Jodie Hayob-Matzke interviewed by Lexi Jackson on March 21, 2024

Jodie Hayob-Matzke: So this is being recorded?

Lexi Jackson: Yes. Is that okay?

JHM: Yes, it is.

LJ: So first I just want to begin with your background information, like, your education and your career prior to UMW, and here as well.

JHM: Okay, sure. I graduated undergraduate in 1987 from the University of Madison, Wisconsin, with a major, a bachelor of science in geology. And then I went to the University of Michigan, Ann Arbor, and earned a master's in geology in 1989 and a PhD in geology, technically, in 1994. But I started here in the fall of ‘93. So I came to Mary Washington, what was then Mary Washington College, in the fall of 1993. And I finished my PhD about six months later, technically, in 1994.

LJ: Okay. One of our sources was William Crawley's Centennial History. And he interviewed Grant Woodwell. And there were some things that he talked about, like, just the development of the geology department. Can you talk about how you were a part of that?

JHM: Yeah. So when I got here in fall of 1993, the summer prior, right before I got here. So the summer of 1993, my department was created, essentially. So at that time, right before I got here, environmental science was a program that was offered through the department of biology because my former colleague Mike Bass created the major, and he was a biologist by training.

So environmental sciences was under the auspices of the biology program. And at that time, geology was joined with chemistry. So when I interviewed the prior spring, it was the department of chemistry and geology. And then I knew, I was told, hey, look, we're going to be creating this new department.

So by the time you get here in the fall, it was then called the Department of Environmental Science and Geology. And then subsequently in, I don't remember what year, I'd have to go back and look, I think about 2012, we changed our name to Earth and environmental sciences because we felt it was just broader and more encompassing of all the courses that we offer and research that we do.

LJ: So since then, do you think, like, separating from chemistry, do you think you have more interest or, like, a larger curriculum?

JHM: I think what we've been able to do when Mike Bass first created the environmental science majors. He did it a long time ago. We actually have the second oldest environmental science program in the state after UVA. Not a lot of people know that. But when he retired, Mike Bass was the longest serving faculty member. I think he'd been here for like, 48 years. And so he

started at Mary Washington in the late sixties, uh, took a hiatus to go finish his PhD, which is kind of unheard of, but back then, you could do that. Then came back to Mary Washington, and he developed, um, I think in the early seventies, our environmental science program.

So we had environmental science as a major before it was really kind of cool and a thing, and all these other schools had it. But when he did it, he was told, you can't have any new resources. You have to do it with existing coursework and faculty. So since the program has grown, and especially, I would say, since we've separated from biology and chemistry, we've hired more people. And the coursework that we offer is much broader. And it's still very interdisciplinary, but it's kind of more uniquely housed within earth and environmental sciences. So, for example, we now have an applied toxicology course that Tyler Frankl teaches. He's a biologist by training, but he really sees himself as more of an environmental scientist.

We have climate change and energy resources and, uh, global environmental problems and all sorts of different courses that we now offer, because when I first came on board, we were a department of four. Mike Bass, who was a biologist by training, who was really the only, like, environmental scientist, if you will. Then there was a soft rock geologist named Bob, who Pam is kind of ultimately his replacement, with several people in between. Grant Woodwell was there and then and me. So it was essentially three traditional geologists, along with a biologist. Yeah. So many of the courses in environmental science were offered outside of the department, and now we have the ability to keep more of the coursework in house, but still allowing a lot of electives from other programs. So it's changed a lot. Yeah, for sure.

LJ: Would you say there's a growing interest?

JHM: I think so. I do think at the national level, geologists have dropped the ball at the K through twelve. There is no proper formal geology in high school. It's like 9th grade earth science, and it's often the low range heating students take. It doesn't have to be that way, but apparently it is.So students come to college not really fully appreciating what geology is. They think it's just rocks. And all we do is look at rocks, which is a big part of it, but it encompasses climate change, energy resources, groundwater, surface water, um, earthquakes, seismology, volcanology, uh, mineralogy. I mean, there's just so many areas of geology.

So we often get geology majors once they take the physical geology and kind of fall in love with it, they don't tend to come out of high school wanting to major in geology. Environmental science, on the other hand, has really exploded and was not a thing when I was in high school, of course. And it is very interdisciplinary, but just like geology can be quite interdisciplinary, it's really using chemistry and physics and biology to study earth problems.

Environmental science is using many different disciplines and tools to study environmental problems, whether that be contamination and sustainability and things like that. So the vast majority of our students that come to admissions events coming out of high school because they've had AP, environmental science, typically are interested in, or they think they're interested in environmental science. Yeah. Rather than geology. But then sometimes they fall in love with the geology.

