# Academy of Neurologic Physical Therapy

# Historian Committee Inspirational Conversation

# Interviewee: Michelle Lusardi, PT, DPT, PhD, FAPTA

Interviewer: Dana Lott

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**Transcription of Full Audio Interview**

**Start of Transcription:** Timestamp 00:00:01

**End of Transcription:** Timestamp 00:27:10

**Introduction:** Welcome to another selection of Inspirational Conversations brought to you by the Historian Committee. Today’s interview is with Dr. Michelle Lusardi who is interviewed by Dana Lott, a member of the Historian Committee. Dr. Michelle Lusardi has worn many hats in her career as a researcher, associate professor, author and board member for the Academy, just to name a few. She has authored over 40 peer-reviewed articles, has been the recipient of several honorary awards, which include the Joan Mills Award and Outstanding Educator Awards from the Academy of Geriatric Physical Therapy and Baethke-Carlin Award and Lucy Blair Award from the American Physical Association, and is named a Catherine Worthingham Fellow of the American Physical Therapy Association. Dr. Lusardi has served on the Board of Directors of the Academy of Geriatric Physical Therapy, as Editor of the Journal of Geriatric Physical Therapy, and as chair of the "GeriEDGE" task force on functional assessment.

 **Interviewer (I):** So, describe for me, your education and initial interest in Physical Therapy.

**Michelle Lusardi (ML):** Well, I went to a small college in Pennsylvania, undergrad, majoring in Bio, thinking that I was going to go to medical school and really wanting to do that. Then I met my husband and decided I didn’t want as many years as medical school would take. His best friend at school wanted to be a PT, so, Kevin talked to me about what PT was like and I was like, “Oh, that sounds good.” So, I transferred into Downstate Medical Center, as a junior, they just did Junior and Senior year, so, I completed my Bachelor’s there and had some really outstanding faculty, at the time. Margie Kramer was one of our faculty and she did PNF and she had magic hands and I said, “I want to do this.” So, my interest in neuro sort of came from…she did neuro rehab, she taught in the neuro rehab component of the curriculum. So, that’s where my interest came in. My first job was in a children’s center. That was before mainstreaming, I’m that old. I was terrible because I didn’t understand families and how they functioned. So, I would work diligently on these wonderful home programs and then get aggravated when mom’s, who were often single moms because they had a child with a disability, couldn’t integrate it into their already too busy lives. We moved…I graduated in ’76, we moved in ’77 to Connecticut because my husband had finished his graduate work and got a job in Connecticut and I started at Hartford Hospital, knowing that I was probably going to be a neuro nerd. You know, it was an acute care hospital and at the time we also had an inpatient rehab and we just had a cadre of folks there, that had gone on to really blossom and grow and contribute. Sherri Hayes was there with me, Linda Crane was there with me. Linda was one of the first 3 certified specialists in the association. Caroline Kelly, who has been recognized for her clinical education excellence, was there. We just were…we fed off each other. There were 11 PTs there, when I joined and I was there for about 4 ½ to 5 years and by the time I left there were 35 and we got organized into a neuro team, an ortho team, a cardiopulmonary team. So, I had the opportunity to do inpatient acute stroke. You know, I was…the neuro ICU was my second home, so I worked a lot with folks with head injuries, new spinal cord injuries, brain tumors, that kind of stuff. Was able to spend some time on the neuro inpatient rehab floor and met some wonderful people who influenced…. their handling of their situations influenced my dissertation topic, when I went back to grad school. While I was at Hartford, I had the opportunity to help with continuing education programs and we brought Greg Johnson and Vicky Saliba from the Institute of Physical Art in, to do PNF courses. They were such magnificent teachers. I learned so much from them. Really after Margie with PNF and now Greg and Vicky with PNF… you have to remember this was in the late 70s and early 80s, so, motor learning hadn’t yet come in as a way of thinking about rehab, but their manual skills were just so incredible. They noticed I was around every time they came to town.

