Neurology's commitment to address gender bias in neurology journals

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Systemic, institutional, and organizational barriers and unconscious biases have led to the underrepresentation of women in the medical profession, particularly in academic medicine. Women comprise 40% of faculty in US departments of neurology and only 31% of the faculty at the top ranked programs.[1, 2] The proportion of women who are full professors at all US programs is 21%, and it is 14% at the top ranked ones.[1, 2] In the European Union, 24% of university professors are women.[3] In 2018, only 14 women chaired one of the 129 neurology departments in the US.[4] Women are underrepresented in the most visible academic leadership positions, including editorial boards of medical journals. In a cross-sectional study published in this issue of *Neurology*®, Mariotto and colleagues found that, in 247 neurology journals, only 12% of editors-in-chief, 23% of associate editors, and 21% of editorial board members were women.[5]

The underrepresentation of women in medical journals has consequences for the scientific field, journals, women researchers, and future generations of clinicians and scientists.[6, 7] Excluding women from the most visible roles in medical journals deprives the field of their expertise and perspective and, moreover, may perpetuate gender biases that affect the process and outcome of peer-review. Membership of Editorial boards is a prestigious achievement in academic medicine and an opportunity to network. Excluding women limits their opportunities for career advancement and may adversely affect their future research funding and even financial future.[7] In addition, it decreases the visibility of women role models for future generations, signaling that the research community does not sufficiently value contributions from women.

How is *Neurology* performing in terms of gender equity? Our report card is mixed. By some metrics, we are doing well. Women are well represented in the core editorial group: the team making decisions on manuscripts (Editor-in Chief and Deputy, Associate and Assistant Editors) includes six women and five men. But, in other aspects we are not doing so well, as only 21% of the members of the Editorial Board, 34% of collaborators listed in the masthead, and 29% of the Resident and Fellow Section editors (all of them neurology residents), are women. Among the 1,737 colleagues who reviewed papers submitted to *Neurology*® in the last six months, 30% were women, and the proportion of women who reviewed more than 5 and 10 papers was 28% and 37%, respectively.[8] Between January 14 and July 14, 2020, we published 72 invited editorials (including seven related to the COVID-19 pandemic) written by 144 authors; of these, only 37% were women. Clearly, there are many opportunities for improvement.

To achieve gender parity among our editorial team, peer reviewers, and invited authors, we commit to taking the following six steps. First, as we make new appointments to the editorial board, we will increase the proportion of women from 27% to 35% this year and to 50% by 2023. Second, we will increase the number of women among editors in our masthead from 34% to 50% by next summer. Third, we will increase the proportion of women editors of the Resident & Fellow Section (RFS) from 27% to 50% this year so that the RFS board reflects the current state of neurology residency programs: in the US and in the UK, for example, 45% and 43% of residents, respectively, are women.[9, 10] Fourth, we will invite more women to reviewer papers, so that by the end of June 2021, the proportion of female peer reviewers will have

increased from 30% to 40% and to 50% by the summer of 2022. To achieve this objective, we will add qualified women to our reviewer database. Fifth, starting immediately, we will increase the proportion of women invited to write editorials and commentaries from 37% to 50%. Sixth, we will work with the editors of the three spoke journals in the *Neurology* family (*Neurology: Clinical Practice*; *Neurology: Neuroimmunology & Neuroinflammation; and Neurology: Genetics*) to achieve gender balance among editors and the editorial boards of these journals over the next 3 years. The proportion of women editors at these journals is 21% but, notably, it is 50% at *Neurology: Genetics*. Women make up 14% to 38% of the editorial boards of these journals.

In order to track our success toward these goals, we will implement editorial processes to collect self-reported gender expansive terminology and other diversity indicators from editorial board members, reviewers, and authors. To avoid potential biases in the manuscript review process, this information will not be available to editors handling the manuscripts or to the peer-reviewers.

While these interventions focus on the gender disparities, we will implement similar policies to ensure proportionate representation of people from racial and ethnic groups that are underrepresented in medicine, and in the future, we will make a separate announcement about these specific measures. We will also continue to strive for a strong international representation on our editorial board, which is currently 41% in *Neurology* and 14%, 55%, and 38% in *Neurology: Clinical Practice; Neurology: Neuroimmunology & Neuroinflammation; and Neurology: Genetics*, respectively.

With these deliberate interventions, we aim to address gender imbalances and handle potential biases in the editorial process. We will keep our readers informed about our progress and invite comments and ideas on how we can best achieve our goals.

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