LJ: Would you say this department, as far as students go, is it more male leaning or female leaning?

JHM: No, it's a good mix right now because Mary Washington, on the whole, is about 65%, we'll say assigned female at birth. That's still probably true in much of our coursework. I would say compared to many programs, we might have a higher male proportion at times. But there have been times when I've had ten students in an upper level class and only three guys. Right now, out of eleven, um, students, I have five guys in my upper level class. So in intro, it's usually about a quarter of the students traditionally were guys, and now it's maybe a third. Ah, sometimes 40%. But that would be unusual. I think it just mirrors the population of Mary Washington.

LJ: Okay. You guys were in Combs?

JHM: We were in Combs.

LJ: Okay.

JHM: Yeah, when I first started, and then in the summer of 1998, when the Jepson Science Center was completed, Grant Woodwell and I moved the department into the new building.

LJ: Did you like it a lot better?

JHM: Oh, gosh, yes. We were stuck in the basement over there. My only window was a wheel well. I mean, what do you call it? Like a below grade window? Well, oh, yeah, a window well, right where I could see people's feet going by. Although I did have a bigger office. But, yeah, we probably right away tripled our space when we moved into this building. And then when the Jepson Science center edition was built, my department slightly more than doubled our space because we did not fare well in the original move into Jepson.

LJ: Oh, why's that?

JHM: Well, now that he's retired, I can say that the chair of physics at the time was in pretty tight with the provost, and they got well more than their share for a department of three people. They had proportionally much more space than we did with four faculty, and we had a lot more majors, and we just continued to grow. And, you know, physics has stayed kind of the same, which is fine. It's an essential program. We obviously need to have physics. But then in the move into the new addition, I think proportionately more so than any other program, with the building of the new addition, we got more space.

So even if you looked at the old Jepson and you looked at what biology and chemistry took on, I think proportionately and by proportionately, I mean, for the number of faculty that we have, I think we got more space. But I'm not confident about that. I just know that we more than doubled our space when we moved into the new addition. And we very much like being over here, although we don't get to see our colleagues as much. We don't like that aspect.

LJ: Did it also allow for, like, more lab work?

JHM: Oh, absolutely. We had two student labs, literally two tiny rooms, one of which was windowless for students to conduct research in. And then we had. Yeah, we had one upper level classroom, one upper level lab, a computer room, and two student in one intro lab. We now have two intro labs. We had one. We had no prep space, no storage space, uh, to get stuff ready or secure, things that we didn't want students to have access to. We now have seven or eight research labs, whereas we had one or two before. Yeah, it's so much better.

LJ: When was the addition completed?

JHM: 2019. Summer of 2019. Um, we moved in. We were here for the fall, and then COVID struck, and people hadn't even fully unpacked some of their labs, and then we kind of got shut down midway through spring of 2020. So, yeah, with two fairly junior faculty that were, you know, going to be going up for tenure. But they did great. They did a lot of great work, even with the shutdown, so. And they've both won outstanding young faculty awards. Like the comprehensive, university wide outstanding young faculty award.

LJ: Are they still here?

JHM: Yeah. Pam Grothe and Tyler Frankel.

LJ: Did you teach from your office or did you?

JHM: I taught from home during COVID Yeah, I taught from home. Yep. Zoomed from home and I personally, like out of my own pocket, bought a really pricey, uh, document camera that could zoom for mineralogy. So I could zoom in on minerals and show some features and stuff and.

LJ: That's nice.

JHM: You know, it was not ideal, but it went better than expected, I would say. I learned how to use Canvas really well and the modules.

LJ: As far as campus as a whole. Are there any big physical transformations that stand out to you or like, impacted you more?

JHM: The Jepson addition, of course, the building of the Jepson Science Center and then the addition that was put on to Jepson for sure has affected me personally the most. But I think for the students, the Cedric Rucker University Center and then the new arts complex that is coming will be fabulous.
We have a set of monitoring wells in the ground that are going to become defunct. And so the dean's office kicked in some money so that we could install some new wells closer here to Jepson, kind of down towards sunken roads so that we can use them for our field methods and our hydrology classes and research and stuff.

LJ: So do you have other things like that over campus that you use?

JHM: No, that would be it. The monitoring wells are it.

LJ: Okay.

JHM: We have students that like map the campus for different projects and classes and stuff. But as far as actual infrastructure? Well, we do have an anemometer which measures wind speed. That's right out front. Other than that, not to my knowledge.