

Cell Centered Database

University of California, San Diego

Maryann Martone

Microscopy Product #:1017 3wk-ly15

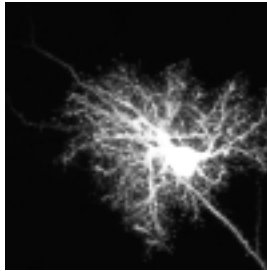
For the most updated information, please visit

<http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=1017>

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 | Maryann Martone , Mark Ellisman |
| PUBLICATION1 | 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. |
| PUBLICATION2 | |
| PUBLICATION3 | |

Experiment Information -

| | |
|-----------------|--|
| PURPOSE | Examine the morphology of 3 week old astrocytes |
| TITLE | Morphology of astrocytes in 3 week old hippocampus |
| EXPERIMENTER | Eric Bushong |
| EXPERIMENT_NAME | |
| EXPERIMENT_DATE | |

| Subject Information - | |
|-----------------------|-------------------|
| GROUP_BY | NA |
| SUBJECT_NAME | NA |
| FIXATION_METHOD_ID | 2 |
| SCIENTIFIC_NAME | rattus norvegicus |
| SPECIES | rat |
| STRAIN | Sprague Dawley |
| AGE | 3 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 | coverslipped |
| EXTERNAL_FILE_NAME | NA |
| TISSUE_GROUP_TYPE | NA |

| Microscopy Product Information - | |
|----------------------------------|--|
| MICROSCOPY_PRODUCT_ID | 1017 |
| IMAGE_BASENAME | 3wk-ly15 |
| CREATE_DATE | |
| INSTRUMENT | Biorad Radiance2000 |
| MICROSCOPE_TYPE | single photon confocal |
| PLANE_COUNT | |
| PRODUCT_TYPE | optical section series |
| PURL | NA |
| SESSION_NAME | |
| TELESCIENCE_SRB | P1230/Experiment_22/Subject_23/Tissue_30/Microscopy_1017 |
| X_RESOLUTION | .045679 pixels/um |
| Y_RESOLUTION | .045679 pixels/um |
| XSIZE | 1024 |
| YSIZE | 1024 |

Protocol:

