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Geographical Participation in Prestigious Neuroscience Research

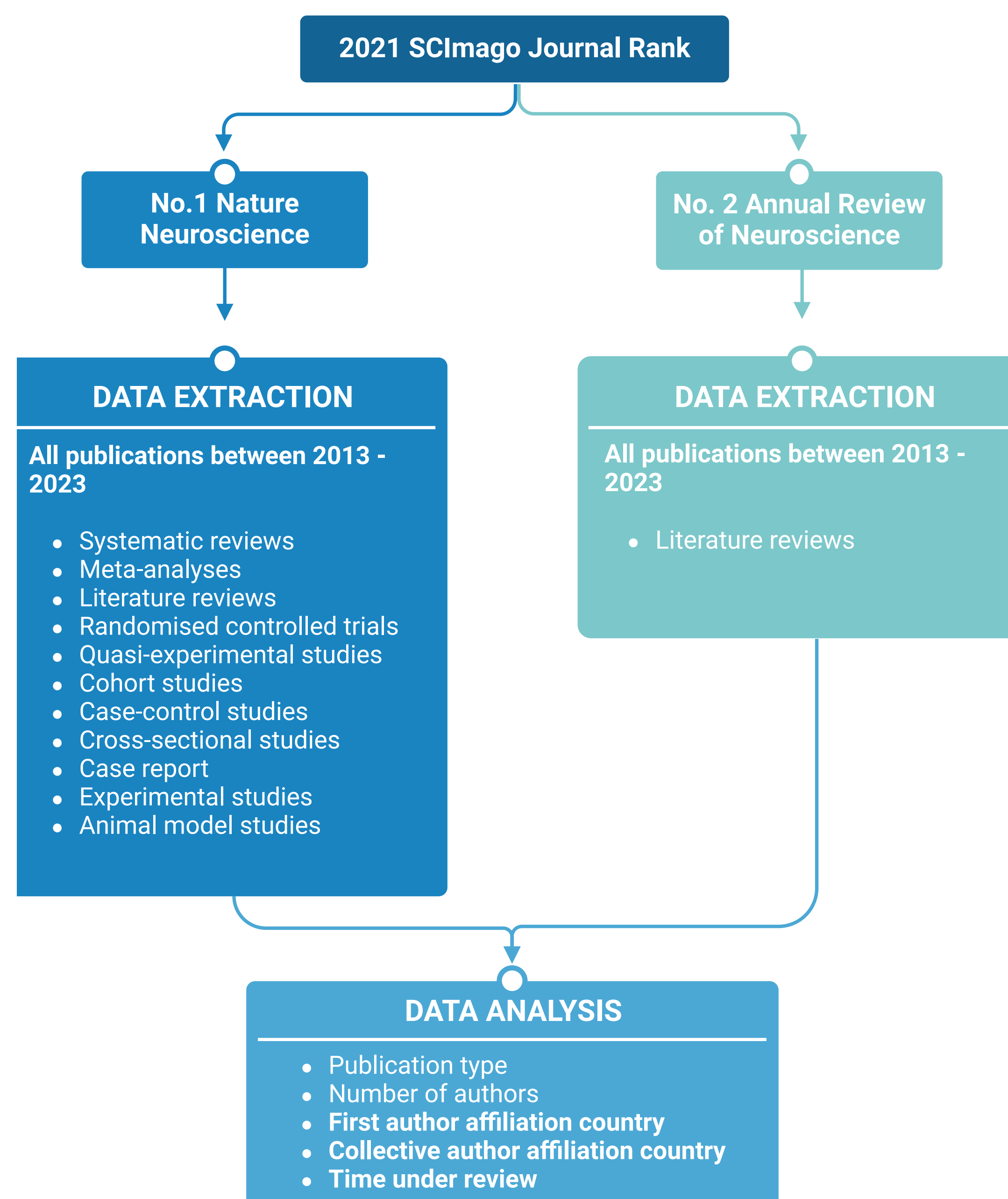
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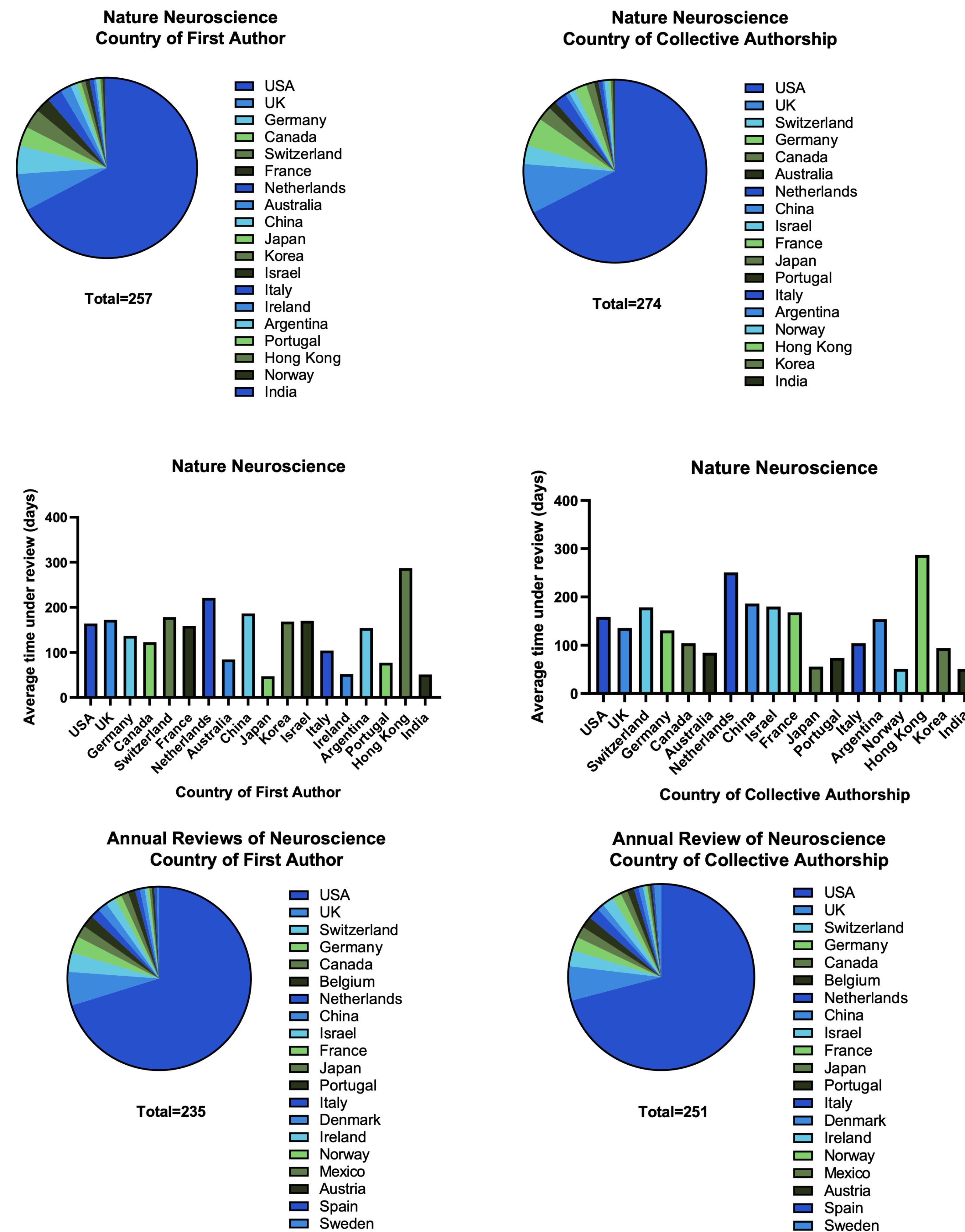
PROBLEM

