

Neuroinformatics and the Society for Neuroscience

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The 2007 annual meeting of the Society for Neuroscience (SfN) in San Diego is destined to hold numerous exciting opportunities for the neuroinformatics aficionado. The meeting program, this year, includes a Presidential Special Lecture, by Dr. Mark Ellisman from the University of California, San Diego, entitled ‘Integrating Neuroscience Knowledge: Brain Research in the Digital Age’. This is the first meeting where neuroinformatics is so prominently featured in a presidential lecture.

Also on the program is a roundtable discussion, moderated by Drs. David Van Essen and Robert Williams, entitled ‘New Directions in Data Mining: Synergies Between Databases and Online Journal Publications’. This discussion continues an on-going effort of the SfN Neuroinformatics Committee in promoting new directions in data mining for the neurosciences through closer integration of information between neuroscientists, journal editors and publishers, and the funding agencies and scientific societies. The society has been instrumental in promoting this topic, through their participation in the SfN sponsored ‘PubMed Plus: New Directions in Publishing and Data Mining’ leadership conference held in June, 2007 in St. Louis. At this meeting, over 60 distinguished members of these various communities worked together to further advance topics such as: better capture of experimental data and metadata for support of data mining efforts; expanding the linkages between the existing public databases and the published literature; standardization and sustenance of databases and journal supplementary materials; and the

potential for establishment of a common manuscript and peer review system to facilitate the publication process.

In addition, the annual SfN meeting includes a Satellite Symposium, organized by Drs. Yuan Liu and Giorgio Ascoli, entitled ‘The Rhyme and the Reason of Data Sharing’ that will present a series of recent success stories on data sharing and reuse in neuroscience. See the commentary by Lui and Ascoli (2007) for further discussion of this event, and the related publications that can also be found in this issue.

The annual Neuroinformatics Social will continue to provide a venue and opportunity to promote neuroinformatics activities within the community. This year, chaired by Dr. Daniel Gardner, the panel will look at the history of a number of the current US National Institutes of Health (NIH) neuroinformatics initiatives to examine the community’s role in fostering ‘good ideas’ into ‘national resources’. Amongst the national neuroinformatics resources that will be represented in the presentations at the social are the Neuroinformatics Information Framework (NIF),¹ the Biomedical Informatics Research Network (BIRN),² and the Neuroimaging Informatics Tools and Resources Clearinghouse (NITRC).³

This later resource, NITRC, is the most recent of the NIH Blueprint for Neuroscience Research⁴ efforts to come online for the neuroscience community. Going public in October of 2007, its’ mission is to provide a user-friendly knowledge environment for the functional magnetic resonance imaging (fMRI) and associated structural analysis

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¹ <http://neurogateway.org>

² <http://www.nbirn.net/>

³ <http://nitrc.nih.gov>

⁴ <http://www.neuroscienceblueprint.nih.gov/>

community. The NITRC website, nitrc.nih.gov, will promote tools and resources, vocabularies, and databases for fMRI research, thereby extending the impact of previously funded, neuroimaging informatics contributions to a broader community.

Taken together, these neuroinformatics highlights at the annual meeting confirm that the topic lives on after the tenure of the Human Brain Project (De Schutter et al. 2006). The Society for Neuroscience should be credited for promoting much of this continued progress in this research area, through active participation at all levels of the organization: including presidents of the society, such as Drs. Huda Akil and David Van Essen, for active promotion of neuroinformatics as an important topic area for the society; the standing SfN Neuroinformatics Committee for providing a means for the society to gather information about informatics needs and to provide advice, management and recommendations about society actions that can facilitate this area; and the annual meeting Program Committee for including a number of opportunities throughout the annual meeting program for the presentation of, and dialog about, neuroinformatics topics to occur. In his Spring, 2007 ‘Message from the President’, Dr. David Van Essen concludes his encouragement for forward progress in neuroinformatics by offering:

Altogether, neuroinformatics offers excellent opportunities for neuroscientists to make better use of their data and better use of their time to ponder the fabulous mysteries of the brain and the insights to be gleaned from the staggering amounts of information emerging from neuroscience laboratories around the world (Van Essen 2007).

The neuroinformatics community is encouraged, through their continued development of novel technologies and applications, participation in scientific meetings and community building, and dissemination of their work in the literature through journals such as *Neuroinformatics*, to continue the progress towards the goal of developing the necessary informatics infrastructure for the ultimate understanding of “How the brain works?”.

References

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