

Women in interventional radiology

Insights into the subspecialty



Interventional radiologists needed

Interventional radiology (IR) is an incredibly rewarding and exciting career. It is a rapidly expanding subspecialty, with the development of innovative technologies and devices constantly improving treatments for patients. IR plays a pivotal role in the management of diseases, providing lifesaving solutions for often critical conditions. Most IR procedures are performed as day cases under local anaesthetic or light sedation. IR enables the treatment of patients who are otherwise unfit for surgery or general anaesthetic, therefore reducing their hospital stay, overall morbidity and mortality.

Women are under-represented in IR. According to the 2019 *Clinical radiology UK workforce census report*, only one in ten consultant IRs are women (11%), compared with four in ten consultant diagnostic radiologists (41%).¹ A recent survey suggests that the exposure to radiation, particularly during reproductive years, and the perceived lack of work-life balance has made the subspecialty less attractive to prospective female trainees.²

The Royal College of Radiologists (RCR) and the British Society of Interventional Radiology (BSIR) want to see more women taking up careers in IR. This list of frequently asked questions aims to dispel the 'myths' and misconceptions about IR that have developed over the years.

Interventional radiology training pathway



1. The Royal College of Radiologists. *Clinical radiology UK workforce census 2019 report*. London: The Royal College of Radiologists, 2020. 2. Wah TM, Belli AM. The interventional radiology (IR) gender gap: A prospective online survey by the Cardiovascular and Interventional Radiological Society of Europe (CIRSE). *Cardiovasc Intervent Radiol* 2018; **41**(8): 1121–1253.

Frequently asked questions



What advice would you give to female medical students or junior doctors wishing to pursue IR?



Dr Fatemeh Sakhinia,
Consultant Vascular IR

Don't let anyone tell you it's not a woman's job! I had some discouragement from non-IR consultants, due to the demands of the role and the perceived risk of radiation – both of which could not be further from the truth. There are many women who have successful careers in IR and great personal lives with families. As a woman you can have an excellent, calming and strategic influence in the IR environment and allow your ability to speak for itself.



Dr Victoria Burrows,
IR registrar

Gain as much exposure to radiology and IR whenever possible: follow and talk to patients regarding their experience through their journey of an IR procedure; attend the BSIR annual scientific meeting to meet the experts in the field; and talk to local IR consultants/trainees regarding IR projects.



Dr Lynn Ling,
Consultant IR

As a female IR, most of my challenges are similar to those my male colleagues would face daily and they don't focus on my gender. Having listened to the apprehension of many young women considering IR, I would like to encourage and empower everyone with my own experience, which has largely been exciting and positive. I remain confident that more women will see the excitement I see in IR and will take up this subspecialty.

Is part time or flexible training possible in IR?



**Dr Naomi Hersey,
Consultant IR**

Flexible training is possible in IR. I was pregnant twice as an IR fellow. During this time, I was able to work in the angiography suite up until 38 weeks in to each pregnancy. I was offered a thermoluminescence dosimeter (TLD) to monitor my radiation dose more carefully. Even as primary operator, my dose was negligible. There is no reason to avoid starting a family because you have chosen to specialise in IR. My trainers were 100% supportive throughout and saw this as a complete non-issue.

Returning to work with small children is challenging but this is not unique to IR. I think it is important to remember that a lot of your male colleagues will have young children as well – they are equally torn between balancing work and family life. I was able to pursue an overseas fellowship with two young children in tow (one aged eight months when I started). This was an amazing opportunity not just for me, but for the whole family. It takes some organising, but is certainly possible.

