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Interview with Vittorio Addona, Professor of Mathematics

Vittorio Addona

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MACALESTER COLLEGE
Macalester College Archives, DeWitt Wallace Library
Oral History Project

Interview with: **Vittorio Addona**
Associate Professor of Mathematics, Statistics, and Computer Science,
2005-present

Date: **Monday, January 11th, 2012**

Place: Macalester College DeWitt Wallace Library, Harmon Room
Interviewer: Alana Horton, Class of 2014

Interview
run time: 59:15 minutes

Accession: 2015-03-20-01

Agreement: Signed, on file, no restrictions

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Interview with Vittorio Addona

Alana Horton, Interviewer

**June 11, 2012
Macalester College
DeWitt Wallace Library
Harmon Room**

AH: My name is Alana Horton. I'm a member of the class of 2014 at Macalester College, and I'm conducting interviews for the Macalester Oral History Project. Today is Monday, June 11, 2012, and I'm interviewing Vittoria, Vittorio Addona, sorry, Professor of Statistics, in the Harmon Room of the DeWitt Wallace Library. Now, if I could just ask you to state your name, um, where you were born, and when you came to Macalester.

VA: So, my name is Vittorio Addona. That mistake happens a lot. I was born in Montreal, Quebec, Canada. Um, and the third question...?

AH: When did you come to Macalester?

VA: I started here in fall of 2005. Um, one of the— speaking of my name, in fact, I still have the first name plate that I saw on my door the first day I arrived at Mac because it was, it was prominently displayed, Villorio Addona. And I thought that that was a keeper.

[01:02]

AH: Yeah. And if I can ask, what's your education background and what work had you been doing prior to Macalester?

VA: So I have a Ph.D. in statistics. I did that at McGill University in Montreal. And I was a graduate student before coming to Mac. Um, there's a little joke between some of us in a similar situation to mine, which is that, you know, we've never had a real job; this is, this was our first and, hopefully only, job ever.

[01:29]

AH: Yeah. And how did you come to study statistics?

VA: Well, I've always been always been interested in mathematics, and I always liked math. And, to somebody who is in that field, there *are* distinctions between math and statistics. To some other people, they're sort of all under the—they sort of all refer to it as the same. But, in college, I kind of moved more towards statistics. It's still loosely tied to math, but different in that it's sort of driven by applications. Sometimes math can be a little bit too abstract and theoretical for many of us, um, so I was kind of attracted to the math, but the applications side of it.

[02:14]

AH: OK. And obviously you completed your degree in Canada—

VA: I did.

AH: But now you're working in the States. Was that a, a decided move on your part, to try to immigrate to the States, or...?

VA: Well, to be honest, part of the reason I came was, uh, for a girl, I guess the answer goes. My then-girlfriend, my now-wife, is American and we met at McGill, and I was still finishing up the Ph.D. and she was already done with her degree. So we kind of looked at some places together and, you know, Minnesota looked really interesting to us, so she started her Ph.D. in the Twin Cities. And then I did a very targeted search for employment here. And so, it was sort of a planned decision.

AH: So, you had previous knowledge of Macalester before coming to the college?

VA: Oh, I—no, not really, no. No, I really didn't. And, it's a very different institution than the type I'm used to. In fact, I have to admit that, uh, when I was looking for jobs and I read about Macalester a little bit, I had to Google "liberal arts college" to read about what these were... So not only did I not know about Macalester, but I really didn't know what a liberal arts college was. We just don't have those really in Canada, and, you know, McGill's a big school, um, *huge* compared to Macalester. But I really fell in love with just reading about the commitment to teaching. You know, that's where I saw—that's where my passion was, not that I didn't like the research, but I could sort of see myself making a mark on the world, really, through teaching.

[04:03]

AH: Yeah. And what do you see is the difference between schools like McGill and Macalester? Like, what has been your experience in that difference?

VA: Well, uh, the obvious answer is the scale. I do find it funny, I *still* do to this day, and especially back when I first came here, that I can say a student's first—if I'm talking to a student, I can refer to another student, uh, by first name and be pretty certain that they'll know who I'm talking about. That was not the case at McGill. The teaching—the style of the course is very different at McGill. You essentially had—I wouldn't say *no* contact, but very little contact with the professors. They came in, they talked to you for an hour, three times a week, and that's when you saw them. Here, I become really close with my students, and I really like that—that's a big difference.

[05:03]

AH: Great. Now, what was your impression with the Macalester hiring process?

VA: Well, I think I'm, I'm pretty—maybe I still am naïve about the hiring process, although I've been through it a couple of times, both on the side of interviewee and committee member, I guess. Much more thorough than I had envisioned as an applicant. We consider so many different, you know, angles and sort of facets that I wouldn't think would be part of the process. You know, location, and spouse, and specific area of, you know, professional research. As I look back now, I think about the talk that—the talks that, you know, they have you teach a class, and they also have you give your professional talk. And, uh, when I think back now at the talks I gave, I realize how many different way I could have gone about things, how much better I could

have been. But just really thorough, that's sort of the overall impression. The sort of communication is very important and the timing of the communication is very important. And I think we do a pretty good job at that.

