness of nitrate film stock.

HUELSBECK: *Mm-hmm. So last question. Are there things based on your personal experience working with nitrate that you think people should know about it?*

GAIARSA: Hmm. That people should know about it. That's the whole history of it. I mean, I would like to tell everybody everything I know about it, but I cannot think of anything specific that, you know, I would want to impart. The only thing is, yes, you have to treat it carefully, no, it's not so dangerous. There's a happy medium, I hope, you know, that I, the information that I'd like to, you know, impart on people is, yes, it's serious, but, no, it's not that serious. You know. Yes.

(41:07 – 43:53) Anecdote about a nitrate print received where shots were spliced together using a sewing machine and the durability of nitrate film.

HUELSBECK: *And are there any other stories or tidbits you'd be willing to share about your experience working with nitrate?*

GAIARSA: My experience working with nitrate. You know, a curiosity maybe, and I'm so sorry I didn't save a frame or didn't take a picture of it. When we were working on a restoration, and I can't remember the title now, because it was like 20 years ago. We got a film from a foreign country, and I can't remember what foreign country it was, either. But apparently, they had no film splicer, neither cement splicer nor tape splicer.

So the shots were stitched together with a sewing machine. They were in perfect frame, you know, frame to frame, so they overlapped the last frame of the shot with the first frame of the next shot, and did a perfectly rectangle to match the frame line. And so the whole film, and I'm talking about, about 2,000 feet of film, the shots were stitched together. It was a tinted silent print. That I remember, but I can't remember the title, and I cannot remember the country, unfortunately.

So, I mean, nitrate film is quite resilient if you think about it. We have it for more than 100 years, so, you know, 1980, 1990, yeah. It's like, no, I'm sorry. 1890s. 1890s is when the first nitrocellulose film was used for the graphic film, right, not motion picture. So it was, yeah, it was, we've been handling it a long time, and amazingly enough, some films from the teens survived better than later ones. Because I touched those. I touched those vitagraphs myself. You know, tinted and toned, and they're like jewels. It was like beautiful. It's beautiful, and quite resilient, yeah.

HUELSBECK: *Thank you so much for taking time to talk with us.*

GAIARSA: Oh, you're welcome.