AN INTERVIEW WITH…

Gregory Makris, MD, PhD, FRCR

Dr. Makris discusses his role with the CIRSE European Trainee Forum, his hopes for the future of interventional radiology, and more.

Can you tell us about your background and how you came to your current position?

I grew up in Athens, Greece, where I first started studying medicine. After graduating and fulfilling my obligations to the Greek army, I moved to London, England, to obtain a PhD in vascular surgery at Imperial College London. During those years, I had the opportunity to experience the magic of interventional radiology (IR). After I completed my PhD, I decided to make the move and join the academic clinical fellowship program in radiology at Cambridge University Hospitals, where I completed my diagnostic radiology training. This was followed by a vascular and IR fellowship at Oxford University Hospitals. During the last 5 years, I had the pleasure to chair the Cardiovascular and Interventional Radiological Society of Europe (CIRSE) European Trainee Forum (ETF) and the Trainee Committee of the British Society of Interventional Radiology (BSIR) (2018–2019). It was a very busy time, but it allowed me to meet some amazing people from all over Europe with a common passion for IR and do some amazing work together.

When not working, you will probably find me at the gym or a basketball court. I try to find some time for reading nonmedical books, and my latest favorite was *Outliers: The Story of Success* by Malcolm Gladwell. Since last summer, I am also a certified Professional Association of Diving Instructors open water diver, and I am always trying to combine holidays with scuba diving when possible!

What is the CIRSE ETF, and when was it established?

The ETF is a subcommittee of CIRSE that aims to get IR trainees involved in the society and contribute to the development of our specialty. We came up with the concept in late 2014 and officially launched the subcommittee in early 2016, which had five members back then. The subcommittee currently has 26 members who represent 25 European countries and are assigned to five working groups focused on IR education, public engagement, medical student engagement, IR mobility, and global outreach. We are grateful for the incredible support from all past CIRSE presidents and Mr. Daniel Waigl, Executive Director of CIRSE.

As Chairman of the CIRSE ETF, what do you make of the fact that more than 300 medical students representing many different countries around the world attended the meeting this year, with the majority of them being women?

We are well aware that medical students don't get enough exposure to IR, and this is why CIRSE has been heavily investing in the "Be inspIRed" student program (www.cirse.org/students/student-programme-be-inspired). The number of students attending the CIRSE annual meeting has increased every year since 2010 when the student program was launched, and more than 1,900 students have taken advantage of this initiative. The student program enables students to learn about IR and its applications by attending recommended scientific sessions, taking part in hands-on device training and simulation sessions, or joining learning centers, workshops, and ETF mentoring sessions (Figure 1). The feedback we have received so far has been great, and we see many students returning to CIRSE; we hope to see many of them joining the ETF subcommittee in a few years.

We believe it is very important to continue this program to allow medical students to participate in one of the largest IR conferences in the world and be inspired by the energy and enthusiasm of the IR specialists who honor us with their participation and expertise every year. CIRSE has also invested in producing a completely revised European IR student curriculum that is available online and free to download (www.cirse.org/students/ir-curriculum-for-students). It would be great to see more national societies participating in similar activities

(Continued on page 111)

(Continued from page 114)
and actively engaging with their local medical schools and student radiology societies.

We were also very happy to see increased participation by women. We believe that IR is a great specialty for women, and CIRSE has been doing a lot of work to eliminate stereotypes and support women who want to join our specialty. However, I believe that national societies also have a big role to play by encouraging the participation of women in their committees and offering support through women-led networking and mentoring. For example, the BSIR has recently introduced women and diversity committees to address this need. You can follow @WIIGS2 on Twitter for more information.

Figure 1. The student cohort attending the "Be inspIRed" program during CIRSE 2019. ©CIRSE.

Where do you see the ETF heading in the future, and what are your goals as Chairman?

The first 3 years of the ETF were all about spreading the word and increasing our visibility as a group. We started with one ETF session and five speakers during CIRSE 2016, and at the most recent CIRSE meeting held in Barcelona, Spain, we had nine ETF sessions and activities including more than 40 speakers and panel members. Our main focus for these sessions has been on issues related to building an IR career without focusing on any single scientific aspect of IR. We plan to continue bringing high-quality content and speakers for our younger attendees, focusing on their professional development and helping them think outside the box and become more innovative and well-adapted to the challenges presented by the competition. For example, we are proud of our sessions on IR mobility, women in IR, becoming an entrepreneur, and how IR can change medicine in low-income countries. We like to use the ETF sessions as a window for our junior interventional radiologists to explore outside the scientific core of IR.

After establishing a solid presence at CIRSE's annual conference, gaining momentum through recognition of the group within the society, and with representation in more than 24 European countries, we are now working toward expanding our project portfolio in collaboration with other national and international societies. As a trainee-focused group, we are particularly interested in better understanding how IR training works in various countries and what we can do to improve and homogenize training standards. This is why we have compiled the first European report on IR training pathways, and we are working to produce the first truly global IR trainee satisfaction survey that will hopefully allow national and international societies to gain a better understanding of the challenges and opportunities of IR training.

I would like to see ETF become even bigger and busier and see more national societies follow this example and encourage and support the development of trainee subcommittees. We have seen that early participation of trainees in such committees allows them to feel more involved with their specialty, brings new ideas to the table, and, of course, helps them develop as leaders and team players who will be ready when the time comes to lead at the highest level. I also would like to see us continue our work to increase the awareness of IR among patients and medical students and bring IR to low- and middle-income countries around the globe.

As demonstrated at CIRSE, the career paths within IR are quite diverse, including interventional oncology, women's health/urology, neurology, trauma, and vascular disease. What advice do you have for trainees in terms of the degree of subspecialization within the field and how to identify interests that will have longevity throughout their careers?

