

There was a consensual acclaim from delegates regarding the conversations that took place about race and gender, in keeping with our commitments for inclusivity.^{4,5} A striking observation from our conference on Jan 30, 2021, was that delegates came to the conference believing that women and individuals from ethnic minorities were not well-represented in neurosurgery events; however, they ended the conference with the opposite impression. The Likert scale mean for “I think women are well represented in Neurosurgery events” improved from 2.54 of 5.00 before the conference to 4.35 of 5.00 after the conference (mean difference 1.81 [95% CI 1.62–2.00]; $p < 0.0001$), with a similar increase for ethnic minority representation (2.86 of 5.00 vs 4.02 of 5.00; 1.15 [0.96–1.35]; $p < 0.0001$). Providing a platform to excellent female neuroscientists and neurosurgeons and experts from ethnic minorities has been the direct result of the feedback that we previously received about the need for conferences to have role models with similar backgrounds to those of our delegates.³

NANSIG is committed to encouraging hard-working and intelligent candidates—regardless of any demographic status—to choose a career in neurology and neurosurgery. However, we recognise our own biases as an organisational team and our need to keep thinking critically to ensure that our actions are matching our aims. We call on all of our current and possible future members to continue providing feedback so that all of our future events—such as our annual conference—can meet the needs of the community.

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Computational neuroscience with global accessibility

An international group of experts in computational neuroscience have developed a new online school: the Neuromatch Academy.¹ Started in response to the COVID-19 pandemic, the goal of the Academy is to provide an inclusive education in computational neuroscience. True to its mission, the first course was run in parallel over three major time zones in July, 2020. More than 1700 students from 64 countries took part, and another 5000 students followed the course within a self-paced option.¹ Specific efforts to include individuals across geopolitical borders included a last-minute licence from the US Office of Foreign Assets Control to allow the inclusion of Iranian residents.¹ Students came from a range of educational backgrounds, as the only prerequisites were introductory

neuroscience, basic mathematics, and some familiarity with programming. With academic and industry support, the course was delivered at a fraction of the cost of conventional teaching platforms: modest registration fees adjusted to reflect median-wage differences for each country were requested, and waivable fees were also offered. All content also remains freely available online.

The 3-week course was taught with interactive, code-based tutorials, interspersed with short explanatory and accessible videos. Students were organised into groups on the basis of time-zone, language preference, and interest for supervised projects. Daily project work led to hands-on experience with real data or theoretical projects, with many groups solving complex problems from scratch. Despite the intensity of the programme, a healthy work ethos was also encouraged, with virtual social hours and yoga classes. The quality of the content and teaching was exemplary and the palpable sense of community was remarkable given its online format. More than 87% of students completed the course (compared with the 5–10% commonly achieved for other open online courses), and 94% of students said that they would recommend the experience to a fellow student.

Neuromatch conferences developed by the same group can also innovate the organisation of online events. For example, social encounters at traditional conferences, which allow networking and enable new collaborations, can be simulated (and optimised) with algorithmic matching of attendees to other like-minded scientists for 15 min chats.² With such advances, online conferences can have many of the benefits of legacy conferences, with less of the disadvantages, such as massive carbon footprints, high costs, or wasted time.³

The Neuromatch Academy offers brilliant training in computational neuroscience, underwritten by an inspiring and inclusive scientific ethos.

The opportunities presented by the online medium offer a range of tools by which to transform education, collaboration, and communication. There are exciting decades ahead if such methods and principles can be collectively used to understand the brain and its disorders.

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