

EDITORIAL

The present and future


To cite this article: Dominique M Durand 2006 *J. Neural Eng.* **3** E01

View the [article online](#) for updates and enhancements.


You may also like


- [Retiring Honorary Editor](#)
- [Changes at Network: Computation in Neural Systems](#)
- [What is Neural Engineering?](#)
Dominique M Durand

Breath Biopsy Conference



5th & 6th November
Online





Join the conference to explore the **latest challenges** and advances in **breath research**, you could even **present your latest work!**

Register now for free!

Main talks

Early career sessions

Posters

EDITORIAL

The present and future

Editor-in-Chief

Dominique M Durand
Case Western Reserve
University, Cleveland, OH,
USA

Neural engineering has grown substantially in the last few years and it is time to review the progress of the first journal in this field. *Journal of Neural Engineering* (JNE) is a quarterly publication that started in 2004. The journal is now in its third volume and eleven issues, consisting of 114 articles in total, have been published since its launch. The editorial processing times have been kept to a minimum, the receipt to first decision time is 41 days, on average, and the time from receipt to publication has been maintained below three months. It is also worth noting that it is free to publish in *Journal of Neural Engineering*—there are no author fees—and once published the articles are free online for the first month. The journal has been listed in Pubmed® since 2005 and has been accepted by ISI® in 2006.

Who is reading *Journal of Neural Engineering*? The number of readers of JNE has increased significantly from 8050 full-text downloads in 2004 to 14 900 in 2005 and the first seven months of 2006 have already seen 12 800 downloads. The top users in 2005 were the Microsoft Corporation, Stanford University and the University of Michigan. The list of top ten users also includes non-US institutions: University of Toronto, University of Tokyo, Hong Kong Polytechnic, National Library of China and University College London, reflecting the international flavor of the journal.

What are the hot topics in neural engineering? Based on the number of downloads and citations for 2004–2005, the top three topics are:

- (1) Brain–computer interfaces
- (2) Visual prostheses
- (3) Neural modelling

Several other topics such as microelectrode arrays, neural signal processing, neural dynamics and neural circuit engineering are also in the top ten.

Where are *Journal of Neural Engineering* articles cited? JNE articles have reached a wide audience and have been cited in some of the best journals in physiology and neuroscience such as *Nature Neuroscience*, *Journal of Neuroscience*, *Trends in Neuroscience*, *Journal of Physiology*, *Proceedings of the National Academy of Science* as well as in engineering and physics journals such as *Annals of Biomedical Engineering*, *Physical Review Letters* and *IEEE Transactions on Biomedical Engineering*. However, the number of citations in clinical journals is limited.

What is special about *Journal of Neural Engineering*? JNE has published two special issues: (1) The Eye and the Chip (visual prostheses) (vol. 2, (1), 2005) and (2) Sensory Integration: Role of Internal Models (vol. 2, (3), 2005). These special issues have attracted a lot of attention based on the number of article downloads. JNE also publishes tutorials intended to provide background information on specific topics such as classification, sensory substitution and cortical neural prosthetics. A series of tutorials from the 3rd Neuro-IT and Neuroengineering Summer School has been published with the first appearing in vol. 2 (4), 2005.

What is in the future for *Journal of Neural Engineering*? The goal of any journal should be to provide a particular field with the best venue for scientists and engineers to make their work available and noticeable to the rest of the

community. In particular, attracting a strong readership base and high quality manuscripts should be the first priority. Providing accurate, reliable and speedy reviews should be the next. With an international board of experts in the field of neural engineering, a solid base of reviewers, readers and contributors, JNE is in a strong position to continue to serve the neural engineering community. However, this is still a small community and growth is essential for continued success in this area. There are two areas of expansion of great interest for the field of neural engineering currently poised between basic science on one hand and clinical implementation on the other: translational neuroscience and therapeutic neural engineering. We should strive to bridge the gap between basic neuroscience, clinical science and engineering by attracting contributions from neuroscientists and clinicians with an interest in neural engineering. I urge members of the neural engineering community to encourage their colleagues in these areas to consider JNE for publication of those manuscripts at the interface with neuroscience and engineering.

I would like to take this opportunity to acknowledge the work of the board members, the reviewers of the articles and the staff at the Institute of Physics Publishing for their contribution to the *Journal of Neural Engineering*.