Once training is complete, you become a lot more in control of your job plan and can mould your working week to some extent. I find it a lot easier to plan my home life with a more predictable working pattern. When I have afternoon intervention lists,

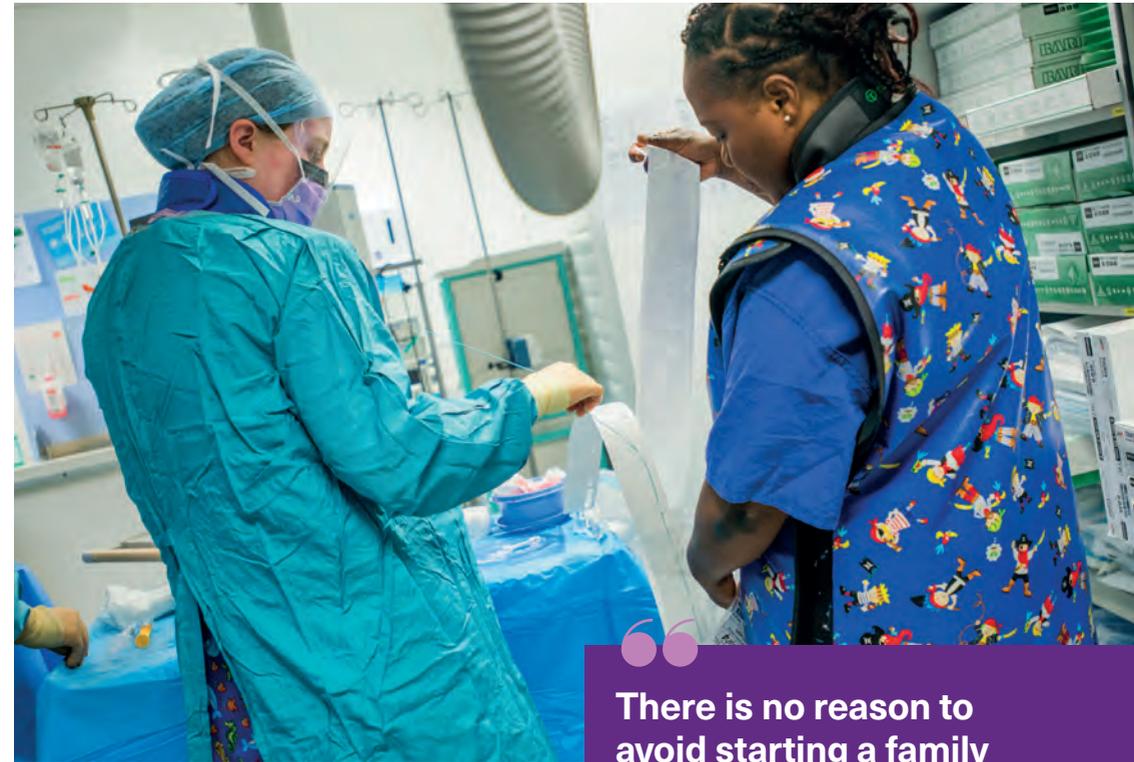
I assume I will be late. When I am on call, I assume I will be at work. I work full-time over four days. I cannot think of another job that would allow me to do that and be as challenging and rewarding.



**Dr Victoria Burrows,
IR registrar**

I trained full time to mid-ST3, then returned at 60% part-time after my first maternity leave. Following that, I took a year out of programme to travel to Canada while my husband had a fellowship and I did a part-time IR observership. I returned full time until my second maternity leave and am now working at 80%.

It's important to discuss both family and training needs openly with the training programme director and rota organisers to maximise exposure to training opportunities and also enjoy family life. Generally, I would say working part time is actually easier in IR than in ward-based specialities as the posts are mainly supernumerary.



There is no reason to avoid starting a family because you have chosen to specialise in IR. My trainers were 100% supportive throughout and saw this as a complete non-issue.

What is the radiation risk for women in IR, particularly during reproductive years and pregnancy?



Dr Andy Rogers,
Medical Physicist

IR staff very rarely get more than 1 millisievert (mSv) in any calendar year on their personal dosimeter worn under the apron, and the dose to the fetus would be approximately 50% of that value due to absorption in overlying tissue. Often doses are very much smaller than this. The dose 'constraint' (a bit like a dose limit) to the fetus during the declared term of pregnancy is 1 mSv, which equates to a dose of 2 mSv on the under apron dosimeter. Current practice would indicate that real levels are well below this constraint.

However, just because risks are small does not mean we ignore strict radiation controls. These should include a bespoke radiation risk assessment performed after a woman declares pregnancy. This should take into account real, local doses and workload to come up with the estimated fetal dose. Pregnant IR workers will often wear an additional electronic dosimeter that enables a real-time readout, thus providing immediate and reassuring data.

