



### **Sept-Oct Residency Times**

Faculty Spotlight: John Alexander [Alex] Cochrane, MD  
Assistant Clinical Professor, WSUSOM Dept. of Urology

#### **Residency Times: Where did you grow up, and when did you become interested in medicine?**

**John Alex Cochrane:** I was born and raised in the verdant, slow sloping hills of southern Indiana in a small, 2,500-person town called Bloomfield. It was a wonderful incubator and nest for me, but I always had bigger dreams, to which my mother can attest. I lived with her in the beginning, and then with my father on his large, family-owned farm from the time I turned 13 until I graduated from high school. The town is mostly made up of farmers and workers for the nearby Army-Navy artillery base. Bloomfield isn't very diverse, but it is warm and welcoming to everyone who is kind and hard-working. I was in every extracurricular I had time for (mostly in the performing arts, like show choir, band, and many musicals which I continued into my undergrad years), and I also held 2 part time jobs to fill my time away from academics.

I have always been interested in science, particularly when it comes to biology, ecology, and evolution. I also had great exposure to the hospital system when I was diagnosed with rheumatic fever in the second grade. I remember the good, and the bad, from those days in vivid detail since then. I was particularly fond of my pediatric cardiologist, who may have unknowingly set me on this path when I was under his excellent care. At Rose-Hulman Institute of Technology in Terre Haute, my undergraduate alma mater, more than 90% of the students are engineers. I entertained the idea of a career in engineering for a while, but I decided I'd rather implement the devices and robots I was studying to design. I also didn't like the amount of paperwork engineers had to complete, which was an unfortunate blow when I entered medical school and residency and found the mountains of paperwork that I'd be responsible for!

#### **RT: How did you become interested in urology?**

**JAC:** In my first year of training at the Indiana University School of Medicine, I was fatefully paired with a community physician to shadow and for mentorship. I had the pleasure of shadowing Dr. Dean Lenz of IU Health Urology at the Bloomington campus. To be honest, I did not enter medical school thinking I would do anything surgical; popular television often doesn't leave the best taste in your mouth when it comes to surgeons. My thoughts were more along the lines of internal medicine/oncology. However, Dr. Lenz was kind, funny, and very confident in his craft. My very first OR case ever in medical school happened to be a robotic pheochromocytoma excision, which is certainly not for the faint of heart. Dr. Lenz was calm, educational, and even let me move the robotic arms while the robot was docked. I was inspired by this relatively random physician letting me get a taste for surgery during a fairly stressful case. At IU we were allowed to choose our mentor the second year, and I stuck with him. I got hands-on training with flexible cystoscopy (by practicing on carved out pumpkins!), and real

patient interaction. I was baited by the opportunity to observe the instant results that surgery can offer, hooked by the vast array of techniques and devices used, and then totally reeled in when I discovered the harmony of medicine and surgery that could lead to some form of mastery over the genitourinary system.

**RT: You're the newest member of the WSUSOM Dept. of Urology faculty, having just graduated from the program in May - congratulations! What are your current interests in academic medicine?**

**JAC:** Why thank you! It is an honor to stay around and see my junior residents off into their careers. I spent many an hour trying to mold them into being both thoughtful and skilled urology residents. It will be a great joy to see them complete their training and go off to do what we are trained to do in the WSUSOM Dept. of Urology: to deliver compassionate, evidence-based urologic care to a community that they love. That is exactly what I get to do!

My current interests lie mostly in the training aspect of urology residents. I've learned via both the easy and hard ways what it takes to thrive in this environment. If you'll forgive the cliché, we all start as diamonds in the rough. Through hard work, perseverance, and appropriate oversight, we are able to polish away the stone, sand, and dust to reveal the gem underneath. My current practice goals are mostly in the field of women's health and pelvic floor medicine and reconstruction. I am currently working alongside some great urologists and device/pharmacy representatives in the Pontiac and Rochester Hills area. My plan is to better streamline female pelvic health in the urology and primary care offices for more effective and efficient care.