[06:28]

AH: Great. So, when you first arrived, in 2005, um, how do you say you would have described the Macalester campus, the students, faculty, administration, and sort of the relationship of everyone?

VA: Well, the campus is beautiful. I really did feel that the first time I came here was, you know, I sort of knew about the student body size and, and I thought, "Wow, the campus is big for that number of students." So, I really did like that. The facilities are phenomenal. I often have my collaborators, who are still at McGill, visit, and they're impressed by the facilities we have. So computer labs, and, you know, those kinds of facilities. In terms of the sort of relationships between faculty members, the Math, Stat, Computer Science Department was fantastic; everybody is welcoming. They're amazing, to be honest with you. The—I really believe that they make—or made, and continue to make me a better teacher, a better researcher. They drive me to work harder because they are so amazingly tireless. So yeah. So, I've really appreciated the relationships I've built with them.

[07:53]

AH: And in the Mathematics, Statistics, and Computer Science Department, in particular, has the department changed since you arrived?

VA: Yes. It has gotten a lot younger. And I don't mean that to be a criticism of the people who were there before I got there, but, since I was hired, we've made four sort of young hires, and I believe a fifth is coming soon. I remember one of our first, one of my first department meetings, or at least a department meeting my first year: we were discussing suggestions for activities, and I suggested a student/faculty softball game. And after I said those words, there was complete and utter silence, and I felt like, you know, the sort of scene with the tumbleweed roll by, and I thought, 'OK...' And now I feel like if I suggested that, there'd be a little more buy-in. But, yes, so we've become sort of—I don't want to say energetic because there was tons of energy but sort of, yeah, a little bit younger.

AH: Yeah. And have you felt any changes on the campus as a whole since you've arrived?

VA: Um, not so tangible—or not, yeah, not—nothing that I can really pinpoint.

[09:18]

AH: OK. And, um, so, you've recently received tenure?

VA: I did.

AH: Congratulations.

VA: Yes.

AH: [laughter] Um, what was your experience with the tenure process?

VA: Uh, quite stressful at first—I think this is pretty typical. It's very stressful in the first couple of years; you spend a lot of time thinking about it. And then, sort of as time goes by, you become—you know, you think about it, but you sort of, you know, you become sort of at peace with whatever will happen. If it's not going to work out, it's not necessarily because you've done a bad job, maybe it's just not the right fit for either side. But you sort of—you do come to a place where you're happy with what you've done and whatever the decision of the college is, sort of, you know, you'll work through it whatever happens. That's not to say that I wasn't elated when I got the news; I was. But there is a calmer feeling when you're in your fifth or sixth year compared to your first and second.

[10:30]

AH: Definitely. So your areas of specialization are survival analysis—

VA: Mm-hm.

AH: —analysis of post-election audits—

VA: Yep.

AH: —and sports statistics?

VA: Yes, that's right.

AH: So, I was hoping you could talk a little bit about these areas, and how you got interested in them.

VA: So, the survival analysis is kind of a very—it's a specialized field of statistics, which sort of, uh, deals a lot with medical applications. It's not exclusively medical applications, but it is a large chunk. And the reasons it's medical applications is because it deals specifically with time. So a typical question would be, "How long does a cancer patient survive?" Or "How long does a person with Alzheimer's survive with their disease?" That was what I studied in graduate school, so that's what sort of my thesis was on, and that's how I became involved in that area. The sports statistics it's—so I'm an avid sports fan, I love all sports. I think there's a lot of interesting questions that one can answer. I think there's a lot of misconception about what sports statistics is, amongst, you know, the lay-fan or the layperson. We're trying to answer, you know, a serious, academic question in a sort of a very objective, statistical way. And I thought it was a good way to get students involved in research. Survival analysis is usually not taught at the graduate [*sic* undergraduate] level, although we do have a course now in survival analysis, but it's sort of a little bit harder to get students involved in that area, so I thought sports statistics would be a good way to get students involved in research. And I've had some success with that. And then the post-election audits, that sort of just arose with, um, a phone call I got from the director of this group called Citizens for Election Integrity Minnesota, so CEIMN. And the director was Mark Halvorson, and—you know, at the time, Minnesota's audit law was

undergoing review. And so they wanted to have somebody with some quantitative expertise help them look at the law, see how it could be improved. So I spent some time on this, this audit panel, which was kind of cool because there was, it was like the Minnesota Director of Elections was on it, and the Secretary of State sort of paid a short visit during one—what was it—during one meeting. So that was kind of cool.

[13:17]

AH: Yeah, definitely. So, with sports statistics, you said that you've involved some Macalester students with your work—

VA: Yes.

AH: And, so, what kind of projects resulted from that?

VA: So, one of the first ones I did, um, had to do—so it was sort of related to basketball, and I had a student who was very bright, very motivated, and really interested in sort of some cutting-edge techniques. And we tried to basically tease out the contribution of each player on a basketball court. And there's sort of traditional ways that players are evaluated, so player evaluation is a big theme in sports statistics: you want to know who's good, you want to know who's not as good. Sometime that seems like an easy question, but it's not so easy, um, because if you share a court with a good player, you'll seem better than you actually are; if you share the court with some bad players, you'll seem not as good as maybe you actually are. Uh, so controlling for these factors is important. So, we built these really, you know—we had these

really large data sets to work with. And what was—you know, the way we started was pretty simple. There was this work out there that we had noticed online, which had results but did not have a lot of detail behind it, and we tried to figure out what this person did. And this person was actually an economist, somewhere in North Carolina. And we, sort of, were able to replicate his results without him telling us what he had done. And he was very impressed by this, and he hired this student. The student's name was Dave Lewin, or David Lewin. He hired him for a summer internship and then, you know, he was impressed with that work and—and now, you know, now David is working with the Cleveland Cavaliers, so this really led to something pretty fantastic for him. Um, yeah.

