

Jinny Nathans: This is Jinny Nathans on Monday, June 4th, 2018 at the Weather and Forecasting/Numerical Weather Prediction Meeting in Denver, Colorado. I am speaking with Patricia Vollmer, and we're going to talk about one of the questions, or whatever you want to talk about that you've made notes on at the meeting. So I'm going to turn it right over to you, and here you are, here's Patricia.

Patricia Vollmer: I took a few notes and I figured I would just discuss being a female in this incredibly male-dominated discipline. I think about this topic a lot, because I currently am an assistant professor at the United States Air Force Academy, so I do have a chance to talk about this topic with prospective future meteorologists, also future Air Force officers, future air force pilots. When they're female they're looking to the left, they're looking to the right, and they're not necessarily seeing someone who looks like they do, or thinks like they do, or they bring a different perspective. So I have a couple stories if you will, I've got some people I've listed who would kind of have an influence. I have to admit first I always figured by being a female that it didn't matter. It didn't matter. Nobody needs to call me out on being a female and I'm not to call out anyone on being a male. I didn't want any attention brought to it. And over the years I realized every time there was a female in a position that I could see myself in in the future, that caught my attention.

I think it probably started out in undergraduate education. I was at Penn State from 1991 and 1995, and by and large the professors I had were male. During that time, or not long before I arrived is when Dr. Jenni Evans came in, and she was my Dynamics II instructor. And again I tried to tell myself it doesn't matter that she's a female and I'm a female, but in reality it does, almost subconsciously, it puts a signal in my brain that, well, look where she is. She's a PhD, she's teaching wave dynamics, if she can do it, so can I. So I think that was almost a subliminal trigger in my head, it kept me inspired. I like to think I maybe worked a little extra hard in her class. I did pretty well.

JN: That's excellent, I think it does make a difference when you see someone, and it really just has to be one person, who looks like you. And they don't have to look completely like you, but there has to be some really salient characteristic that you can relate to and that makes you feel that you have the right to aspire to that.

PV: She was part of that. We didn't have conversations about it overtly, I got to see her in January at the AMS meeting in Austin. I saw her at a reception and I shook her hand and I said thank you for everything you taught me in Wave Dynamics. Her class was tough, I do remember that. I remember she would bring in a southern hemisphere perspective, unlike... you know, she's Australian, so she can totally think southern hemisphere very comfortably, can flip back and forth. So I do remember that. It's about 25 years ago.

I don't have memories of being treated significantly differently during my undergraduate years. I had ROTC scholarships, so I went into the Air Force after I graduated, and that was a place where being a female had an impact. At the time that I came in, there were maybe 10%, 8-10% of positions weren't available to women, because it was working with Army infantry or working with the Rangers, working with Air Force special operations, they had no women, they weren't resourced to accommodate women, so if they needed a weather forecaster it needed be a male. I

didn't lose sleep over this until a little later, and it wasn't losing sleep because I couldn't do it. It got me thinking, there were women coming up in the ranks who would have been great. That policy has changed just in the past [while]... it has evolved to a hundred percent women across the ranks, so I'm really happy about that. That's the first place. And again, admittedly I did not lose sleep about it. In hindsight I wish I had lost more sleep, I wish I had been more vocal. Maybe that's just part of me that's a little chicken about getting too confrontational.

JN: You probably did more than you think, just by being there, even.

PV: I hope so. I do hope so. The second female in meteorology I met who had a profound impact is when I got to meet the legendary Joanne Simpson at a satellite meteorology conference in 2001, this was in Madison, Wisconsin. I got to sit next to her at a reception or at a luncheon, and she tells these amazing stories of what it was like being a PhD student at University of Chicago under Ted Fujita, and her stories were just filled with this, they were very vibrant, they were very... she had a lot of fantastic adjectives to describe the feelings and the environment and she could paint this picture of what it was like a half-century ago. She was the only female, the only female, it's not even I was the only female at the time, she was the only one in the field...

JN: Absolutely.

PV: ... doing what she was doing, and she continued that until she passed. She was still very active in the field. I was honored and flattered to meet her. She was so kind. Outright she just said thank you for doing what you're doing, similar to what you just said, Jinny. By doing what you're doing, you're doing a lot. I don't have to be on a picket line or anything, just trying to be an example.

At that same conference, that's when I met one of my mentors today, Jennifer Alexander, who's an AMS fellow, and she's one of the department heads of the Air Force Academy now, so she's an Air Force Colonel. She's amazingly brilliant, a great leader. She and I have kind of wavered back and forth crossing paths for the past 20 years or so. I didn't meet her in person until 2001, but I'd known who she was since about 1997, '98, so we like to say we've known each other over 20 years and I consider her a mentor today, actively. I see her routinely. She's a great example of females in positions of leadership today in meteorology, and I think that's wonderful.

