

# Cell Centered Database

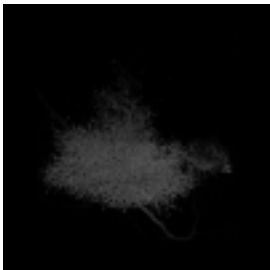
University of California, San Diego

Maryann Martone

Microscopy Product #:10 2wk-ly10

For the most updated information, please visit

<http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=10>

|         |   |              |
|---------|---|--------------|
| Image2D | Reconstruction  | Segmentation |
|         |  |              |

## Project Information:

|                     |  |
|---------------------|--|
| PROJECT_ID          | P1230  |
| PROJECT_NAME        | Astrocyte Development  |
| PROJECT_DESCRIPTION | Postnatal development of protoplasmic astrocytes   |
| LEADER              | Eric Bushong   |
| FUNDING_AGENCY      | NIH  |
| PROJECT_START_DATE  | 2002-02-01 00:00:00.0  |
| PROJECT_END_DATE    |  |
| COLLABORATORS       | <a href="#">Maryann Martone</a> , <a href="#">Mark Ellisman</a>  |
| PUBLICATION1        | <a href="#">Bushong EA, Martone ME, Ellisman MH. Maturation of astrocyte morphology and the establishment of astrocyte domains during postnatal hippocampal development. Int J Dev Neurosci. 2004 Apr;22(2):73-86.</a> |
| PUBLICATION2        |  |
| PUBLICATION3        |  |

|                                 |  |
|---------------------------------|--|
| <b>Experiment Information -</b> |  |
| PURPOSE                         | To study the development of astrocytes in situ |
| TITLE                           | Intracellular injection of an astrocyte        |
| EXPERIMENTER                    | Eric Bushong                                   |
| EXPERIMENT_NAME                 |  |
| EXPERIMENT_DATE                 | 2002-02-21 00:00:00.0                          |

| Subject Information - |                   |
|-----------------------|-------------------|
| GROUP_BY              | age               |
| SUBJECT_NAME          | Group_2           |
| FIXATION_METHOD_ID    |                   |
| SCIENTIFIC_NAME       | rattus norvegicus |
| SPECIES               | rat               |
| STRAIN                | Sprague Dawley    |
| AGE                   | 2 weeks           |
| AGECLASS              | juvenile          |
| ANIMAL_NAME           |                   |
| LITTER_ID             |                   |
| SEX                   | male              |
| VENDOR                |                   |
| WEIGHT                |                   |

| Tissue -            |             |
|---------------------|-------------|
| ANATOMIC_LOCATION   | hippocampus |
| MICROTOME           | vibratome   |
| ORIENTATION         | coronal     |
| THICKNESS           | 100 um      |
| TISSUE_PROD_STORAGE |             |
| EXTERNAL_FILE_NAME  |             |
| TISSUE_GROUP_TYPE   |             |

| Microscopy Product Information - |   |
|----------------------------------|---|
| MICROSCOPY_PRODUCT_ID            | 10  |
| IMAGE_BASENAME                   | 2wk-ly10  |
| CREATE_DATE                      |   |
| INSTRUMENT                       | Biorad Radiance 2000 Confocal                       |
| MICROSCOPE_TYPE                  | confocal  |
| PLANE_COUNT                      | 1   |
| PRODUCT_TYPE                     | optical section series                              |
| PURL                             | NA  |
| SESSION_NAME                     |   |
| TELESCIENCE_SRB                  | P1230/Experiment_7/Subject_7/Tissue_7/Microscopy_10 |
| X_RESOLUTION                     | .0493 um  |
| Y_RESOLUTION                     | .0493 um  |
| XSIZE                            | 1024  |
| YSIZE                            | 1024  |

