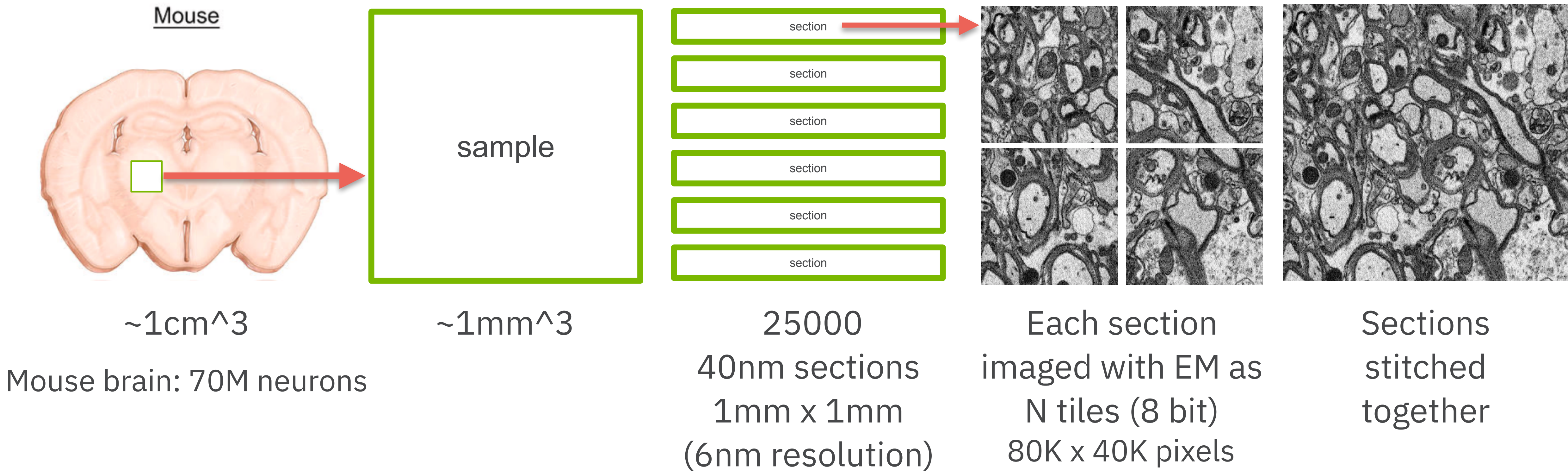


Connectomics Data-Driven Models

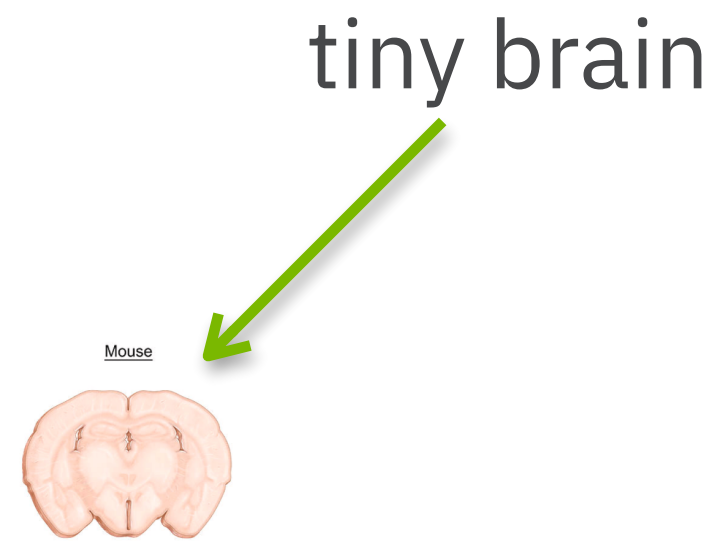


How much image data is 1mm³ ? 1×10^{15} voxels --> ~1 PB

Data Challenges in Connectomics



Mouse brain: 70M neurons



~1cm³

How much image data
is 1cm³ ? ~**1EB**

Human brain: 80B neurons



~1000cm³

How much image data is
1000cm³ ? ~**1000 EB**
(6nm x 6nm x 40nm)

**Reconstructed data
will be much larger:**

- Segmentation labels for each voxel
 - 4x voxel data
- 3D Mesh
- Skeleton

The structures are expected to be used to seed simulations to study flow in neurotransmitters, in better modeling the brain, among others.