AH: That sounds fascinating.

VA: Yes.

[15:24]

AH: And so was this really just a joint collaboration between you and David?

VA: Yes. We worked on it together, you know—he knew, I'm not a big basketball fan, to be totally honest. But, so, he knew a little bit more about the basketball side, and could tell whether things “made sense” sort of in, in quotation marks. And I helped him a little bit more on the manipulation of the database. At that time, I think he was still a sophomore, so he was still early

in his Mac career. He's learned a lot since then. Um, uh, you know, he has aspirations of even going on to being an Assistant GM [General Manager], and hopefully a GM of a basketball team.

[16:06]

AH: Wow. Yeah, and I know you've also worked with several students on honors projects and capstones?

VA: Yes. Tons of capstones. Just to tie that in, so one of the other sports projects I did was a capstone project with a student named Jeremy Roth, and he was interested in—there's certain sort of common themes that are important in sports statistics. Sometimes, fairness or equality—so there's a lot of, there's some very famous work about racial discrimination in basketball, for example. You know, do referees call more fouls depending, you know, depending on what the race of the players involved is, or do umpires in baseball tend to call a strike more often depending on whether the pitcher is, you know, what the race of the pitcher is, what the race of the batter is. So sort of things that are—have a sports context but aren't really about sports. And this particular project was on the effect of steroid use in baseball. So, you might imagine that it's hard to get information on who uses steroids, because it's not open, often it's secretive. And what, you know, can you quantify what the effects of steroid use are? And we were able to do something where we had sort of a conservative estimate of what we thought the effect of the steroid use was. We used this thing called the Mitchell Report which is sort of an extensive overview of steroid use. So, the student, Jeremy, spent many hours reading through this Mitchell Report, you know, it's a hundred page report, and it was, um, you know, it's being used even in

legal cases against players like Roger Clemens. And the work got published in a nice journal. The journal's called *The Journal of Quantitative Analysis in Sports*—

AH: Oh, great.

VA: That's sort of the sign that sports statistics is moving, sort of, towards a more academic, in a more academic direction—that there's a professional journal now, where this kind of work can go.

[18:16]

AH: And it wasn't seen like that in the past?

VA: [laughs] It's funny that—yeah, even today, you know—if you tell an academic statistician that you work in sports statistics, you might get an odd look. And it's funny, I—you know, everybody always sees themselves as sort of getting it from all sides, because if—because if you tell the casual sports fan that you do sports statistics, you'll get a different kind of an odd look. Yeah, there was a bit of a stigma—

AH: Uh-huh.

VA: I did some other work with a colleague at the University of Minnesota on projecting which football—which quarterbacks would be good quarterbacks, and in the pros, based on what they've done in college, and I know, you know, he has said to me, he wants to be careful about

how much of this stuff he does. Not because he doesn't love it, but he's worried about how it will be seen. But I—it is moving in the right direction. The one thing I do like about sports statistics, and I don't know why this is, maybe it's because it's not seen as, um, in the right way, is that they are open with their data. And there's a general movement towards making data available publically. But in the past, even today, in survival analysis, for example, or in a lot of other fields, people are very, very protective of their data. And it's unfortunate because if you want to have verifiable results, you need access to their data to make sure what they did was, you know, what people did was right, and sort of the ideal is to say, "Here's the analysis we did and here's the data we used, and it's available to anybody who wants to use it." That's not usually, that hasn't been how it's worked. Often you get data, and it's like this, it's unfortunate for teaching as well, you get data sets that are twenty years old, and the reason they're twenty years old is because those are the data sets that are publically available. Once the researchers have squeezed every last drop out of them, they make them publically available. Whereas in sports, you can really sophisticated, very detailed data—*new* data, ready to analyze and use.

[20:37]

AH: Great. So, you mentioned at the beginning, there, that you've been working with a researcher at the U of M [University of Minnesota].

VA: Yes.

AH: So, I'm wondering, what kinds of other collaborative research have you done with other departments at Macalester, or, um...?

VA: A little bit. I worked with worked with Professor Ding [Liang Ding] in the Economics Department. That was joint with a common student of ours. And he was looking at, um, he was looking at the foreign exchange market and the introduction of an electronic trading system. So there was sort of this, you know, discrete event that happened, I think it was 1992, where trading information was available through an electronic system and he wanted to see what the effects of this electronic system were. And, that was—that was great. And I also did some sort of, I wouldn't call it consulting, but a little bit of work with Ray Rogers in Geology on some field data that he had collected. So those are the two big projects that I can think of with, um—

AH: Cross-department—

VA: Mac faculty. That's right.

AH: Yeah. Do you feel that, that's a very open process; do departments have a lot of exchange?

