Profile

Franz Fazekas: a specialist in not overspecialising

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> "Too much specialisation may have negative effects; we can lose the ability to see the entire patient and his or her problems."

It's the kind of thing we have all heard over the years, but when Franz Fazekas, Professor of Neurology at the Medical University of Graz, Austria, and President of the European Academy of Neurology (EAN) says it, you listen all the harder. You see, for Franz, not overspecialising goes beyond being better able to understand a patient's condition; it's a mantra he lives by. His research, for example, focuses not only on stroke and other cerebrovascular disease, but also on multiple sclerosis. "That's a little unusual nowadays with ever increasing specialisation", he tells me. No arguments there. But such scope marks the path of his personal life too. Who else goes ballroom dancing four nights a week, but spends weekends clambering around Alpine rock faces on fixed rope routes? He shows me a picture of himself ascending some steel pegs bashed into a canyon wall; it's a good place not to be overspecialised in waltzing.

A little digging, however, reveals some commonalities in all this embracing of things broader. True, Franz is perhaps most immediately identifiable for the scale that bears his surname—used to grade white matter hyperintensities in MRI scans of the brain, commonly in the context of ageing and cerebrovascular disease—yet he was also among the first to suggest MRI criteria for diagnosing multiple sclerosis. For sure these are rather different clinical areas, but with MRI underpinning discovery in both. Indeed, MRI has been at the core of most of his work, partly because he was so impressed by what he could learn from getting a non-invasive glimpse into a patient's brain, but partly "by sheer luck", he suggests. "We installed the first MRI machine in Graz in 1986, just when I was returning from two years of training (in cerebral blood flow and metabolism) at the University of Pennsylvania in Philadelphia", he recalls. "So my timing was fortunate—and back then there was a lot to be explored!" And explore he did, using MRI to make important contributions to our understanding of brain damage, microbleeds, the association between white matter hyperintensities and cognition, and the diagnosis, treatment, and care of patients with multiple sclerosis and stroke. As for the commonalities in climbing and dancing, "both are good for spatial orientation and balance", he instructs me (and there was I, thinking that both were just fun!).

In keeping with his awareness of the dangers of over-specialising, Franz hopes to use his position as President of the EAN to promote the importance of general neurology. "Keeping in touch with general neurology helps you tie it all together", he insists. "It's quite conceivable that patients with stroke, a brain tumour, or multiple sclerosis have several other neurological problems, like cognitive disorders or seizures. We need to bring the different specialities within neurology together—so at the congress level at least we must highlight the advantages of knowing about neurological disorders in a composite manner."

Similarly, while he understands the importance of research into pharmacological agents, Franz underscores that he would like to see greater recognition of patient observation as a driver of clinical research. "Being a clinician, most questions for my research came from observations made in patients", he tells me. "I am convinced that this is a very efficient way to foster the improvement of patient care, and it is important that this kind of research be adequately funded. My interest in white matter hyperintensities, for example, originated by observing them in many patients without knowing what they meant. You start to observe them, and then want to know what they mean, and whether having noted them can help in patient management. While this is in part feasible without large funding, most treatment-related questions are impossible without it—and we have to argue for it. We have to convince decision makers that it will pay off if they invest money in such activities."

But you don't have to look too hard before you find that, in one particular area—living in Graz—Franz appears to have become quite the specialist. Born in Leoben he studied medicine in Graz just 70 km away, and apart from those 2 years in the USA, he never left. From medical student to Professor of Neurology at his alma mater; why so strong a connection? Was he failing to take his own advice? "Austrians, at least those of my generation, like to stay where they were born" he tells me. I am perplexed, but only until I am completely bewildered. "Also, when I had to develop my scientific career, it was not yet so easy to move outside Austria, and changing universities within Austria would have been very unusual and not much appreciated." Something I better understand then comes: "Most importantly, however, when scrutinising positions elsewhere I realised that combining neurological patient care with researching MRI would have been nigh possible in any other German-speaking country." Perhaps, then, he was just born in the right place?

As he packs his dancing shoes into a mountaineer's rucksack, I need not wonder what Franz would advise a young neurologist thinking of specialising as a right frontal lobe, workplace-trauma ultrasound diagnostician. It's probably good advice whether you were born in the right place or not.

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