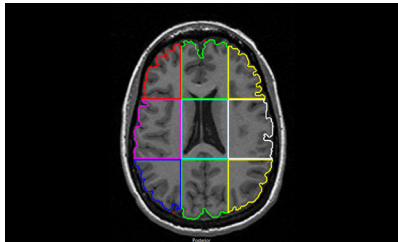
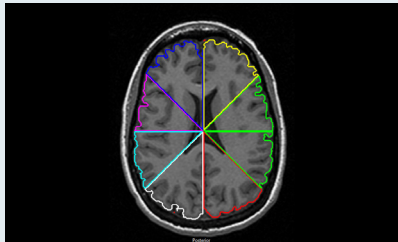
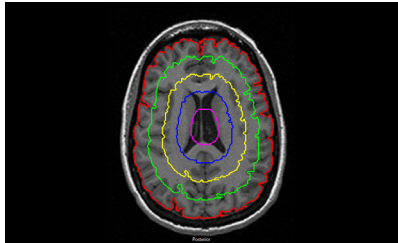


## Divide Regions

The Divide Regions tool allows users to divide objects into subdivisions based upon the division type selected. Users can choose between grid, radial or between borders.

**Table 7.2: Divide Regions**

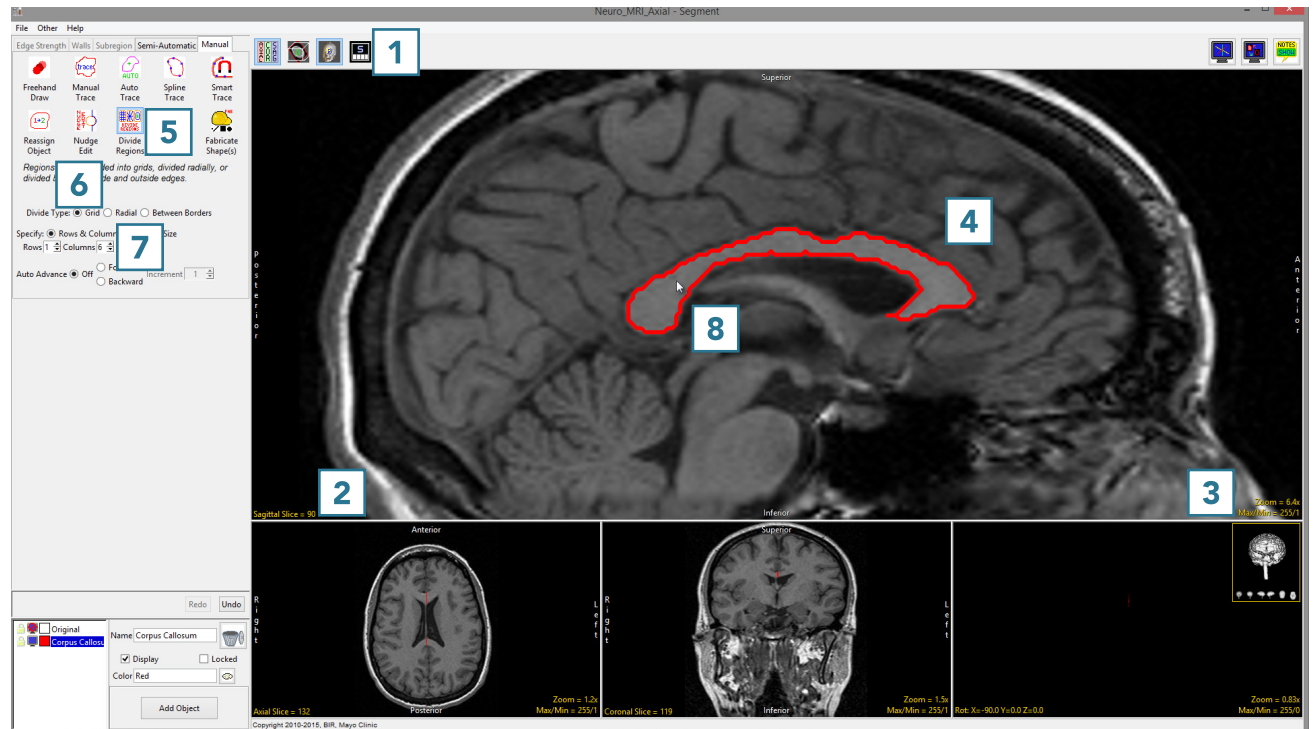
Divide Type	Function	Example
Grid	Divides selected object into rectangles.	
Radial	Radially divides selected object, splitting the object into pie wedges.	
Between Borders	Divides object into concentric shapes.	

## 28. Grid Division of an Object

Grid division can be useful for subdividing structures into various anatomical substructures. For example, division of the corpus callosum (CC) on the mid-sagittal slice into its substructures is an important research methodology for assessment of the CC. A method for CC subdivision proposed by Witelson *et al*, "[Hand and sex differences in the isthmus and genu of the human corpus callosum: a postmortem morphological study](#)," provides an easy methodology for CC subdivision using AnalyzePro and has subsequently become the de facto standard for the procedure.

- Select MRI\_3D\_Head and open Segment.
- Set the primary display to Sagittal, **1** move to the mid-sagittal slice **2** and Zoom to the CC. **3**
- Select Manual and use either Smart Trace or Auto Trace to define the CC on the mid-sagittal slice. **4**
- Select Divide Regions. **5** Set the Divide Type to Grid. **6**
- Set the Number of Rows to 1 and Columns to 6. **7**
- Click in the CC. **8**

 Download the MRI\_3D\_Head data set to follow along <http://analyzedirect.com/data/>



- The CC will be divided into 6 Subregions. **9**
- Note that the Rostrum **10** will need to be assigned to a separate object. This can be achieved using the 2D reassignment option in the Reassign Object tool. Objects can be given the correct structural names (Splenium, Isthmus, Posterior Midbody, Anterior Midbody, Rostral Body, Genu and Rostrum) using the Object Control window.
- Use File > Save Object Map to save your work.