VA: Um, yeah, I think they do. I mean, I think it could always be better. You know, I'll handle the odd phone call from a faculty member, you know, call me up and ask me a little, tiny sliver of a question that I'll answer. It would be nice if maybe we were brought in a little bit more as a member of the sort of quote unquote “research team,” but it's not—it's pretty good already, you know, people like Liang and Ray have, have clearly done this and some others are willing to do that too.

[22:28]

AH: Definitely. As far as your work with the Macalester wider community goes, I know that you're involved with the Community and Global Health concentration—

VA: Yes.

AH: You're a member of the steering committee? Is that correct?

VA: That's right.

AH: So, how did you get on that, and what do you see as your role there?

VA: Well, I guess originally, you know, so survival analysis is really tied to medical applications and obviously that's, you know, a big part of what the Community and Global Health concentration deals with—at least, you know, partly. And there's sort of a quantitative component to the concentration. So, I was kind of a natural person to include, at least in the group who was putting forth this proposal. And that's how I got involved. And there was another Math faculty member involved, Danny Kaplan. So that's sort of how I got involved and now I'm on the steering committee. So, I really enjoy helping to organize events and, you know, identifying students who sort of indicate an interest in the field, and making them aware of this opportunity. And that's pretty much the extent of my role. Making decisions about also, you

know, where do we see the concentration going in five to ten years, what parts of the concentration are sustainable, what is working, what's not working, those kinds of things.

[23:53]

AH: Definitely. And where *would* you like to see the concentration go in the near future?

VA: Well, the concentration has just exploded. I think—I guess it's arguable to say that we're the most popular concentration. I don't know the exact number of concentrators we've got, but we're either the—I think we are the biggest in terms of number of concentrators. Where would I like it to go: well for *my* side of, sort of, you know, the quantitative side, we have this new course in epidemiology. I want that course to grow even more than it already has; it's already quite popular. We have lots of students who are interested in public—in MPHs [Master of Public Health degrees], and it is nice that we have the University of Minnesota next-door to us. That helps us a lot. But I'd like to see that course become really entrenched as part of our curriculum. It *is* almost there, but not quite. I'd like to see maybe, and we do a good job of this, in fact, a fantastic job—the directors of the concentration right now, Jaine Strauss, Devavani Chatterjea, are always working to establish ties with outside organizations so students can have internship experiences, can have study abroad experiences, can have job, you know, good job opportunities after they leave. But I think that is an ongoing effort that, even in the next five years, will be huge.

[25:33]

AH: Definitely. And, do you teach the epidemiology course?

VA: I have not taught it *yet*. I think we've offered it three times. Three falls in a row. And it's always been Danny Kaplan, just with the way the courses have broke down, but I would love to teach it. There's been some talk of doing it as a First Year Course, which I think would be fantastic; I'd love to teach it as a First Year Course. I have been doing this other class that's related to the concentration. Which is called "Modern Statistics," but basically is a course in survival analysis.

[26:10]

AH: Great. And, and what other classes do you teach, and um, have you created or altered any courses that find particularly—

VA: —interesting.

AH: Yeah. [laughs] Interesting.

VA: So I teach across the statistics curriculum. This includes, sort of, a couple of different levels of intro classes, and then there's sort of a second course for students who want to pursue more, and then there's—that's sort of the lower/mid-division, and then the upper-division classes are a sequence in probability and mathematical statistics and those are kind of different in that they're quite a bit more theoretical, whereas the other courses are more applied. The other courses are fanta—they're not solely service courses, but they do provide a lot of service to biology, to economics, to political science, sociology, um, geology. So, I've taught sort of both

the theoretical and the applied. This “Modern Statistics” course is a course I created from scratch: a new listing. I’ve taught that twice. I’ll teach it again this fall for the third time. It has also been great. I was worried at first: how was this going to go, it’s usually only taught at the graduate level; that was very stressful for me. But it works, you know, it works—the first time you teach it, there’s always things you want to change, but it worked pretty well. And then the second time it sort of got a little bit better and I’m hoping now the third time will sort of be...perfect. I did a First Year Course in sports statistics, which I thought worked quite well. It’s an interesting way to introduce students to statistics. Those are the new ones. I think that’s pretty much it, yeah.

[28:02]

AH: Yeah, totally. And, you were speaking of, sort of, just the applied nature of some of those classes, and I know in 2007, two years after you arrived, the Educational Policy and Governance Committee debated whether Applied Mathematics and Statistics should become its own major or a path in the department. And they decided it should be a path, if that’s correct. And, you had a role in preparing that proposal, right? So, what are your opinions about the role of the Applied and Math—Math and Statistics track versus a major?

VA: On the ground, so to speak, it’s—there isn’t a huge difference between calling it a major, calling it a track, so we were fine with the decision. We understood, you know, some of their reasoning was the amount of overlap a Math major and an Applied Math and Stats major. And, although we could argue, you know, we could argue about whether there’s too much overlap, or just the right amount of overlap, we were fine with the decision. I think, again, it doesn’t really

affect our students, you know—it doesn't really affect them so much to say whether it's a track or a separate major. I think the important thing is to have something in place for the student who is interested in mathematics, but not interested in the theoretical aspects of math: to have a set of courses that they can take, that really, you know, satisfies their interest and leads to fantastic job opportunities for them.