**(I):** And was that a coincidence or not?

**(ML):** So, I eventually was able to join them as a teaching assistant and then eventually as an instructor. That led to an opportunity to fill in for someone on sabbatical at the University of Connecticut. So, the person I filled in for taught the neuro rehab stuff and I just, as much as I loved patient care, being in the classroom…I knew that was going to become sort of my niche.

**(I):** Did you ever see yourself there before?

**(ML):** Not initially, you know, my son was born in the early 1980s and I started working part time a couple days a week at the hospital. Also, picked up private pay patients, who were post stroke. I got involved with a local stroke support group and was treating in their homes and this one woman, who had had a very severe stroke…we’ve learned a lot about strokes since then, this was in the early 80s…she was very determined, had significant right hemiplegia, and aphasia, that semi-resolved. She lived in a very old house and had very old beds, with the strings underneath them for support. When we tried to exercise on the bed…her tone was horrible, so my job was to come in and help her exercise, so we could manage her abnormal tone… we’d get on the bed to try to do exercises and roll into each other, so I made her get up and down from the floor, much to her chagrin, until one day. She kept the books for her husband’s binary practice. They had a big wooden rolltop desk and she sat on a folding chair because she could bump it in and out more easily. She walked with a quad cane, mostly because it didn’t fall over. She could walk with a straight cane, but it never stayed put when she sat down and stuff, so she wanted a quad cane. She went to reach for the telephone and her bottom slid off of the chair and she ended up in the cubbyhole under the desk and because we had been getting up and down from the floor, she took some time and did some problem solving and sort of fanny walked her way out from under the cubbyhole and rolled her way into the living room and over to the couch and got herself up. She called me up and she said, “Michelle, you won’t believe what I just did! I got up all by myself!” That was a turning point for her. She had been a master gardener and she had a beautiful rose garden. Because she knew she could get up, she went back out and dug in the garden. She had been a good hands class national champion at dressage and had horses. She hadn’t been up on her horse, probably in 3-4 years, so her next goal was, get me up on the horse. She got up on the horse and we noticed that when she got up on the horse, her gait improved. You know, with the rhythm of the horse. When I did decide to bring it back to UConn, when I did decide that I wanted to teach and had to go back to graduate school. Did my Master’s in Education and then did a PhD in Gerontology and Family Studies, and my dissertation topic was on the fear of falling and the risk of falling in community living folks. So, her interaction in the early 80s, led to my PhD topic and I think of her every day and stuff. So, I was at UConn and the TA, you know, was a fill-in for one of the faculty members that was finishing her dissertation and was on sabbatical. She extended her sabbatical, so I stuck around another semester. Then, they were in the middle of a faculty search and couldn’t find anybody, so, I stayed on another year. Eventually, we decided to go back to school, so I stayed on as a lecturer, completed my Master’s, completed the PhD, and was there almost 15 years, I think. Got involved in the APTA sections level activities because a colleague at UConn, Rita Wong. She was very involved and brought me to my first CSM, introduced me to lots of people, and got me onto committees. She kept saying, “Michelle can do this for you.” Thanks Rita, but through involvement with the sections, really had opportunities to interact with folks, who already were contributing a lot. So, I was able to be mentored and ride on their coattails a bit and it just kind of grew from there. Got interested in problem-based learning and UConn was a research one place and problem-based learning is very time intensive and so, it wasn’t something that was ever going to happen at UConn. Opportunity came to be involved in new program development, so I interviewed at Marymount, Arlington Virginia and knew that Mike was coming to Sacred Heart, knew of him, knew that he was very charismatic. So, I went down and interviewed with him and basically, he made it happen. It was an incredibly creative time. We were the original group of us, I think I was the 5th out of 8 hired. Developed the curriculum from scratch. Made lots of mistakes and had to correct them, but really enjoyed problem-based learning format and of course I was the neuro nerd on the faculty and met Donna Bowers, who became…

**(I):** The force of intervention.

**(ML):** We became immediate bosom buddies basically and when we team taught, I’d start a sentence and she’d finish it. She was NDT trained, I still thought about PNF. By that time, in preparing courses, you have to stay current in the literature, so we had integrated motor learning, but we didn’t let go of the manual stuff we were doing. In lab, in the Master’s program, we team taught labs together and I would handle a patient, using my skill set, and then she would handle the same patient, using her skill set. It was really kind of neat to demonstrate that you can approach a problem in many different ways and still have positive outcomes.

