

IQBAL ^{MD, FRCSC} IKE K. AHMED

Dr. Ahmed is well known as an innovator in anterior segment surgery, particularly in the area of microinvasive glaucoma surgery (MIGS)—a term that he coined—and he has contributed to the development of numerous devices for cataract and glaucoma surgery. In this interview, Dr. Ahmed talks about the advantages of looking from the outside in, finding the courage to challenge the system, and the importance of developing a mindset that is open to innovation.

INTERVIEWED BY LAURA STRAUB, *CRST/CRST EUROPE* EDITOR-IN-CHIEF



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BMC: Who or what drew you to ophthalmology?

IQBAL IKE K. AHMED, MD, FRCSC: I always wanted to be a surgeon, even before medical school. My career was heading toward trauma or orthopedic surgery, but I happened to apply for a scholarship with Steve A. Arshinoff, MD, FRCSC, and he was my first glimpse into ophthalmology. He convinced me to look at ophthalmology seriously, instead of going into orthopedic surgery. Once I did that, I fell in love with the technical side of ophthalmology—the fine art of microsurgery. I thought, “Wow, this is like taking surgery to the next level.”

BMC: Early in your career, who else were your big influences?

AHMED: My dad is a physician, so I grew up in a household where medicine was part of the family. I think that drew me toward the field. I would also say, being a brown immigrant kid, medicine was one of those noble

professions that parents always tried to push their kids toward. That’s probably why you see a lot of brown doctors these days. That may also have been part of my upbringing, valuing medicine in general.

BMC: What kind of physician is your father?

AHMED: He’s a psychiatrist, which is a very different area of medicine. But I think he was also always interested in ophthalmology. I remember him talking about it when I was a kid.

BMC: What do you consider to be your greatest professional achievement so far?

AHMED: I would hope that my greatest achievement has been giving my colleagues the courage to challenge the system. In medicine in general, and certainly in ophthalmology, there’s a feeling of reserve when it comes to challenging norms. When I do things that challenge the norms, hopefully in a

respectful way, and people see what I do, I hope it gives them the impetus to say, “Hey, I can be who I am and be successful at it, and I don’t have to feel as though I must be a conformer.”

There are obviously many individual accomplishments that people talk to me about. Two things, one would be glaucoma surgery and MIGS. The second would be tackling the most complicated surgeries I could find. But on a more global level, it would be the mindset I mentioned.

I see myself as advocating for change, for letting voices be heard, no matter who they are, and for having an open dialogue. That’s what I try to teach residents and medical students. I feel that our education system is too tilted toward rote memory and following standard mindless protocols. It doesn’t encourage people to think critically and analytically. Analytical and lateral thinking are lacking because people have not been brought up to think that way. They’re brought up to answer a quiz or an

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exam, list a bunch of differentials, and list steps 1 to 10 on how to do something. That’s a good way to start, but it doesn’t stop there.

I’m the opposite. I don’t follow instruction very well, I don’t follow rules, and I challenge every step. I think analytically and laterally around different issues, and part of the reason is because of the way I was brought up. So I feel a responsibility to push for that kind of mentality, to allow us to innovate and change the way we do things to help our patients. That’s what drives me and what is important to me.

BMC: What other changes are needed in ophthalmology right now?

AHMED: Medicine is changing rapidly. Of course we need to think about how to treat disease better, but also, how do we adapt to our changing environment? We need to be mobile, literally and figuratively, and active beyond the traditional hallways of medicine.

Information technology is one of those areas. It’s imperative that we challenge the way we typically look at things, and information technology, artificial intelligence, and deep learning will be part of that. Those technologies are already changing the way that we practice medicine. That will be an important task for the next generation, to keep up with how our system is changing due to the collision of technology with everything we do in life, including medicine.

And that also applies to the way that the practice of medicine and the scope of medicine are changing. The

roles of government and regulatory systems are evolving. It is important for us to be able to look at challenges as opportunities and try to find solutions that lead to the betterment of humankind. That means adapting to different cultural environments, whether it’s the way the government runs, the way we teach and learn, the way we do research, or, again, the way technology is merging with health care.

So that’s more of a systems-based challenge, looking at problems on a macro level, rather than microscopically. We have unmet needs in glaucoma: medication problems, compliance, adherence, disease progression, surgical risk. How do we move forward? One way is by embracing what I call *interventional glaucoma*, looking at things actively rather than passively. That is an ongoing cultural change in glaucoma, brought on by the availability of multiple devices for MIGS.

I may have assisted in moving that change forward by helping to develop MIGS, but on a higher level it involves changing the cultural mindset of how we look at glaucoma. And that’s challenging because many people have a traditional way of looking at it, a very medication-heavy view. And yet we’re changing that. Technology has helped us to do that, but changing that cultural mindset requires what we were talking about earlier—bucking the system, challenging the way we look at things, and thinking about things from a more systems-based approach, rather than microscopically. Having the technology gives us the ability to

do those things that change the paradigms. I love changing paradigms. We’re in the midst of a shift to interventional glaucoma, and I hope it will help change the course of the disease. I hope it will help take glaucoma from being one of the leading causes of blindness and drop it down on the list.

BMC: What keeps you motivated professionally?

AHMED: For me, it’s internal motivators. To inspire and be inspired. It’s the drive to discover and to always want more. Asking the right questions, trying to answer them, and learning from our failures. I always want to answer questions and, furthermore, to be the first one to do it. Again, critically looking at ourselves and taking it apart. I use the term *blowing things up*. I like blowing things up.

The process of discovery is amazing. We talked about deep learning, machine learning, and, on a human level, deep learning is accessing our deep thoughts—our deep level of thinking, in our minds, our bodies, and our souls to address some of our clinical challenges.

BMC: If you had to nominate one creative mind in ophthalmology, whom would it be and why?

AHMED: There are too many to pick from! I truly think every single mind in ophthalmology has the potential to be creative, and all it takes is for us to have the courage and conviction to tap into that. So I nominate all my peers, colleagues, and friends in ophthalmology. ■

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