**Protocol:**

N/A

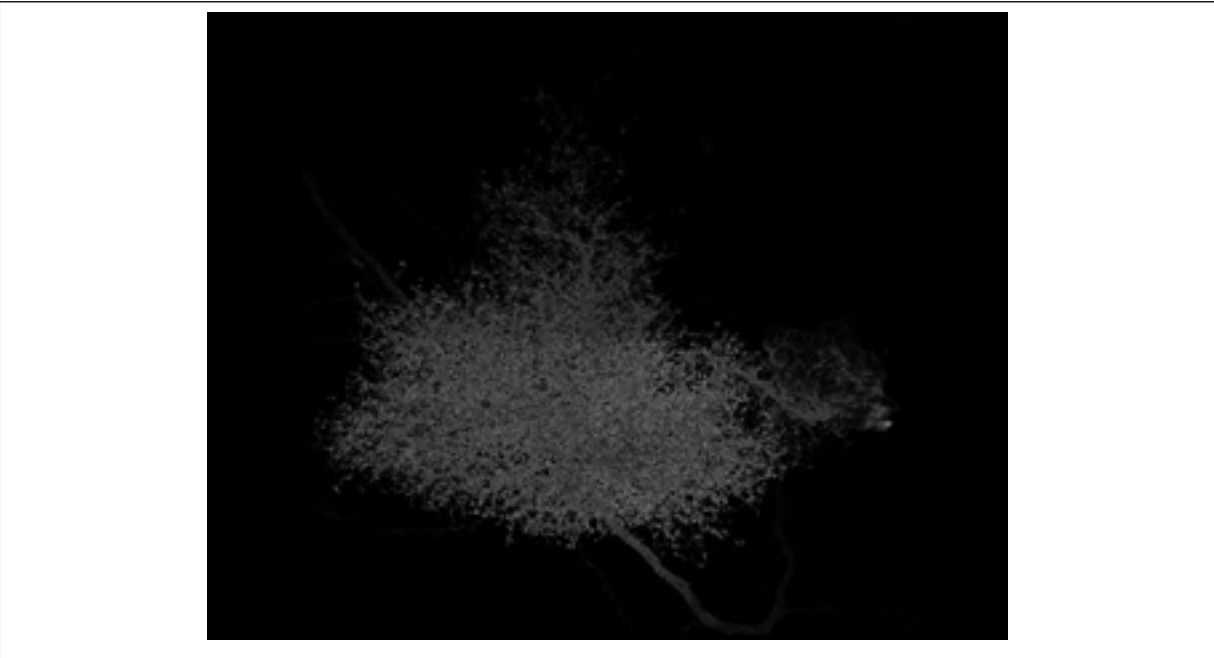
|                        |        |
|------------------------|--------|
| <b>Image Type -</b>    |        |
| OPTICAL_SECTION_SERIES | 10     |
| OPTICAL_Z_RESOLUTION   | .25 um |

|                               |                        |
|-------------------------------|------------------------|
| <b>Specimen Description -</b> |                        |
| ANATOMICAL_DETAIL             | 10                     |
| ATLAS_COORD                   | , ,                    |
| CELL_TYPE                     | protoplasmic astrocyte |
| ORGAN                         | brain                  |
| REGION                        | hippocampus            |
| SYSTEM                        | central nervous system |

|                                   |          |
|-----------------------------------|----------|
| <b>Light Microscopy Product -</b> |          |
| LMPRODUCT_ID                      | 10       |
| COVER_SLIP_THICKNESS              | 1 um     |
| IMMERSION_MEDIUM                  | oil      |
| LENS_MAGNIFICATION                | 60 X     |
| MOUNTING_MEDIUM                   | gelvatol |
| NUMERICAL_APERTURE                | 1.4      |

# Reconstruction

Reconstruction Image -



| Reconstruction -         |  |
|--------------------------|--|
| RECONSTRUCTION3D_ID      | 10   |
| CROPPING_COORDINATE1     | ,  |
| CROPPING_COORDINATE2     | ,  |
| RECON_TYPE               | optical section series/mosaic  |
| THUMBNAIL                | P1171/2wk-ly10_vt.jpg  |
| VOLUME_DIMENSION         | , ,  |
| VOLUME_NAME              | eric/2wk-ly27.pic  |
| VOXEL_SCALE              | , ,  |
| RECONSTRUCTION_IMAGES_ID | 10   |
| RECON_IMAGE_DESC         | Maximum intensity projection of an optical section series of a protoplasmic astrocyte injected with Lucifer Yellow in rat hippocampal area CA1 |
| RECON_FILE_NAME          | eric/2wk-LY10_thumbnail.jpg  |
| VOLUME_THUMBNAIL         | P1171/2wk-ly10_vt.jpg  |

## **USER AGREEMENT**

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## **USER NOTIFICATION**

For large size image data, it will take several minutes to download, please be patient. Thanks!

## **ACKNOWLEDGEMENT**

Data used from the CCDB should be appropriately referenced, including both the author of the data and the CCDB. If the data were from a published study, the reference is included in the database record. The following reference should be cited for the CCDB:

Martone, M. E., Gupta, A., Wong, M., Qian, X., Sosinsky, G., Ludaescher, B., and Ellisman, M. H. A cell centered database for electron tomographic data. *J. Struct. Biology* 138: 145-155, 2002.

In addition, the support for the Cell Centered Database should be included in the acknowledgement section of any publication: The Cell Centered Database is supported by NIH grants from NCRR RR04050, RR RR08605 and the Human Brain Project DA016602 from the National Institute on Drug Abuse, the National Institute of Biomedical Imaging and Bioengineering and the National Institute of Mental Health, and NSF grants supporting the National Partnership for Advanced Computational Infrastructure NSF-ASC 97-5249 and MCB-9728338.

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