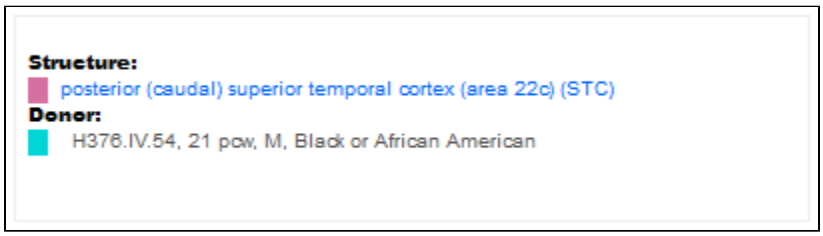
BrainSpan Atlas of the Developing Human Brain

DEVELOPING HUMAN REFERENCE ATLASES

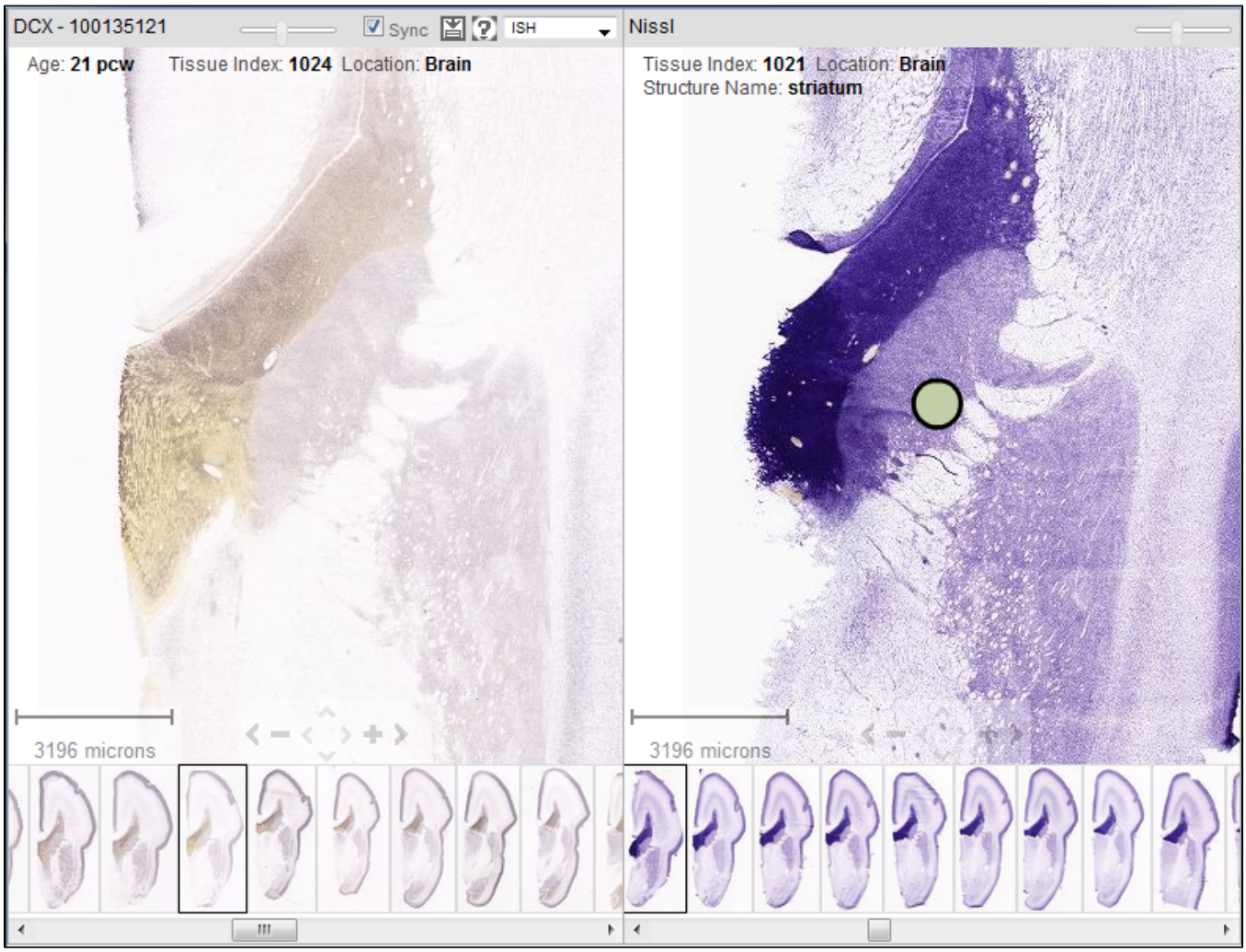
Reference Atlases

To complement the RNA-Seq and microarray gene expression data, reference atlases were created at three developmental stages; 15 pcw, 21 pcw and 34 years. The reference atlas are full-color, high-resolution, web-based digital brain atlases accompanied by a systematic, hierarchically organized taxonomy of developing brain structures.



From the heatmap view in the BrainSpan Atlas of the Developing Human Brain, you can see the Structure Ontology list from the selected data point in the heatmap. Clicking on the structure link will bring you to the appropriate developmental stage in the Reference Atlas (adult vs. prenatal).

From the *In Situ* Hybridization data in the BrainSpan Atlas of the Developing Human Brain, you can also arrive at the Human Brain Atlas Guide by clicking on a hotspot while viewing an experiment in the High Resolution Image Viewer.



Either of these actions will bring you to the Interactive Atlas Viewer with the structure of interest highlighted in purple.

Clicking on the annotation links from the "Reference Atlas" tab in the banner menu will also take you to the Interactive Atlas Viewers. Supporting data used to create these Atlases is also available for viewing or for download.

BrainSpan Reference Atlases

The BrainSpan Reference Atlases are full-color, high-resolution, Web-based digital brain atlases accompanied by a systematic, hierarchically organized taxonomy of developing human brain structures.

For more information, please refer to the documentation.

Atlas	Annotation	Supporting Data
15 pcw - Whole Brain	46 sections (0.5 - 1.0 mm intervals)	Nissl, AChE, ISH
21 pcw - Cerebrum	81 sections (0.5 - 1.2 mm intervals)	Nissl, AChE, ISH
21 pcw - Brainstem	41 sections (0.25 - 0.5 mm intervals)	Nissl, AChE, ISH
34 yrs - Whole Brain	Featuring two cortical views: Sulcal - Gyral Modified Brodmann 106 sections (0.4 - 3.4 mm intervals)	Nissl, Parvalbumin, 3T structural MRI (47MB), 7T structural MRI (5GB), 3T 1200 micron diffusion (880MB), 3T 900 micron diffusion (1GB)

Reference Atlas Viewing Tools

Interactive Atlas Viewer (IAV)

Zoom-And-Pan (ZAP) Image Viewer

Using The High Resolution Image Viewer