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Can women in IR strike a work-life balance, especially with a young family?



Dr Lakshmi Ratnam,
Consultant IR

Striking a work-life balance in IR is important, as it is with any career. I firmly believe that if you are happy and fulfilled by your job, your family life is happier as a result. I think it is essential that your partner, children and family understand how important your work is, both for its own sake and in terms of what it means to you. Working flexibly can help – a late reporting session weekly enables me to take the children to school and pick them up at least once a week.



Dr Lynn Ling,
Consultant IR

My mentors, now colleagues and friends, have been both men and women who have supported me in working flexibly, which I truly believe has been key to a fulfilling career. Remember that flexibility works both ways and that at least some of your colleagues' circumstances will be similar to yours. Be willing to both ask for and receive help.



Dr Victoria Burrows,
IR registrar

Working part time allows for balance and flexibility depending on your needs. It's challenging at times, but I suspect no more so than in other specialties. Being organised is necessary to minimise stress. A good, robust childcare set-up is essential to allow you to focus at work, which again is no different to other specialties. The benefit of IR training over other specialties is that you are often working in a supernumerary position; if you have to leave because your child is unwell, it causes less disruption to services.

How have you overcome the challenges of a male-dominated working environment?



**Professor Tze Min Wah,
Consultant IR**

We need female IRs who have already succeeded to step forward as role models to mentor and coach the next generation of IRs.

Male IRs can also play their part. They can proactively and consistently promote their female colleagues and challenge any negative behaviour they come across. Male IRs can be strong role models for juniors and should strive to set an example. I am much indebted to my mentors, all male, who have coached me throughout my career and have inspired and nurtured me against a rather challenging backdrop.



**Dr Victoria Burrows,
IR registrar**

Knowing your specialty and being confident in your abilities is key. Personally I haven't had many challenges. The majority of the consultants I've worked with have been very supportive. Most of them have families of their own and appreciate the associated stresses and strains. In the early days of my radiology career, before starting IR, a couple of consultants questioned whether it would be the right subspecialty for me as I was married to a surgeon and wanted a family. I think this just made me more determined.



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Is IR a rewarding career?



Dr Fatemeh Sakhinia,
Consultant Vascular IR

The most exciting part of my day is when I am in the angiography suite, dealing with a variety of cases, from the most simple to the highly complex, quickly and efficiently. From inserting lines in patients for lifesaving chemotherapy, to repairing aortic aneurysms through pinhole skin incisions, the challenges never seem to stop. The ability to think on your feet and make instant changes to treatment that have such a dramatic effect on patients on a day-to-day basis is one of the most unique aspects of this subspecialty. In IR you sometimes see the treatment work in front of your eyes!

I feel lucky to have had the opportunity to train in this fascinating and ever expanding subspecialty and have never regretted my decision. It gives me immense pleasure to be able to inspire and encourage the younger generation to embark on a similarly rewarding journey.



Dr Victoria Burrows,
IR registrar

100% yes. I wouldn't want to do anything else and I'm so glad I've found a subspecialty that allows me to use my brain and my hands. I really enjoy the interaction with patients, the mixture of desk work and more physical work, the variety of procedures and the interactions with teams across the hospital.



**The IR team at Queen Elizabeth Hospital,
University Hospitals Birmingham
NHS Foundation Trust**

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Further information

For more information about training in interventional radiology, please go to www.rcr.ac.uk

Links to key pages are below:

Guidance on training in interventional radiology

www.rcr.ac.uk/file/guidance-training-interventional-radiology

Interventional radiology subspecialty training curriculum

www.rcr.ac.uk/interventional-radiology-curriculum

What is it really like to be a radiologist?

www.rcr.ac.uk/radiology-careers/what-it-is-like

Interventional radiology – promotional video by the British Society of Interventional Radiology (BSIR)

<https://youtu.be/RNtaWox8qng>

If the video does not play, please try opening the link in a different browser.

Images courtesy of the British Society of Interventional Radiology.



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