



Lifeline



Gabriel Bsteh is a neurologist and clinical neuroscientist in the Department of Neurology at the Medical University of Vienna (Vienna, Austria). He earned his MD and PhD at the Medical University of Innsbruck (Innsbruck, Austria). His research is focused on personalised medicine in multiple sclerosis, particularly on biomarkers such as optical coherence tomography and olfactory function.

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

I have always been enamoured with all kinds of sports and I am an enthusiastic amateur in show jumping. In another world, I would be part-time sports journalist and professional show jumper.

Who was your most influential teacher, and why?

Professor Wolfgang Löscher (Department of Neurology, Medical University of Innsbruck) was my mentor, introducing me to the majestic precision of clinical neurology and the joy of clinical neuroscience; he is still a great friend. Professor Thomas Berger (Department of Neurology, Medical University of Vienna) took me under his wing and opened the door to multiple sclerosis, a research area where I found a true academic home.

What is the most memorable comment from a referee?

Multiple sclerosis is diagnosed by McDonald criteria, not McDonald's criteria, even though I would be interested in how Ronald McDonald would diagnose multiple sclerosis.

What is your favourite book or film, and why?

A Few Good Men. This film provides a fitting quote for every occasion and can give solace on days when nothing has gone right.

How do you relax?

Sitting on the back of one of my horses, I enter a world where nothing else matters.

What is your idea of a perfect day?

A horse-ride through the hills with my girlfriend in the morning, cheering on my local football team in the afternoon, and enjoying a fine glass of single malt whisky in the evening.

What is your greatest regret?

Not being in the stands when Chelsea FC defeated Bayern Munich in the Champions League Final in 2012.

What was your first experiment as a child?

Trying to cut my own hair. It did not work out as I thought it would.

What one discovery or invention would most improve your life?

Time travel, to make the day have more than 24 h.

What is the best piece of advice you have received?

Scared to death is also dead.

See Online for appendix

For more on ACORD see <https://www.ctu.mrc.ac.uk/studies/all-studies/a/acord>

Focal Point

Trials for neurodegenerative diseases: time to innovate

The remarkable progress in our understanding of the mechanisms underlying neurodegenerative diseases heralds an era when neurologists would be at the vanguard of regenerative medicine, instead of chroniclers of decline. To capitalise on these advances that are identifying ever more therapeutic candidates, whether repurposed or entirely new, there is an urgent need for refined methods to test these putative medicines in clinical trials. Our field has the opportunity to learn from innovations in trial design, particularly those pioneered in oncology.

Complex trial designs that include a multi-arm, multi-stage model offer considerable advantages over the standard two-arm trial, with substantial efficiency gains in time, cost, and resources. A multi-arm, multi-stage model can incorporate simultaneous testing of multiple interventional arms with a single standard-of-care arm, allow for prespecified adaptation at interim points of analyses, and include new interventional arms. For instance, the landmark STAMPEDE platform trial for prostate cancer¹ has evaluated eight treatments in 16 years. Its findings have led to four changes in standard-of-care, in a much shorter timeframe than that required for a conventional approach of a sequential two-arm trial.

Akin to the creative Cajal Embroidery Project (appendix)—a collaborative, inclusive effort² comprising neuroscientists and non-neuroscientists—we have created a consortium named ACORD (A Collaboration Of groups developing, Running and reporting platform trials in neurodegenerative Diseases), hosted by the Medical Research Council Clinical Trials Unit at University College London (London, UK), to improve trial design for neurodegenerative conditions, including platform trials for motor neuron disease (MND-SMART, NCT04302870) and multiple sclerosis (OCTOPUS, EUDRACT 2021-003034-37). This consortium and other initiatives are key to realising the promise of regenerative neurology sooner, rather than later.

Arpan R Mehta, Jeremy Chataway, Suvankar Pal, Mahesh K B Parmar, Siddharthan Chandran

- 1 Parmar MK, Sydes MR, Cafferty FH, et al. Testing many treatments within a single protocol over 10 years at MRC Clinical Trials Unit at UCL: Multi-arm, multi-stage platform, umbrella and basket protocols. *Clin Trials* 2017; **14**: 451–61.
- 2 Mehta AR, Abbott CM, Chandran S, Haley JE. The Cajal Embroidery Project: celebrating neuroscience. *Lancet Neurol* 2020; **19**: 979.