[29:46]

AH: Yeah. And I know there was some, not some controversy, but there was definitely—I read an editorial you wrote for *The Mac Weekly* about—there was this student who had complained that we're not training students for jobs. What, what would you say to that criticism that this track is a job-training...

VA: Oh, I don't think it, I don't think it is at all. I mean, of course, it gives them tools that are—what would the word be—marketable, make them marketable, or be—it *can* lead to jobs. It's not an engineering degree, you know. It's not that kind of pre-professional degree, so you can get an Applied Math and Statistics major and do anything. I mean, you can go to med school if you want, you can go to law school, you can also get a job, you know, using the math degree, but it's—I think—I don't know if there was a misunderstanding about what it was, maybe. I'm just guessing here, but perhaps the misunderstanding is the term “applied mathematics,” a lot of times, people hear that term and think that it is two words that are stuck together. In other words, it is mathematics which is applied. And, in fact, that's not—that's not really what it is. Applied mathematics is a field. That is the name of a field, which uses differential equations to solve problems. So maybe that was a bit of, there was a bit of misunderstanding about that. But I have

to be honest, at the same time, I don't think it's a bad thing for students to get skills that make them desirable job candidates.

[31:34]

AH: Mm-hm. Yeah, definitely. And, and I wanted to ask, too, how you feel that Macalester's sort of Statistics Department, or part of the department, compares to other departments at other small liberal arts colleges?

VA: This is going to sound like—[laughs] this is the problem with me answering this question is because I tell my students this all the time, and they always kind—and I always wonder are they thinking, “Well, of course, *you're* going to say that, Victor,” you know. But I really think we're—we have an amazing, amazing curriculum. And I'm realizing this more and more as I visit other schools, talk to them about their statistics, talk to them about what they're doing in their courses. And often it is, you know, either archaic [laughs] or yeah, yeah archaic is a good word to use. Just not relevant in today's world. It's, you know, stuck in fifty years ago. There's a lot of schools that are finally coming around to the way we teach statistics. Which is, you know, largely computational, so using the computer to solve problems. But it's taking years; you know, we were doing this stuff when I first got here in '05. And Danny Kaplan, Karen Saxe, there were several math faculty that—David Bressoud—that were involved in developing this sequence Applied Math and Statistics—or no, sorry, Applied Calculus, and then this “Intro to Statistical Modeling” class. And that sequence only now is, I mean, it's taken years of advertising it, of selling it, of doing talks around the country about it, about the, you know, the

virtues of those courses. People are finally starting to come around. They're giving credit to us for being the leaders in—

AH: Oh, wow.

VA: —you know, in having this sort of curricular reform. So I really think it's awesome to be at a place where we actually led the way, and I can say that honestly, led the way in where statistics education should go, at the undergraduate level.

[34:03]

AH: So, sorry, what exactly are we doing differently...?

VA: OK—

[both laugh]

VA: Perhaps I should have started with that. We're—so in the past—so there's a few things. One is there was not, there's not, in other places and in other intro stat courses, there's not enough of an emphasis on data, and the analysis of data, to answer real questions. So there's lots of tiny data sets that are contrived, or that are flat-out made-up. You know, “Here are seven numbers,” and it's just totally useless.

AH: Do a *t*-test....

VA: Do a *t*-test, that's right. And the—you know, what's—there are so many examples of this, but the typical kind of analysis—and I know because I taught an intro stat class at McGill on a couple of occasions, so I know what the old-school course looked like. And often you'd ask a question that was totally irrelevant, that nobody would ever really want an answer. So...you know, I tell my student—we looked at diamond prices in one of my classes, or we look—diamond ring prices—and you could ask how, if I asked you what's the typical diamond ring cost, what would be your first reaction? My sense is your—well, what would be your first reaction? As an off-the-cuff moment?

[35:26]

AH: [laughs] Um...

VA: What is the typical diamond ring, or diamond, cost? You would say:

AH: I am looking at specific diamonds...? [laughs]

VA: OK... So, in a sense, you're saying, aren't you saying, "It depends?"

AH: Yeah...

VA: Right? Aren't—wouldn't you say that? You'd say, "Well, are we talking about a two-carat diamond or a .4-carat diamond? Are we talking about, you know, perfect clarity? Does it

have imperfections?” And that’s, that’s true! It does depend. In those other courses, they actually never get to the point where they acknowledge the fact that it depends. They just answer the question overall. And you *could* answer the question. But it’s not a very interesting question to answer. You could say, “Diamonds cost anywhere between a thousand and nine thousand dollars.” That’s true. But *we’re* getting at the “it depends” question. And—so, we’re controlling for things. That’s another, a fancier way of saying this. We’re—or an even fancier way is to say we’re building multivariate models. And we’re doing that very early on. So that’s one thing. Dealing with data, doing multivariate models that are more realistic, using sophisticated software. We’re using the R package. This is what professional statisticians use. When you go to other schools, it’s unfortunate, the most common answer you’ll get is, “Well, *our* students would not be able to do that.” And it’s such a, it’s such an unfortunate answer, that they don’t have the faith in their students that they would be able to understand these ideas, and I think they would. A lot of times, the reasons they don’t want to do things like, do multivariate models, do sophisticated analysis, or use sophisticated software, is not because they’re worried their *students* can’t do it, it’s because they’re worried whether *they* can do it as professors. And they sort of have to step out of their comfort zone and just, you know, dive in and see what happens. But there’s a security blanket to do the same old thing that you’ve done for twenty years. It’s very difficult to tear yourself away from that.

