

BrainSlices – image sharing for neuroscience

Abstract

Images of brain tissue are common outcome of a great number of neuroscience experiments, however their impact on scientific development is limited since by themselves they are usually not published. Internet technology facilitates making the images available online, nonetheless raw image files of good quality are very large and therefore inconvenient to provide and analyze online directly. The challenge of image size has been solved with image pyramid technique, however, there is still no convenient way to share annotated images of neuroscientific specimens.

To fill that gap we developed BrainSlices software and used it to set up an online repository (<http://brainslices.org>) of annotated high quality images of brain tissue. The repository combines the power of the image pyramid technique with convenience of image upload. Every image can be easily annotated with exhaustive metadata and later found by searching for them. The user interface of the repository and the provided facilities were developed with typical neuroscience use in mind.