So there are the three names I wrote down. Like I said earlier, I do talk to younger folks, I like to think I can offer some hints of mentoring, and I do stick with some of the basics like just always do your best, don't let anybody tell you can't do something because of the color of your skin, the shape of your eyes or your gender or sex, what you are today or what you were when you were born. It doesn't matter. It's what's in your brain. Can you pass this physics course? Can you succeed in dynamics? Then it doesn't matter what your physical form is.

JN: Yes, it doesn't matter and no matter what happens, if this is what you really want to do you just have to keep going, you have to move forward like a shark and just keep going.

PV: One of the things that comes up a lot, these Air Force Academy cadets will ask me about the work-family balance. Women are challenged, and there's no way around it. If you stop to have a

baby that's an impact, and there are those who balance it well, but they're not going to tell you there was zero impact, it's just not possible. I did go into the Air Force reserves, I left active duty and I stayed home with the kids for almost 10 years, and I'm really blessed and grateful that I was able to come back into the Air Force full-time and continue to serve. Now that my sons are older, I'm starting to re-approach some of my goals, I'm hoping to continue my education once the kids are off to college on their own.

JN: I think that's very significant, that one, you were able to think about doing it, and then actually do it. Joanne Simpson in her writings wrote extensively about the conflict that she felt in terms of having a family and doing the work that she had chosen.

PV: It's big.

JN: And for her sometimes the outcome was not as happy as she would have liked, so for you to be doing this successfully is a very big deal.

PV: It hurt to get off active duty, it was one of the hardest decisions of my life. My husband would probably attest that the first year was very hard on my brain. There was a lot of drama. When our second son was born, it was within a couple weeks of our second son being born, I had decided to get off active duty, it was within about two weeks. My husband got accepted to North Carolina State's PhD program and he studied with Gary Lackmann and Sandra Yuter, another female talent who I have encountered over the years. But seeing what he was getting to do, I was very jealous. We can kind of laugh about it now, but that was really painful for the first year, where I was just plain jealous. I've gotten over it, somewhat. The program got hard, I saw some of the back-and-forth trying to get the dissertation such that everyone was happy with it. That was tough. So there were periods where I was like okay, I am glad that's not me. But most of the time I was saying okay one day, that might be me. I do know a physicist who did a 20 year career in the Air Force and then she went off to UC Berkeley and got her PhD at about age forty-five. I feel like "I can do that!" I'll probably start over the age of 50, but never stop learning.

JN: You're absolutely right, you're absolutely right.

PV: Is there a time cap or anything? I've got some pontifications here I can go over.

JN: There's no cap on time, but since the intention of this project is to generate material that would be relevant to the AMS Centennial, if it's okay with you I'll ask you to talk a little bit about AMS as you went through this progression. What kind of support or nonsupport or relevance was the Society in any of the decisions that you made, and where you went, where you ended up? That would be my main question.

PV: Okay. I started in college, there's the undergraduate programs, or the university programs I guess, they'll have the branches of the AMS...

JN: And the chapters.

PV: The student chapters, yes. So I was involved in the student chapter quite a bit, and that was a good time. I didn't do much with it after. I maintained my membership, I had my physical copy journal subscriptions. We got Weather and Forecasting, BAMS, and Monthly Weather Review, I think those are the three that we always made a point... I have them still, stacks of them. I guess until graduate school, so in graduate school, by design I presented at the satellite conference I mentioned, in 2001. I won the poster award, which I was very flattered.

JN: Oh, that's very significant.

PV: So AMS was helpful there. There was a little monetary award, so I was very grateful for that. I guess it wasn't until Nebraska, when I got off active duty and my husband was with North Carolina State, he was active in their student chapter, but I was less so, because I was with the kids. My reserve job I was still doing meteorology, but it was only forty days a year, and then I would take off that hat and put back on the mom hat. I got involved again when we got to Nebraska... Becky Adams was involved, Becky Selin-Adams [Adams-Selin--ed], she was involved in the branch, the Omaha chapter. So I was involved with the Omaha chapter, and Barbara Mays was the president. I think I was the secretary at the time. I was one of the officers for the Omaha chapter. That was a really good time and we would bring in, I mean there was just talent all over the area between Creighton and University of Nebraska and the Air Force 557th Weather Wing there, so all kinds of great talks. There were a lot of retired meteorologists in the area, a lot of retired air force would settle in that metro. I remember a retired Vietnam-era officer who came and talked to us about how he was part of this cloud seeding mission for the Ho Chi Minh Trail, Operation Popeye. You can Google that, it was very interesting. I'd heard about it on the periphery, it wasn't officially declassified until the 1990s, and what this gentleman was able to talk about is, it was mechanically he's like you feel like it works. The science is there, but we couldn't verify. You can't verify whether cloud seeding works. Where maybe you made it... so they were making it flood on the Ho Chi Minh Trail, to stop the...

JN: The traffic.