[37:43]

AH: And how did this come about at Macalester? Do you have an impression about who started this, or—

VA: Oh yes—

AH: Where this trend came from?

VA: [laughs] I am not going to take credit for that. At all. I think, clearly, Danny Kaplan was sort of the leader in this, but of course, as I said, Karen Saxe, David Bressoud, several other people. But he, Danny, is the one who—I mean I've been around at conferences with him and he has done an amazing job of—I don't want to say selling it, because that makes it sound bad, but it really has to be a sell-job, because so many people are so pessimistic about it. And he has been great at not—I would have gotten discouraged. You go give ten talks around the country and you get nothing but, you know, pessimistic, negative feedback—"Our students aren't going to be able to do this." Well, I would have just said, "OK, well, that's it, we tried." But he has just continued and continued and pecked away and pecked away. And he has a book that sort of uses this approach. And now, I think, you know, there's sort of the floodgates are opening, and people are starting to come around to it. It's even funny—and he doesn't have an ego about this, but he *should*. We were just doing this—it was an eConference, so it was a conference online, and these people were doing talks about how this is how introductory statistics should be taught. And they were doing the very examples that we've been doing for five or ten years. And we were sort of giggling to ourselves. But you know, it's better that they're doing this than that they're, you know—even if they're trying to—and I don't think they were necessarily trying to pass it off as their own, but it's better that they're doing this than not doing it.

[39:37]

AH: Yeah. And what's your impression of how Macalester students have reacted to this curriculum?

VA: I think it—generally positive. If I'm not mistaken—now, I don't want to say something that's not true—I think that course is either the most—maybe it's not the most enrolled course at Mac, but it's definitely in the top three.

AH: Oh, wow.

VA: We are now, I think, easily at five sections a year, sometimes six, of twenty-five to thirty students per section. So, we're talking about, yeah, like one-fifty to one-eighty students a year taking that course.

AH: Oh, yeah, that's—that's huge!

VA: It is.

[40:24]

AH: Great. And then, this is a little off this topic—

VA: [laughs] OK.

AH: But, uh—

VA: That's OK.

AH: [laughs] I wanted to ask: you are a faculty member who was raised in another country.

VA: Yes.

AH: And you're trilingual. Right?

VA: I—I am—

[both laugh]

AH: So, I wanted to ask what your opinion is of Macalester's approach to global citizenship and multiculturalism.

VA: Well, first thing: yes, I am trilingual. To me, that was—everybody's always sort of really impressed by that, but it was just circumstance. I was growing up in a French-speaking part of Canada. To an—to Italian parents. But who went to school in English. So, I kind of had no choice to speak those three languages. *I think our students do a—I think our students are fantastic in wanting to know about other cultures, wanting to learn new languages, doing amazing travelling, either during study abroad or even at other times. And sort of just soaking up those things, and being open to them. So, I think—so I don't know if it's what we do at*

Macalester that makes them have these great experiences, or if the people who are interested in multiculturalism, you know, want to come to Macalester—I'm not sure which it is. But that's one of the things I've really appreciated. So, in Montreal, it's not uncommon at all to have people from dozens of different backgrounds and, you know, languages—just in the hallways, you'll hear five different languages, and that was totally normal. And I know that that's not the case at many American institutions, if any. But here, it actually is. It—in some sense, it's similar to what I experienced in Montreal. I get very embarrassed when, on the first day of class, I ask my students about things and they'll say, they'll say something to me in Italian. Because they'll see my name, and so they'll something to me in Italian and they're expecting me to respond in Italian and it's—it's like I start to blush, you know—

[42:42]

AH: Aw. [laughs]

VA: —because, yes, I can speak Italian. It's not something I want to do in class... My Italian is not school-learned. It is, you know, it's a dialect from southern Italy and so it's embarrassing, but that has happened to me so many times I can't even remember how many times it's happened. It is nice to speak French to students; I—that's sort of something I learned in school and it's been great to meet, we've had several students whose parents speak French. You know, they grew up in North Africa or, some—you know, usually North Africa—and their parents will come and they'll be blown away when I have a conversation with them in French. So, yeah, I've been really happy with the multiculturalism.

AH: And you get an impression that it's really part of the culture of Mac?

VA: I think so. Yeah, I don't think—you know, we have these, or this requirement, but I really do think it's, for the most part—you know, it's organic. It's not forced on the students.

[43:50]

AH: Definitely. And now, I'm going to jump a little bit more—

VA: OK. That's fine.

AH: Sorry, just to go back to the Mathematics, Statistics, and Computer Science Department. What would you say is your vision for the future? Obviously, we have this curriculum that's just—all other schools are just beginning to match, but—

VA: Mm-hm.

AH: What would you like to see five, ten, twenty years out?