**(I):** I’m glad you brought up the problem learning because I had a question about that. In our profession, previous knowledge is being challenged. You know, like coming back to activity after a concussion and now you have neuroplasticity, use it, don’t lose it. Kind of looking at it from an education perspective, what do you think are some things that we are realizing in education, that perhaps we didn’t think about earlier on?

**(ML):** Well, you know, as there have been trends, you know. In the 60s and the 70s it was PNF and NDT and a little bit of Bobath. In the 80s, Carr and Shepherd started coming through with their way of managing stroke. So, knowledge is sort of been building. Sometimes what happens is, the baby gets thrown out with the bathwater. So, when motor learning started to come up, you didn’t touch your patients, you did motor learning and you didn’t do the manual facilitation that you might do if you were NDT or PNF trained or that sort of thing. So, there was a rift about what approach was still viable or most viable. Then, more recently, there has been a building of saying, integration of things and with plasticity, you know, motor learning and plasticity are so important and sort of ask don’t tell strategies. When you ask someone to do something and you say, “What do you think about what you just did? How did that go?” Rather than saying, “If you had put your foot here or your hand here,” you know. Rather than being directive, sort of use a problem-based approach.

**(I):** Do you think problem-based learning is the neuroplasticity theme of education. Is it where we’re going because it seems to be working?

**(ML):** You know, in some ways yes. The drawback for me anyway for problem-based learning is that my research productivity decreased somewhat. Of course, I was now at a teaching institution versus a research institution, from UConn to Sacred Heart. I used to get so frustrated at UConn because you would work so hard on these grant applications and you would get a review that was positive, but you were ranked and I was always the one that was just below the one that got funded and it was perceived as a failure by the powers at be at the University. So, I was very happy when I came to Sacred Heart that I didn’t have that. I was awarded some teaching grants, as well as, a couple of research grants at Sacred Heart. You know, I was able to incorporate it, but the thing about problem-based learning is because you spend so much time with students, in collaborative learning, rather than in traditional lecture format, something has to go and so, I did all my research in the summer time, when I wasn’t in the classroom. Then, I would try to sneak it in. I’d collect my data and stuff in the summer time and then try to get it cleaned up and analyzed and write manuscripts and stuff as I could, during the semester. We transitioned from…the Master’s program only ran for 3 or 4 years, before we transitioned to DPT. So, we did major curriculum development twice, while I was there.

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**(I):** So, you’re happy to be retired?

**(ML):** Well, no. I miss being in the classroom. My responsibility at Sacred Heart was the Neuroanatomy piece and Donna and I wrote cases that were aimed at being integrative across the anatomy piece. The way that Sacred Heart’s curriculum was built up, there was basic science stuff, there was assessment stuff, and then there was intervention stuff. The cases were supposed to be an umbrella that stretched across all three and took a lot of time and thinking on faculty to imbed those clues into one-page paper cases.

**(I):** And to guide your tutorials later.

**(ML):** Right, right. Every 3 or 4 years, we would tutor ourselves to make sure we understood the process a bit. It was interesting to let go of control. I’ve been retired almost 8 years now, so I’m not as into the literature as I used to be, but I really am intrigued by divided attention and dual task training and that kind of thing, from a false prevention perspective, but that’s neuro. I mean, neuro and geriatrics.

**(I):** Absolutely.

**(ML):** Absolutely integrated that way. Translational research, you know, so how do we take the stuff we are reading in journals and make it accessible to clinicians, who will then use the information, you know, that kind of thing. My PhD in geriatrics was wonderful. I had some very good mentors in graduate school. They were not PTs, they were social scientists, mostly. At the time I started my degrees, I was very interested in motor learning and would have loved to go down to NYU and worked with Gentile a bit, but we lived too far away and I had a young child, but I’m pretty proud of my body of work.

