

Inside the Search for Answers: Professor David Sanders on Celiac Disease, Mentorship, and the Next Generation of Researchers

For nearly three decades, Professor David Sanders has been at the forefront of research into celiac disease. Based at Sheffield Teaching Hospitals NHS Foundation Trust, he has helped reshape how the condition is understood, diagnosed, and studied worldwide. As the ISSCD prepares to launch its next call for applications to the Mentee in Mentorship (M-in-M) programme, Professor Sanders spoke with the ISSCD about his journey into the field, the evolution of celiac disease research, and why mentoring young clinicians has become one of the most rewarding parts of his career.

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ISSCD: Professor Sanders, could you start by telling us about your journey into celiac disease research?

Prof Sanders: I’ve been involved in celiac disease for almost 30 years. My interest began when I received a research grant from a charity that was then called Action Medical Research, now known as Action Research. At the time, their remit covered a broad range of medical research.

My project explored whether patients presenting with metabolic bone problems such as osteopenia or osteoporosis might actually have undiagnosed celiac disease. But the real spark came from a colleague and friend, Professor Marios Hadjivassiliou, who was conducting groundbreaking neurological research related to celiac disease. We were chatting in the doctors’ mess one day, and he inspired me to pursue the field.

That research became my postgraduate MD thesis. During the work, I conducted a study involving around 1,200 individuals and found that the prevalence of celiac disease in the UK was about 1% or roughly one in 100 adults.

That might sound ordinary now, but at the time it was a huge shift. In fact, a 1950 paper in the British Medical Journal suggested the disease affected only about one in 8,000 people and primarily children. Suddenly we had evidence that it was far more common and affecting adults too.

Around the same time, I also published a paper in *The Lancet* showing that some patients diagnosed with irritable bowel syndrome (IBS) actually had underlying celiac disease. That work ultimately influenced National Institute of Health and Care Excellence (NICE) Guidelines and changed how clinicians approach testing.

So, there was this cluster of studies early in my career that really helped reshape understanding of the condition.

From rare disease to global challenge

ISSCD: How has understanding of celiac disease evolved since those early studies?

Prof Sanders: When Coeliac UK first recognised the one-in-100 prevalence, they estimated that for every diagnosed case there were perhaps seven or eight people who had the disease but hadn't been recognised.

Over the last three decades, much of my work has focused on improving diagnosis and raising awareness of how diverse the disease can be. The symptoms are incredibly varied, which is why it was historically missed so often.

We've made enormous progress. Today the estimate is that for every diagnosed case there may be around two undiagnosed cases. That's a huge improvement but it still means more than half of people with the condition remain undiagnosed. So, we still have work to do.

At Sheffield we eventually became the NHS England National Centre for Refractory Celiac Disease, meaning we see many of the most complex cases in the UK. Alongside that, we've developed advanced endoscopy work, and our unit is now one of only two in the UK designated as a World Endoscopy Organisation Centre of Excellence.

We've also built what is probably the largest database of celiac patients in the world, with over 3,000 individuals. Researchers from across the globe come to work with us and access the data.

Why mentorship matters in medicine

ISSCD: The ISSCD is launched its latest call for applications to the Mentee in Mentorship programme on 23 March. From your experience, what difference do opportunities like this make for early-career clinicians?

Prof Sanders: I think it's hugely inspiring for young clinicians to spend time in other units and see how things are done elsewhere. That's especially true for people coming from abroad.

When trainees come to Sheffield, they gain access to a large patient database and a highly specialised centre. Most of them end up publishing research during their time with us. And having that association with a national centre is valuable for their careers.

Interestingly, many of the mentees currently coming through the programme are from Italy. Some start with the M-in-M programme and later return as fellows. For example, one former mentee is now working here as a fellow and may even go on to become a consultant in the future.

It becomes a kind of professional springboard.

Beyond the formal programme, we've been running an international fellowship programme since around the turn of the century so for more than 25 years. Because of that, when new trainees arrive, they enter a community of eight or nine other fellows from around the world. It's a lively, supportive environment, which makes a big difference.

No one wants to feel like they're the only junior person surrounded by senior consultants. Being part of a peer group helps enormously.

Tackling Medical Inertia

ISSCD: Would you say programmes like M-in-M are essential for developing the next generation of researchers?

Prof Sanders: Absolutely essential.

Historically, there's been a degree of medical inertia around celiac disease. Some clinicians see it as straightforward, test the patient, confirm the diagnosis, advise a gluten-free diet, and that's the end of it.

But the reality is that it's a complex, multi-system autoimmune condition. Part of the challenge is that doctors often prefer diseases where they can prescribe a drug. There isn't currently a pharmaceutical treatment for celiac disease management so we rely on a gluten free diet, so some clinicians underestimate its complexity.

When trainees come to a specialised unit like ours, their perception changes. They see the neurological issues, the bone disease, the autoimmune complications. They realise it's a far more interesting and challenging field than they expected.

For me, the real measure of success for programmes like M-in-M is simple: do participants stay in the field? If they continue researching and working in celiac disease long term, then the programme has done its job.

There's also another important benefit, collaboration. If researchers from multiple countries know and trust each other, it becomes much easier to run large studies. One centre might only have seven patients with a rare condition, but across several centres you might suddenly have 100.

The programme doesn't just train people, it also builds international research networks.

Why Mentoring the Next Generation Still Inspires Me

ISSCD: Finally, on a personal level, what has mentoring meant to you?

Prof Sanders: I'm in my late fifties now, so naturally I'm thinking about the next generation taking things forward.

One thing people don't always tell you when you become senior is that you can become slightly detached from what's happening at the coalface. Younger colleagues bring new perspectives, new ideas, and sometimes they challenge your assumptions and that's incredibly valuable.

Having young researchers in the department is genuinely joyous.

Even better when they come from different countries. It brings energy and colour to the environment. For example, there's always the smell of fresh coffee in the department now and that's because we have Italian fellows working here!

Mentees form friendships and professional networks that last for years, and people like me benefit from their enthusiasm and curiosity.

Professionally, it's one of the most rewarding parts of my job.

As the ISSCD's Mentee in Mentorship programme prepares to welcome its next cohort, Professor Sanders hopes the initiative will continue to inspire early-career clinicians and strengthen international collaboration in celiac disease research.

“The real success,” he says, “is when those young researchers go on to become the leaders of the field.”