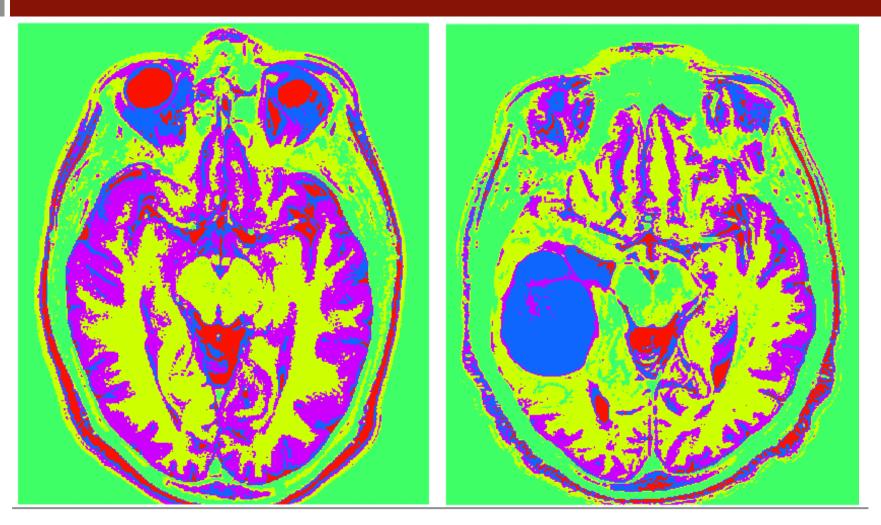
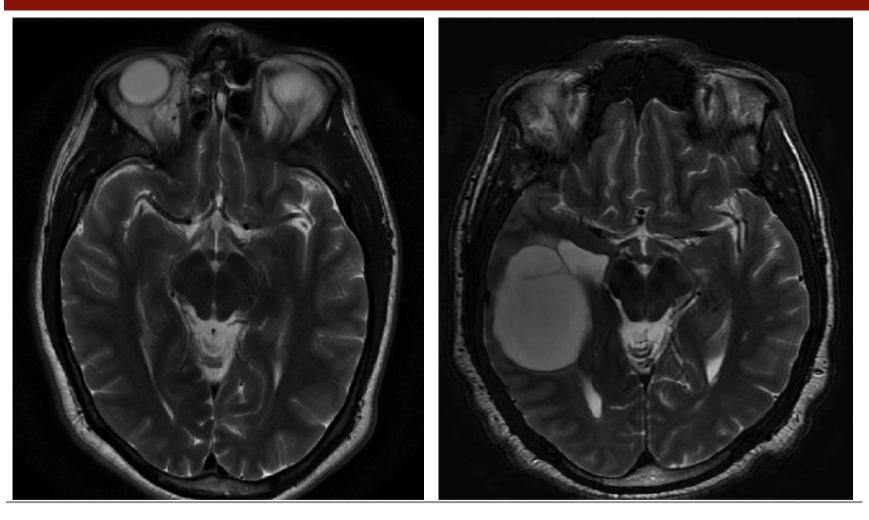
## Segmented MRI Images



15.071x – Predictive Diagnosis: Discovering Patterns for Disease Detection

## T2 Weighted MRI Images

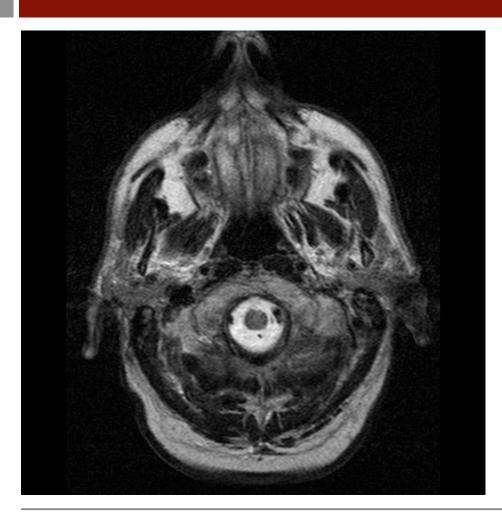


15.071x – Predictive Diagnosis: Discovering Patterns for Disease Detection

## First Taste of a Fascinating Field

- MRI image segmentation is subject of ongoing research
- k-means is a good starting point, but not enough
  - Advanced clustering techniques such as the modified fuzzy k-means (MFCM) clustering technique
  - Packages in R specialized for medical image analysis
    <a href="http://cran.r-project.org/web/views/MedicalImaging.html">http://cran.r-project.org/web/views/MedicalImaging.html</a>

## 3D Reconstruction



- 3D reconstruction from 2D cross sectional MRI images
- Important in the medical field for diagnosis, surgical planning and biological research