N/A

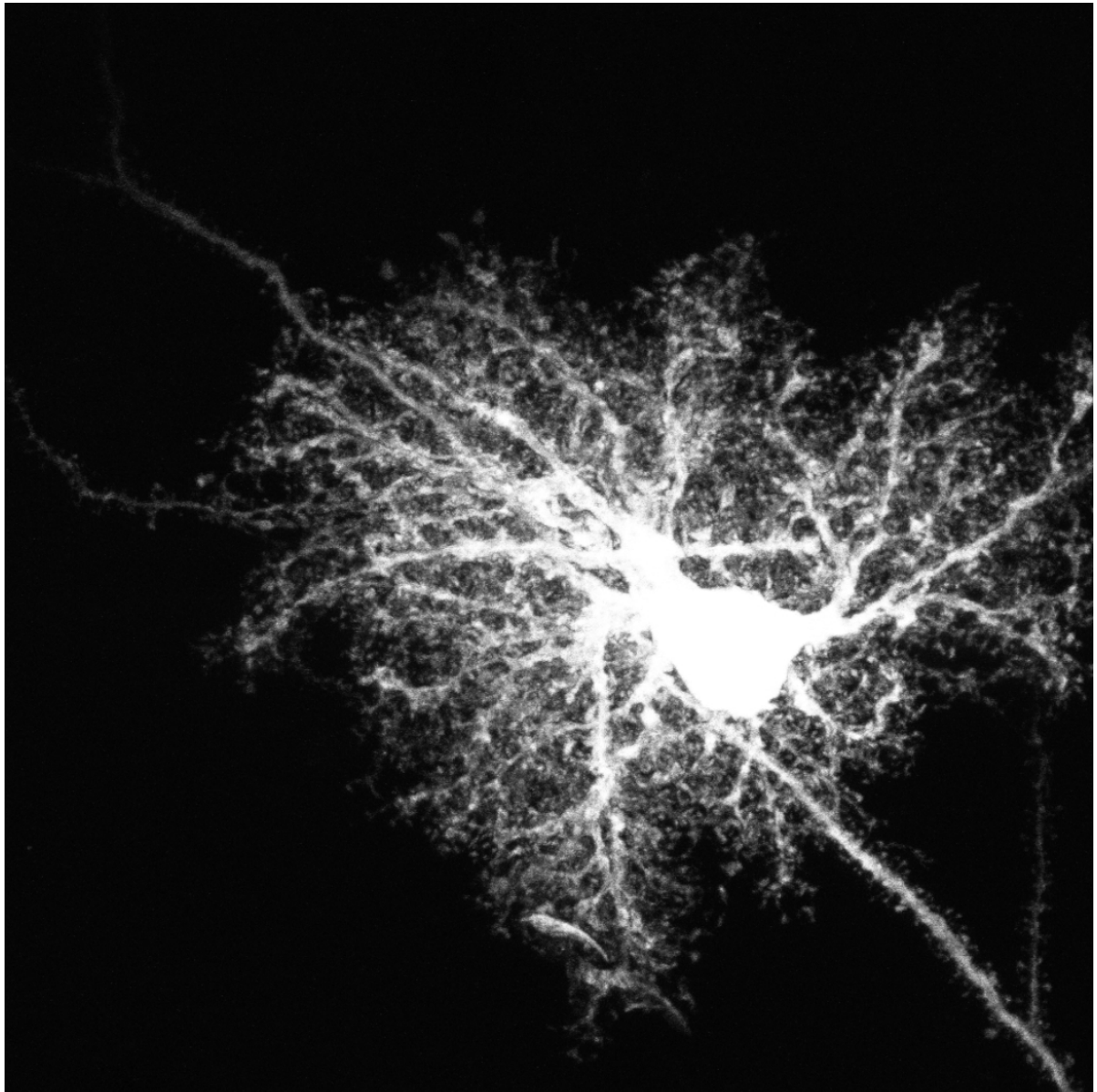
| | |
|-------------------------|--------|
| Image Type - | |
| THROUGH_FOCUS_SERIES_ID | 1017 |
| OPTICAL_SECTION_SERIES | 1017 |
| OPTICAL_Z_RESOLUTION | .25 um |

| | |
|------------------------|------------------------|
| Specimen Description - | |
| ANATOMICAL_DETAIL | 1017 |
| ATLAS_COORD | , , |
| CELL_TYPE | protoplasmic astrocyte |
| ORGAN | brain |
| REGION | hippocampus |
| SYSTEM | central nervous system |

| | |
|----------------------------|----------|
| Light Microscopy Product - | |
| LMPRODUCT_ID | 1017 |
| COVER_SLIP_THICKNESS | 1 um |
| IMMERSION_MEDIUM | oil |
| LENS | Nikon |
| LENS_MAGNIFICATION | 60 x |
| MOUNTING_MEDIUM | gelvatol |
| NUMERICAL_APERTURE | 1.4 |
| REFRACTIVE_INDEX | 1.5 |

Reconstruction

Reconstruction Image -



| | |
|--------------------------|--|
| Reconstruction - | |
| RECONSTRUCTION3D_ID | 1017 |
| CROPPING_COORDINATE1 | , |
| CROPPING_COORDINATE2 | , |
| RECON_TYPE | optical section series |
| THUMBNAIL | p1230/3wk-ly15_vt.jpg |
| VOLUME_DIMENSION | , , |
| VOLUME_NAME | Feb2004E/3wk/ly/3wk-ly15/3wk-ly15.tar |
| VOXEL_SCALE | , , |
| RECONSTRUCTION_IMAGES_ID | 1017 |
| RECON_IMAGE_DESC | Optical section series through a protoplasmic astrocyte in rat hippocampal area CA1 intracellulaly injected Lucifer Yellow and imaged with confocal microscopy |
| RECON_FILE_NAME | Feb2004E/3wk/ly/3wk-ly15/3wk-ly15-proj.jpg |
| VOLUME_THUMBNAIL | P1230/3wk-ly15_vt.jpg |

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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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