



To Go Far, Go Together

Dr. Michael Meneghini is the associate professor of orthopedic surgery, fellowship director at the IU Health Hip and Knee Center at Saxony Hospital, and practicing orthopedic surgeon.

BY HONGLIN XIAO

Honglin Xiao: Thank you for taking the time to sit down with us for this Insight Spotlight. To get us started, please tell us a little bit about your educational background and your career thus far.

Michael Meneghini: Well, I grew up in Terre Haute, a native Hoosier, and received my engineering degree from Rose Hulman before heading to IU School of Medicine where I graduated in 1999. I then did my residency at Rush University Medical Center in Chicago followed by a fellowship in lower extremity adult reconstruction at the Mayo Clinic. I started practicing at Saint Vincent Hospital with a group called Joint Replacement Surgeons of Indiana, a highly reputable joint replacement group which I was with for two years before joining the faculty at the University of Connecticut.

While in private practice, I realized that I wanted to be an academic orthopaedic surgeon. I had always wanted to teach and had the opportunity to get the hip and knee program at

Connecticut up and running. Then, for personal reasons, I wanted to come back home because I have family here [in Indiana]. I was given a unique opportunity when I came back: IU Health was building a hospital in Fishers and wanted to focus on orthopedic and heart surgery. They asked if I would be willing to become the director of orthopedics. I had to start my practice and build this hospital from scratch. In 2011 we opened the Hip and Knee Center here and within 5 years became the busiest hip and knee center in all of IU health.

X: So, it sounds like you really went full circle. Besides the involvement you have within clinic and the OR, can you speak to the involvement you have here within research?

M: Yeah, it has been a great journey; when I first started we had 3 exam rooms and we didn't even have a bathroom in our small office over on Spring Mill street where our practice started was while waiting for IU Saxony to be built. My office was in one of those exam rooms, so we effectively had 2 exam rooms. Now, our

team consists of 4 surgeons, multiple nurses and assistants and its been great to build this staff here which all help with research.

Our research program here is designed to be a center of excellence for the tripartite mission that embodies IUSM: clinical practice, education, and research. Our fellowship program embodies that educational component. When I came back to IU, we really built up the hip and knee fellowship training program. The first year we had 5 applicants for 1 spot, now we have over 100 applicants for 3 spots. It is probably within the top 10-15 fellowship programs now.

The research component has exploded as well. It started with me and my spreadsheet of surgical cases and collecting certain data points. I had an engineering student, Luke Lovro from New Mexico, who emailed me when I first started and asked if he could do research with me for a year. At that point, I had very little grant money, barely \$30,000, and told him I could only pay him a portion of that. He agreed regardless; so this engineering student from New Mexico drove all the way to Indiana and essentially started our research program before he got into medical school.

Now, our research wing includes a research director, a full-time engineer, a data analyst, and multiple medical students. It really has exploded, and we've gone in 8 years from essentially a small program to one of the best hip and knee surgical and research centers in the Midwest. It's been a labor of love; I can tell you my car is the first to get here and the last to leave.

X: Wow, a student was so dedicated that he drove from New Mexico of all places. For those of us right here at IUSM, do you have any advice on how to get started on research?

M: As a medical student, I was very fortunate. My first research project was with Dr. Bill Capello, an orthopedic surgeon here at IU. I was at the IU Northwest campus in Gary and called the anatomy department in Indianapolis and told them I had an engineering background and was interested in knee replacements and asked if there was anyone who worked with implant design. They referred me to Dr. Capello and I still remember the meeting: I told him I wanted to do hip and knee replacements and he pulls an implant off his shelf and says to me, "I designed this". This was in 2000, my first year of medical school. 18 years later, I can point to this implant that's sitting here and say to you that I designed this myself.

Eighteen years ago, I was a first-year medical school and had a mentor who gave me an opportunity to do research. So, my advice for medical students has two parts: the easy one is to find a mentor and be aggressive and get involved in whatever way you can. For me, clinical research is important because as surgeons we must think clinically. It helps us make everyday decisions. The second part may be more challenging. If you want to do academic medicine and research, the sooner you can identify your field of interest, the quicker you can reach your goals and the better off you will be in your pursuits by focusing your efforts and getting ahead. Even if you can't focus on what you want to do right now, pick something and get started from there. Easier said than done but I believe it is crucial to get started sooner rather than later, particularly if you want to be an academic physician or surgeon.

X: You mentioned that Dr. Capello gave you the first building block to start your career in orthopedics. It seems that you are passing it down through the years with all the fellows and medical students you educate here. How did you get started in mentorship and what value do you see in finding an appropriate mentor for medical students?

M: Mentorship cannot be overvalued. It is as big as people say it is. If I look at the times when I have succeeded, I can identify mentors and people who have guided me along the way. This includes my parents first and foremost.

As you get out into the professional world, you can't learn this world from a textbook and you can't learn it from the internet. Much of success comes from relationships and learning from others who have traveled a similar path. Mentorship is so invaluable in that not only can it help you focus on what you want to do, but a good mentor is able to guide you and allow you to be more productive.

Moreover, from a professional development perspective, mentors are great friends and lifelong contacts. If you look at what our medical profession struggles with right now, you see it every day in emails, magazines, what have you. Physician burnout, dissatisfaction with work, dissatisfaction with EMR. I read all these things and realize that despite having such a busy lifestyle with clinic and research, I feel fulfilled because of my great relationships with my mentors.

To this day, I am still in contact with Bill Capello; he was in my clinic yesterday and brought in one of his friends to have me operate on them. Yesterday was an extremely satisfying day for me professionally. Despite all the same stressors of clinic, of all those things, it boils down to me as a first-year medical student and reaching out for an opportunity.

X: It sounds like you have enjoyed a great amount of success because of your mentors. What has been the biggest challenge for you in terms of balancing your time in the OR, in the clinic, and with research?

M: The biggest challenge that comes to mind is managing time with my family and my clinic duties. For someone who is driven like me, it can be difficult to balance clinical practice and family, but it takes communication and perseverance. I have 5 children and it is very hard to manage everything that comes with being a parent with my career. I am blessed to have a spouse who is supportive and who is an amazing mother.

As a physician, it is easy for people to say the spouse doesn't have to sacrifice and all that nonsense. In reality, the spouse sacrifices a lot. They have to be on board with what you do and if you pretend that it won't matter, or sacrifices won't happen, it is very hard to overcome. For example, next week I have to travel to a conference in Florida. I take my wife and my kids with me when I go to these. While it is hard in terms of preparation as I can't prepare my talks on the plane like I would do in the past because I help with the kids, it allows me to enjoy time with my family. To do so however, I have to be more efficient and put in the effort to prepare for a work trip with the family.

Communication is a huge part of this. It is crucial to work life balance, I can't emphasize it enough. There will be times when it is hard, but my wife and I communicate constantly. For example, at the end of the year, I have all the medical students who do research with me come over and have a pizza party and I schedule that based on availability of our family calendar and after I help her get the kids down to bed.

I guess this is just a long-winded answer to say that my wife is equally responsible and deserves equal credit for my success. She allows everything to happen.

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