VA: Boy, that is a tough question. Well, for example—yeah, so this is a tough question. One thing we have to think about, and we've kind of already started to think about this, although not a lot, but ways to reach lots of students on a limited—you know, sort of the problem is limited budget, how do you get lots of students learning things? And we've moved to this system of computer labs, where every student is sitting at a computer and that's not scalable to bigger

groups. So, for example, online courses would be an interesting avenue to think about—you know, is it feasible, do the students lose something, do they feel like that's not why they came to Mac, or something like that, or is it a great opportunity? You know, and I think it could be seen as a great opportunity. Or some sort of electronic learning. That's one sort of, you know, one big horizon that many people have spoken about. And I don't know if—there's sort of some people starting to do things, but still lots needs to be done in that respect to make it work right. That's the big one I can think about; I mean, there's always sort of evolution in curriculum, which I think we're good at. Those are the two things I can think of. The sort of evolution of curriculum is always ongoing though. Yeah, aside from that, you know, it's hard to say, twenty years down the line, but we're always sort of thinking forward. You know, every department meeting, we think about what can we do to make our department better in the next five years.

[46:05]

AH: Yeah, and you mentioned, much earlier, that four new faculty members have just been added?

VA: In the last—yes, since I came.

AH: In the last—since you came. How do you think that's going to shape the department?

VA: You know, every time a new faculty member comes in, there's this, like, new energy that enters the department, and so, yes. Every faculty member has sort of brought something new, new areas of research. They sort of invigorate students who are interested in those areas, so, for

example—so we've got Chad Topaz who's doing research with students; Andrew Beveridge has done great research with students; Alicia Johnson is doing great research; Shilad Sen is doing great research with Computer Science students. So, I think, they each bring their own research area. That adds to the curriculum, as well, because, for example, I teach a course in survival analysis. They each teach courses in their own research disciplines. So, I think there's sort of a natural—when you add somebody, it adds to the education aspect, and it adds to the research opportunities for students. And it just brings in this new energy. So I think we're—there's sort of a changing of the guard, and now, with this fifth person coming in, and myself, we'll have six people who, sort of, will hopefully lead us into those next twenty years.

[47:31]

AH: Definitely. So, just to go into some general reflections, I guess, about Macalester: what would you say you enjoy most about being part of the faculty here?

VA: What would I enjoy most... Well, I do like the atmosphere that, you know, for example, at faculty meetings, I think there's a nice atmosphere. I think that's gotten a lot better since I've gotten here. There's a lot of open discussion, there's a lot of interest in faculty governance, so we don't have very many faculty who are interested in their research and don't really care about the decisions that Mac makes. We do have a lot of faculty members who are interested in making decisions that are right for the college. And a lot of faculty members who are, you know, who deliberate about these things, who are open to opinions from people who are in totally different fields from them. So, we have a lot of—we do have a pretty good communication between, say, the sciences and the humanities and the arts, and all these different

areas. I think that's generally good. Yeah, so from a faculty's perspective, I think that's one of the things I like most.

[48:55]

AH: And, what would you say your major critiques of Macalester would be? Or...

VA: Critiques? Yeah, I—maybe I shouldn't answer this question too quickly. Oh, that was just a joke.

AH: [laughs]

VA: So, one thing that I'm, you know—my crusade, perhaps, for the next ten years, or five years, is grade inflation. This is something that *I* take personally. In my opinion, grades have gone up at an astounding rate and we get—there are so many people who bring such passionate opinions about this topic, that it's very hard to have a discussion that results in a course of action. But, for me, there are negative consequences, *huge* negative consequences, to grade inflation. So that's something I think I want to address. You know, now that I'm tenured and I want to really have a careful discussion that brings in as many people as possible. I really think it hurts our best students. And I really think it sends a bad message to some—to the small proportion of students who *don't* have a good work ethic, who end up getting a grade that they view as good, reasonable. And it really sends a message to those students that the work ethic that they're—that the work they're putting in is just fine. And I—one thing that I tell my students, or anybody who is willing to listen, is, if we produce students who know nothing about statistics, I'm fine with

that. And I try to say that to surprise people, because they'll say, "Wait, you're fine with that?" And I say, "Yes, I'm totally fine with that." But if we produce students who have a subpar work ethic, that bothers me a lot more. So, you don't know statistics, that's fine. You can go on and have a perfectly good career, having a perfectly good life, fulfilling life—you don't know a lick of statistics. But if we're producing students who don't have a good work ethic, and I'm not saying a lot of them don't, but there is, there's a problem with grade inflation that you could get away with some subpar effort. That's the big one. The other thing is, I do want students to be exposed to—so one thing I noticed when I came here was that, you know, the political leanings became very clear, very quickly. And that's fine with me, I'm sort of leaning in the same way. But I'm not sure there was enough students, you know, being forced to have a real discussion with people who believe something differently than they do. And I want them to be exposed to *that*. And I don't know, I don't know how we solve that problem, or if it's a problem, but it would be nice if they were exposed to these different opinions and were forced to have these discussions. It's a little bit hard when there's such a tiny minority of, sort of, different viewpoints. And if you're never exposed to people who have different views than you do, than I don't know if you necessarily grow, as much as you could.