**RT: Do you have a teaching philosophy or teaching mentors?**

**JAC:** Oh boy, do I have a pedagogical approach! I had the very great fortune of being taught by Dr. Ella Ingram at Rose-Hulman. Her focus was ecology, evolution, and the science of teaching. Never have I felt smarter, and at the same time more oblivious, than in her classes. She championed the flipped classroom - lecture before class, quiz at the beginning of class, in-depth conversation with supporting articles and arguing to follow. Her exams were always open-ended. While the hard science was never up for debate, if you could show your line of thinking in a clear and scientific way, then there were always some points to make up. Dr. Ingram also incorporated many techniques to deliver knowledge in her classes, from basic Power Points and posters to songs and art. One of my class final projects was an amateur video in the style of Isabella Rossellini's short-film series *Green Porno* about the sexual selection and reproductive habits of the great North American Porcupine. Spoiler, the prickly parts of the whole endeavor are not what you'd expect! I have tried to model the same teaching approach: lecture and reading before clinic or the case, followed by impromptu quizzing, and then abstracting the same concepts we use in urology from the revolutionary to the mundane.

**RT: Do you have any advice for aspiring physician-scientists or academic researchers?**

**JAC:** The best advice I can give at my stage is to physician-educators. I always have to remember that just a few short months ago, the shoe was on the other foot. Take time to learn for yourself your craft, because it is a practice after all. Teach what you feel comfortable teaching, and learn together with the residents that which you yourself are still not concrete on. Be open to them educating you as well. While you may be working in relative solitude with a few residents, they are working with many attendings who can all offer pointers (some to incorporate and others to avoid).

As for aspiring physician-scientists and academic researchers, keep on going! The road from bench to clinic is a long and arduous one. Keeping it as simple as one can is key. Residents and physicians are expected to know many details for any given issue, and the simpler it is the easier it is to lock away.

**RT: Would you recommend specific practices to residents to help maintain well-being?**

**JAC:** Resident wellness, in my opinion, is a unique and personal journey for all. Some residents are happy to be in the OR as long as possible, while others would much rather enjoy their free time and being with loved ones. While I don't condone long hours, I can certainly reap the benefits now in independence. Find what works for you, and don't be afraid to seek solace in other residents and even therapists if you're open to it. We are all working so very hard to keep this community safe and healthy, but it shouldn't come at the expense of your own well-being. Find your resources and utilize them as much as you need.

I found focused breathing and short meditative mantras to be of great use in acute situations. Patient is crashing and you don't know what to do? Pause and take 3-5 slow, focused deep breaths to re-center. Getting yelled at by an overworked nurse or tech? Repeat a mantra to keep you in-line. My personal mantra is *water off a duck's back* when I feel that others are overreaching. Keep in mind that you don't know their situation, they obviously don't understand yours, but at the center of it all you should be staying true to yourself and providing excellent patient care. That's all we really need to do to succeed.

**RT: What was the last great nonmedical book you read? Is there one that all residents should read?**

**JAC:** Oh, I love this question, it really starts to break through ego and reveal some of the core belief systems and personalities. In my not-so-large amount of spare time, I usually prefer to play video games. An interactive story where you shape the outcome? Sounds awesome to me. And if my attendings ask, I show them articles supporting gaming and hand eye coordination, which can be particularly handy in robotic surgery.

I did read a book recently, however! It is one of my favorites of all time: Physician-writer Michael Crichton's *Jurassic Park*. It is a wonderful mix of science, horror, and the age-old tale of the hubris of man. Each outcome of the fictional scientist's work in the book is supported by unnervingly sound scientific thoughts and data. Plus, the child in me is still fascinated by the creatures that ruled the earth for hundreds of millions of years so, so long ago.

As for what book I recommend? That is an easy one. *Difficult Conversations: How to Discuss What Matters Most* by Stone, Patton, and Heen. It is a how-to self-help book on negotiating conflict in emotionally loaded conversations. Great for the floor, unit, OR, and when talking to patients.

**RT: Anything else you may wish to add?**

**JAC:** Only my gratitude for my attendings teaching me all they know during residency, and accepting me into their practice and the residency program. They say that we are all just standing on the shoulders of giants, but it is an honor to stand beside them now. COVID-19 was tough for all, including those offering elective surgery, but they definitely got us through it all with an ease that experience can afford. I hope to one day inspire the current and future residents to consider academic urology and even joining the program. That way, I hope to prove to myself that I can be as inspiring and life-changing as my educators have been for me.

Thank you so much for taking the time to get to know me and letting me share some of my story!