



Lifeline



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What has been the greatest achievement of your career?

Leading a large multicentre trial to determine the effectiveness of early intensive treatment compared with escalation approaches for patients with multiple sclerosis.

Who inspires you?

Patients with multiple sclerosis who overcome obstacles on a daily basis, who inspire us to improve treatment and management of the condition.

What do you think is the most neglected field of science or medicine at the moment?

We see plenty of patients referred to multiple sclerosis clinics with disabling symptoms but normal neurological exam and testing, but we have very little to offer them clinically, and there is no research in this field.

If you had not entered your current profession, what would you have liked to do?

I would have loved to study architecture, it is a perfect combination of science and art.

Who were your most influential teachers, and why?

Victor M Rivera taught me to love neurology and, importantly, was an example of generosity, kindness, and grace. Jeffrey A Cohen taught me the science of multiple sclerosis and has shaped my academic career. He is a role model in every way and there are few days I do not ask him for advice.

What is your idea of a perfect day?

Getting up very early, running, making myself an espresso, getting some work done, and then spending time with the people I love.

If you wrote an autobiography, what would be the title?

He refused to write his autobiography.

What was your first experiment as a child?

Testing loading force on my hot wheels.

What one discovery or invention would most improve your life?

Tele-transporter.

What is the best piece of advice you have received?

Study something you are passionate about and, although you will have failures, use these to improve your research.

Focal Point

Dax versus Broca

In 1865, Paul Broca, one of the founders of neuropsychology, published his landmark paper on the left cerebral dominance for speech. Broca thought that “we speak with the left hemisphere”, referring to Leborgne (known as Tan-Tan), an aphasic patient whose brain presented a lesion in the third frontal convolution.¹ A similar hypothesis on cerebral dominance had been proposed 30 years earlier by another French physician, Marc Dax (1770–1837). In 1836, Dax presented his memoir *Lesions of the left half of the brain coincident with the forgetting of the signs of thought*, based on 40 patients with aphasia from his own practice, at the Congrès Méridional in Montpellier (duly registered).² He had examined the first patient in 1800; this former captain of cavalry had got a sabre wound at the left parietal bone during a battle; he had selectively lost ‘word memory’ and couldn’t talk, but had kept ‘thought memory’; the absence of tongue palsy was noted.

Unfortunately, Marc Dax died in 1837, before he had the chance to publish the series. Some copies of Dax’s manuscript appear to have been distributed to colleagues at this time.³ It is quite likely that Broca was aware of this paper before 1865. In 1863, Dax’s manuscript about speech disorders and left hemisphere lesions was presented by his son Gustave Dax at a session of the *Académie Impériale de Médecine* in which Broca was also participating.⁴ A controversy even emerged a few years later between Dax’s son and Broca.⁵ At these times, the scientific elite in Paris was not at all inclined to listen to outsiders, even if they were French too. Parisians were more likely to promote a physician like Broca, with an international reputation.

Dax identified speech cerebral lateralisation about 30 years before Broca. However, most neurologists would have in mind the famous story of Tan-Tan, and that seems fine to everyone—but maybe not to Dax’s descendants!

Emmanuel Drouin, Yann Péréon

- 1 Broca P. Sur le siège de la faculté du langage articulé. *Bulletins de la Société d'Anthropologie* 1865; 6: 377–93.
- 2 Dax M. Lésions de la moitié gauche de l'encéphale coïncidant avec l'oubli des signes de la pensée: communication orale à Montpellier en 1836. *Bull Hebd Med Chir* 1865; 2: 259–62 [2nd series].
- 3 Grasset J. Traité des maladies du système nerveux. 2nd edition. Paris, 1881: 154.
- 4 Program of written communications. *Bulletin de l'Académie Impériale de Médecine* 1863: 496–97.
- 5 Roe D, Finger S. Gustave Dax and his fight for recognition: an overlooked chapter in the early history of cerebral dominance. *J Hist Neurosci* 1996; 5: 228–40.