[52:14]

AH: Definitely. On the flip side of that question, what would you say are Macalester's greatest strengths?

VA: Well, I definitely think the multiculturalism. I think the energy of the students. So, I was amazed, because I never did all of the things that the students here do—I am still shocked at

when I look at the schedules of our students because when I was a student, all I did was go to class, try to keep up with my assignments, and I didn't really do much outside of class. So, I think the energy of the students to do extracurriculars, and extracurriculars that, you know, that really matter in the community, you know, athletics aside, I mean, that's also a—they do great things there, but really community involvement, and programs, even internationally, where they're trying to effect change. To me, that's amazing, and I don't even know how I could have done that as a nineteen-year-old, but our students do do that. That's a huge thing. Our curr—our sort of academic—the level, you know, of our academic depth is amazing. I think the—one of the biggest things we bring, and I think—I hope we realize this, I *think* we do—is how amazing our teachers are, how devoted they are to education. I think generally we understand, we do see that, and I hope the students see that. It's hard because the students never see faculty members from other colleges, or at least they don't very often, so they may not realize really how amazing our faculty members are.

[54:05]

AH: Great. So, next question: I wanted to ask, what experiences would you say have been the most memorable for you at Macalester so far?

VA: Uh, well definitely—so, particular instances? Definitely the tenure decision, having the bagpipes come into my room was a phenomenal experience. It was funny the way it happened. I was sort of teaching and I heard the bagpipes in the building, and then I heard the bagpipes going away, you know, in a different direction; I thought, “OK...” And then I heard them leave the building, and I thought, “Oh my god, what's going on now...?” And what had happened is, just

with the timing, my department wanted to be there, and so they told the bagpipers to come back later. But, of course, I did not know this, and I was, you know, my heart almost stopped—

AH: [laughs] Oh my gosh...

VA: —uh, in the middle of class. But it's funny, I put it out of my head and I was just talking to students, and my students for my next class came in, and they're like, "Did you hear there were bagpipers?" And I was like, "Yup." Of course, they didn't know that I was up for tenure, and they were like—and it's just funny what students know and don't know. And they were like, "Oh, that happens when a professor gets tenure." They were like explaining it to me, you know: "That happens when a professor gets tenure." And I'm like, "Yup, I know..."

AH: [laughs]

[55:36]

VA: But that ended up well, and it's a good story. One of the weirder things that I—so there's sort—I hope I'm interpreting this question well, but, uh, when I was teaching, in fact, just a couple of weeks after I had learned about tenure, our department coordinator [Kay Crawford] walked in the room, in the middle of my discussion, and I was like, "What's going on?" And I was like, "Kay, can't you see I'm teaching right now?" you know, "Please go." And she's like, you know, "Come over here." And I was like, this is bizarre. And she was like, "Isadora," who is my wife, "wants to talk to you." And I'm like, "Oh my god, this is bad..." If I'm being interrupted in the middle of class, this is bad. So these thousand crazy thoughts ran through my

head and, in fact, she had a health condition of a partially collapsed lung. She was on her way to the hospital. Everything's OK, she's fine. But that's something I've—I don't know if I've ever been interrupted in the middle of class like that before. So, that something—

[56:45]

AH: No. Certainly memorable... [laughs]

VA: That's something that's going to stick in my head. I had a really interesting Valentine's Day Trad [Traditions, the Macalester all-male a cappella group], uh—

AH: [laughs] Oh yes...

VA: —visit, that I'm not going to forget anytime soon. I'm trying to think of what other interesting—

AH: Was it shirtless?

VA: Unfortunately, yes. It was sh—

[both laugh]

VA: Unfortunately, yes—

AH: That's a ten-dollar Valentine!

VA: Is it really?! Oh—

AH: Yeah!

VA: It was not directed at me. I will say. It was directed at somebody in my class.

[57:19]

AH: Oh, great. And I think you've addressed some parts of this next question, but now that you've achieved tenure, what are you most looking forward to in the future, in terms of being at Macalester?

VA: So, I do want to get more involved in, you know, faculty governance. So we're told, "before tenure don't take on too much outside of your research and teaching"—

AH: Is that, just, common advice or were you actually told that?

VA: That's common advice, and I think I was also told that by specific individuals, but that is sort of typically what one is told. So I did a few, you know, I've done a few little committee work, or committee works... But I'd love to do bigger things that really tackle some big issues, some big questions. In terms of, you know, my research, I'm kicking around the idea of writing a book, for example, which would be sort of a long-term project. In terms of my teaching, yeah,

I'm always thinking about new courses that I could develop. There's sort of a list of courses we *could* develop; it's just a matter of having the manpower to cover our classes. Of course, there's the grade inflation issue that I've talked about. That's sort of something *I* want to take up myself. Um, yeah. Those are the big things.

[58:50]

AH: Great. And is there anything else you'd like to add to the record before we close?

VA: Um, no, I don't think so. Thank you—

AH: [laughs]

VA: —because when I read the questions, when I read the questions before the interview, I thought, “Oh my goodness,” this was a thorough review of my vita—

AH: Well, you have a very, very detailed—

[both laugh]

AH: —curriculum vitae, I must say. But, thank you very much.

VA: Thank you.

AH: Great.

[End of Interview 59:15]