We are very lucky in IR to cover so many different clinical areas and specialties that you will never get bored! Despite the temptation to follow the trend of subspecialization, I think it is important for an interventional radiologist to be able to maintain his or her general IR skills while developing an area of expertise. This approach adds value for money to our specialty and usually makes people more employable and more attractive to a hiring organization. This is a trend we see in the United Kingdom (UK). Most importantly, it is about becoming more clinical as a specialty and making

sure we get every opportunity to be involved in patient care. This can be through participation in clinics or ward rounds, but it has to become part of our training to give us the confidence to do so.

Figure 2. Kampala Women's Hospital and local radiology team. First published in Interventional News (January 9, 2019), reprinted with permission.

What are your thoughts about IR becoming an independent specialty?

I strongly believe that IR should be an independent specialty, and there is a lot of discussion about this in the UK. I think IR has reached the stage in evolution as a subspecialty where our interests can no longer be served under the umbrella of "general radiology." This starts with the selection process, as Prof. Andy Adam infamously said in his Society of Interventional Radiology keynote lecture a few years ago, "I think we are fishing from the wrong pond." The specialty needs more surgical-minded people who will be able to join the specialty from day 1 knowing that this is what they will train for.

At the moment, even in the UK where we have a very well-structured IR training program, you still have to wait 3 to 4 years before you can start your training in IR procedures, with no guarantees that you will receive this training until year 4. As a result, I think that many candidates who would consider IR prefer to go over to surgery. Also, when it comes to training, IR cannot really design a modern curriculum focused on the clinical skills that are so important for the modern interventional radiologist. Having our own specialty will allow us to become more clinically oriented and more involved with patient care, which is important to ensure that our patients receive the best possible care pre- and postoperatively.

What is the biggest misconception among trainees about the field of IR that might steer them away from the specialty?

The most common concern and misconception among trainees and junior doctors is the threat of competitive specialties and how they may affect the future of IR. I think that competition is necessary to improve and avoid becoming complacent. I also believe that competition is not a unique "problem" to IR, because in most other specialties, there is some overlap with other specialties, creating competition among them. The important issue is how we react to this competition as a specialty and ensure that we remain relevant and spearhead innovation and progress in our field.

To achieve this, we need to recruit candidates with the right qualities and train them properly and systematically, exposing them to all aspects of IR. Actively participating in our national and international societies to protect our interests and those of our patients is also essential to ensuring the healthy growth of our specialty. Finally, as a specialty, we need to invest more in the academic side of training to produce interventional radiologists who understand research but also those who can produce high-quality evidence for current or future IR treatments.

Which technologies have been the most significant in advancing IR, both in terms of the ability to expand into new fields and in the quality of patient care?

In our field, there are many new smart devices and techniques; however, I still believe that the main thing we need to do to further improve the quality of patient care is to reinvent ourselves not only as great operators/problem solvers but also as great physicians who understand the underlying pathology and can manage the patient as a whole. Technology alone hardly ever drastically alters patient care!

What were the biggest takeaways from your trip to Uganda to work on establishing the country's first IR unit? What are the next steps to continue developing the specialty there, and could similar steps be translated to other underserved populations around the globe?

Uganda has approximately 50 radiologists, which is roughly one radiologist for every 1 million people. This scarcity of specialists is a common problem for most African countries. For context, according to the Royal College of Radiology, the average ratio in the UK is

48 radiologists per 1 million people, a number considered small in comparison to European Union standards. At the same time, Uganda has one of the worst records of both postpartum hemorrhage and road traffic–related morbidity in Africa. These are areas where good clinical imaging and IR services can make the difference between life and death. In November 2018, a scoping visit in Kampala, Uganda, took place to perform a structured evaluation of the Mulago National Referral Hospital (Figure 2). The assessment was based on the IR readiness assessment tool for global health and aimed to assess the available resources and infrastructure as well as interview stakeholders regarding their views on the issue. I was pleasantly surprised to see that it did not take much convincing for the local stakeholder to understand the potential of establishing an IR service in the country. Since then, we have been in the process of designing an IR training curriculum that will be taught in Kampala by visiting IRs from all over the world. Similar initiatives are taking place in other African countries, such as Tanzania, with great results, and we hope to continue spreading the word so that more countries can be involved.

For many years, IR was considered a "luxury" specialty that only high-income countries could afford; however, evidence suggests that this is no longer the case. The continuous progress of technology and a competitive free market drives prices down. At the same time, an increasing number of sub-Saharan countries are entering an era of economic stability and growth, and with a young population, they are looking for ways to improve the state of their health care systems. We believe that as an IR community, we have a responsibility to support this effort by offering training and advice on how to set up these complex services.

If you could go back in time to experience another era of history, when would you choose?

I would like to travel back to the 1960s in the United States. The '60s were a decade of revolution and change in politics, music, and society around the world. It started in the United States and the UK and spread to continental Europe and other parts of the globe, and I would have loved to be able to experience the world evolving in such a dramatic fashion. It was also a decade of great technologic advancement, including landing the first man on the moon and, of course, the birth of IR in the lab of Charles Dotter. I would love to have met him and picked his brain about a thing or two. ■

Acknowledgment: Dr. Makris would like to thank his team in the vascular and IR department of Oxford University Hospitals for all their support and training, as well as the CIRSE organization for believing in and supporting the ETF.

Gregory Makris, MD, PhD, FRCR
Senior Vascular and Interventional Radiology Fellow
Oxford University Hospitals
Chairman, CIRSE European Trainee Forum
Cardiovascular and Interventional Radiological Society of Europe
Chairman, BSIR Trainee Committee
British Society of Interventional Radiology
London, United Kingdom
g.makris09@doctors.org.uk; @gregmakris23
Disclosures: None.