**(I):** You segue so perfectly into my next question. So, the determining risk of falls in community dwelling older adults’ article that you did with Dr. Shewing, up until then there had been no reviews that provided measure to measure comparison of predictive properties for tools used to assess fall risk. Can you share some of your highlights of working with the 9 other authors of that article?

**(ML):** We were charged by the section and support financially by the section and by the APTA, to do some leg work that would prepare for a clinical practice guideline in fall prevention. So, we had a team of, at any one time, 9 or 10 people. The team changed a little bit over the thing. We thought it would take us about a year to do this systematic review. Boy, were we wrong! We got into the literature and we discovered that as a group, PTs were using more than 70 different tools to assess risk of falling. So, through our article selection and screening process, we pulled out articles that had information about sensitivity and specificity and did lots and lots of math to use the idea of pre and post-test probability. Which is not something, folks in medicine do it all the time, but not something PTs, at least in geriatrics and neuro, routinely do. So, we found as many articles as we could for commonly used instruments and did the math to combine using sensitivity and specificity to develop, you know, go through likelihood ratios and odds ratios, down to post-test probability, so that the therapist could say, “Okay, if someone is walking at <1.0 m/s, their fall risk goes from a 1 in 3 to a 45-48%.” Of the articles, where the evidence existed, we found that no single measure got close, but in looking at the medical literature and how they used post-test probability, we found that you could not add, but mathematically use one test’s post-test probability as the next test’s pre-test probability. So, if you chose to do a set of 3 or 4 assessments, you could say, “Okay, now I know if they are under the cut score and therefore have a positive test for three of my measures, now I am confident that this person’s risk is maybe 75%.” So, we are hoping that this has the potential to change practice.

**(I):** Absolutely. In the acute care setting, this is huge for us. Being able to justify people staying, people getting outpatient, you know.

**(ML):** The problem is, most of the articles I looked at were set in community, so there needs to be studies in different settings. I just finished working on a consultant project for a large homecare agency, looking at their fall prevention protocol and out of that, we are hoping…it hasn’t quite been implemented yet, it took about 6 months to develop and we sort of trained the trainers, kind of thing…we’re hoping that we will have a data set about a year and a half from now of over 10,000 people, who are receiving homecare, that we can stratify by gender and decade of age >65 until close to 100. Also, diagnosis because total joint folks are totally different than other homecare folks. So, just like we have norms for community dwelling folks, we can have some norms for folks, who are receiving PT in the home, after hospitalization. So, we shall see. So, my fingers are still in there.

**(I):** You never thought you were actually going to be retired, did you?

**(ML):** Well, you know, what’s nice now is that I get to structure my own time and choose what I want to work on. I miss the classroom. I don’t miss the work of the classroom, but I miss being in the classroom. I’m doing pro bono work in my neighborhood and doing pre-hab for folks, who are going to have total joint replacements. Often times, I’m called upon by neighbors and friends, if they are coming home from the hospital, to be at the house to make sure they can get in safe and get up and down off their toilet, and in and out of their bed, you know. In and out of their favorite chair. So, you know, my fingers are still in. I did homecare after I retired. When I made the decision to retire, I actually did a transitional DPT, so that I could hone up the skills I’d let go, in terms of the other aspects of PT, other than neuro and geriatrics. So, I completed that and then did homecare for about 2 ½ years part time, before we moved to South Carolina.

**(I):** Turned away the sunshine.

**(ML):** Oh, yes. It’s also nice now. Some of my time is spent working with a number of non-profits in the area, who are doing service-oriented work and there’s a lot of poverty in the woods, in South Carolina.

**(I):** Some underserved...

**(ML):** Oh, very much so. Still trying to contribute. I think the transition to retirement for me…the first year was like, “I’m free!” but after that I really said, “What am I going to do with the rest of my life? How can I still bloom where I’m planted and make differences to quality of life for folks?” That’s such a core value in PT.

**(I):** It can get lost when you’re worrying about being in a hospital or being in an outpatient. It just kind of gets lost.

**(ML):** Yeah, so that’s sort of me in a nutshell these days. Are there any other questions?

**(I):** I do have a couple, but I have a feeling they are going to end up being….

**(ML):** Yeah, I don’t even know what time it is.