PV: The North Vietnamese resupply missions. I loved that talk, I thought that was great. There was so much. I mean, it's us trying to fight an enemy using the weather, I was very fascinated. I'm still fascinated with cloud seeding today. So that's a place where I got involved with AMS. I was not working full-time still, I was basically a stay-home mom, I had my reserve unit I was still working with, but having the AMS chapter there helped me still feel like a scientist. My kids were in preschool and kindergarten at the time, but I could still feel like a scientist. I served with them for two years, with the Omaha chapter there, and then... I've got to think about where we were after that.

It wasn't until coming back to Colorado that I was able to come back to work full time. It's not necessarily as a full-time meteorologist, but I get to be a scientist again, I get to be an educator again. My office paid for me to go to AMS in January to be part of the Education Symposium, and I'm hoping I can present or co-present in future Education Symposiums, because that's what I'm working with now, is undergraduate education. I like that. I did just give my card to Becky, and said if you need somebody on the Weather and Forecasting Committee, because they made a call for volunteers, I told them I'd be happy to help. My husband has done the occasional paper

review for Monthly Weather Review, he gets to help that way, so I feel I should do something. I do want to give back. This organization has been kind of a source to help keep my brain active when I'm shuttling the kids back and forth to baseball and boy scouts, and I appreciate that.

JN: I think it's a very special organization, and while the details of your story are different the basic framework is something that I hear over and over and never get tired of hearing, because it has a special place both in people's career lives and in their personal lives, and their personal outlook on things and the feeling of giving back and being active in a volunteer organization is very big.

PV: I agree, I do. I wish I could do more. I wish I had stuff to present, it's been awhile since I've been able to present at one of the meetings.

JN: Well, it sounds like it may be not too far off.

PV: I hope so.

JN: Aim for the Centennial meeting in Boston.

PV: That would be pretty cool.

JN: Yeah?

PV: That would be very cool. Is that the next, or is the next one Denver?

JN: The next one is Phoenix, and that is the kickoff for the hundredth year, and then...

PV: Because Denver's coming, is it the year after Boston?

JN: Yes, it's after. And then 2020 is the big party in Boston, at that meeting. Which is going to be an adventure because of course it's in January in Boston.

PV: Yeah. I went to, my first AMS meeting, I don't know if you're still...

JN: Sure!

PV: My first AMS meeting was 2003, was that Long Beach?

JN: Yes, I think that's right.

PV: I left a six-month-old baby at home to go to that. But the Air Force sent me, I did a short course in wind profiling, which was fantastic, so I actually stayed a little longer than the normal meeting, and it rained and rained and rained on us, oh my gosh, it rained so much.

JN: I was just going to say that that was the incredible rainy meeting, everybody remembers it that way.

PV: And the 2004 was Seattle, that might have been the year I did the wind profiling short course, I can't remember which one of the two, but I had never been to Seattle. No, that's not true, I had been briefly, and it was sunny, and then I go in January and you don't see the sun for five days.

JN: And that was the snowstorm, there was a snowstorm just before the meeting.

PV: Not in Seattle, was it elsewhere?

JN: In Seattle, there was like seven inches which is extremely unusual for Seattle, but people got through it and as I recall it melted fairly quickly, you know, to someone from Boston: not a big deal.

PV: Snow here melts pretty quickly so it's not a huge deal, but I'm so impressed with Denver Airport, their snow-removal capabilities. But yeah, that was my first meeting. I had been to the smaller meetings, but that big AMS one, I didn't get to go until 2004. And I had such a good time each time I've gone.

JN: Oh, that's great.

PV: This past year was the first year I had gone since 2004.

JN: Oh, wow.

PV: I got to see some college friends I hadn't seen since graduation.

JN: Oh, goodness.

PV: It was really neat.

JN: That's good, that's good.

PV: Now that my sons are teenagers I feel like I can be more of a scientist than I was, it was nine years, basically my primary mission was mom and secondary mission was everything else.

JN: Well, you seem to have come through with flying colors, so props to you. Is there anything else you'd like to bring up or comment on, or...

PV: I didn't talk about this one a ton, why am I a meteorologist

[crosstalk]

PV: Things that made an impact, it's not an article but that Operation Popeye talk I thought was so cool.

JN: That absolutely counts, and actually that's the first time someone has mentioned a lecture that they were at.

PV: And it was a chapter, it was the chapter meeting, and we toyed with trying to work out a Colorado Springs student chapter with the Air Force Academy. The numbers of meteorology majors at the academy will spike up to over ten, and then the next year you only have four or five as they move through your interest peaks and lulls accordingly, so.

JN: That makes sense.

PV: So that's tricky to me. We still don't have one. I think there used to be one, you used to have quite a few meteorologists who worked at Peterson Air Force Base in Cheyenne mountain, and all those other functions there, so you could have about 40, 50 people, but there hasn't been a chapter since we moved there in 2013.

JN: Well, it's hard, times have changed and it's hard to get people to do these extra things and to belong to things and other things have taken over people's lives, their nonwork life, so it's difficult. But I thank you very very much for coming and I thank you for waiting.