







Special Issue Reprint

# Artificial Intelligence in Neurobiology and Neurologic Diseases

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Millions of people are affected by neurological disorders. Patients with such conditions have a variety of limitations that impact not just their lives but also the lives of their caregivers. Early detection of the condition can be improved with the help of Artificial Intelligence (AI)based techniques. Al is having a disruptive and transformative effect on clinical medicine. In the fields of neurology and neurobiology, there has been increasing interest regarding developing models and tools to address the complex patterns of connectivity in brain tissue. Cutting-edge Al-based approaches provide great opportunities for making new discoveries about the brain, improving current preventative and diagnostic models and helping to develop more effective assistive neurotechnologies. This reprint focuses on current Al-driven approaches to clinical neuroscience and an assessment of the associated key methodological and ethical challenges. The fundamentals of AI in neurobiology and neurology, its applications and use in various areas of neurobiology and neurology, as well as the subject of how Al-based algorithms can transform the management of neurological diseases will all be favored. Additionally, research implications, novel methods involving deep learning models, and Al-based neuroimaging using brain scans to detect neurological disease will be highlighted.





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