- Research from the most prestigious neurology journals is almost exclusively published and edited by researchers from developed nations.¹
- This trend underscores historical biases within neurology, indicating a narrow range of epistemological perspectives shaping the field.
- Such biases pose a significant neuroethical concern, with the potential to exacerbate health inequalities.³
- Despite these concerns, the diversity of authors and editors in neuroscience fields beyond neurology remains largely unexplored.
- This study aims to address this gap by examining the proportion of scientific studies originating from developing nations in prominent neuroscience journals and exploring collaboration patterns with developed nations.

METHODS



RESULTS



RESULTS

- **USA dominates authorship** in both first and collective authorship, comprising 67.32%, 71.98%, 70.21%, and 75.74% in the studied journals.
- The UK, Switzerland, Germany, and Canada show considerable representation across all datasets.
- **Developing nations** like China, India, and Argentina appear infrequently (**less than 0.5%**).
- Variation review time across countries may be influenced by the higher numbers of authors from countries like the USA, UK, and Germany, which tend to exhibit relatively shorter average times to publication compared to others, while outliers such as Norway, Hong Kong, Korea, and India may contribute to fluctuations.

CONCLUSION

- Our preliminary findings highlight a stark reality: **dominant authorship by key countries like the USA and other developed nations in top neuroscience journals such as Nature Neuroscience and Annual Review of Neuroscience**, evident in both first authorship and collective authorship.
- These results underscore **critical disparities in international representation within the field**, with notable contributions from countries like the UK, Germany, and Canada also shaping the landscape.
- It highlights the severe **underrepresentation of developing countries**.
- The study emphasizes the **urgent need for bolstered collaboration and diversity initiatives within the neuroscientific community** to address these imbalances effectively.



FUTURE DIRECTIONS

- Assess the impact, reach and engagement of research from developing nations in comparison with developed countries.
 - Impact of authorship disparities on the dissemination of knowledge and the development of neuroethical guidelines.
- Continue to investigate emerging trends and patterns in authorship distribution and publication review processes to inform evidence-based interventions and policies.

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