

➤ **Wednesday November 5th, 13:30 a.m. – 16:30 p.m.**

The BrainInfo Portal and Atlas

(<http://braininfo.org>)

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Abstract:

The **BrainInfo Portal to Neuroanatomy on the Web** is designed for scientists engaged in brain research whose knowledge of brain anatomy is limited and who need rapid access to full and accurate information about brain structure. Unique features of BrainInfo compared to PubMed, Google and other search engines:

- The ability to respond to queries posed in any common terminology in English, Latin and five other languages
- A concept-based, NeuroNames, ontology allows semantic retrieval of pages from more than 40 websites without having to explore menus and site maps wondering whether the information one seeks is there and, if so, how to access it.
- Once a user has found the answer to one question, the system assists in proceeding directly to the next information of interest without the need to return to a home page.
- The Portal provides access to hundreds of illustrations, including anatomic diagrams, videos, MRIs, original photomicrographs and data mapped to standard brain atlases.

The **BrainInfo Atlas of the Macaque Brain** will be a fully segmented, annotated, high-resolution, 3-dimensional stereotaxic atlas of the rhesus macaque brain. The atlas will be accessed on the Web where it can be used to:

- Identify classical neuroanatomical structures and navigate easily to information, such as, what are their names, to what major subdivisions of the brain do they belong, what are their connections, what types of cell are found there, what genes are expressed there, etc.
- Determine what kinds of data have been mapped to a given area, such as internal architecture, MRI activation, results of electrical stimulation, chemical stimulation, unit recording, stains for transmitters and gene expression, etc.
- Mapping of the user's own data to the atlas for download to produce images for publication.
- Comparison of the distribution of one's own data with other kinds of data mapped by other investigators to the same region.