

# Cell Centered Database

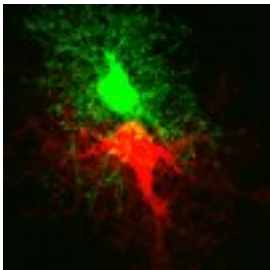
University of California, San Diego

Maryann Martone

Microscopy Product #:56 1wk-both1hm

For the most updated information, please visit

<http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=56>

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	

Experiment Information -	
PURPOSE	Examine the morphology of 1 week old astrocytes
TITLE	Morphology of astrocytes in 1 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	1 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	56
IMAGE_BASENAME	1wk-both1hm
CREATE_DATE	
INSTRUMENT	Biorad Radiance 2000 Confocal
MICROSCOPE_TYPE	confocal
PLANE_COUNT	
PRODUCT_TYPE	optical section series
PURL	NA
SESSION_NAME	
TELESCIENCE_SRB	P1230/Experiment_25/Subject_26/Tissue_32/Microscopy_56
X_RESOLUTION	.031624 um ? ? ? t?b hU ^ r ? ?E# ! >U ? ? t?b U oUN?ea????UN?UN? ? U
Y_RESOLUTION	.031624 um ? ? ? t?b hU ^ r ? ?E# ! >U ? ? t?b U oUN?ea????UN?UN? ? U
XSIZE	1024
YSIZE	1024

## Protocol:

N/A

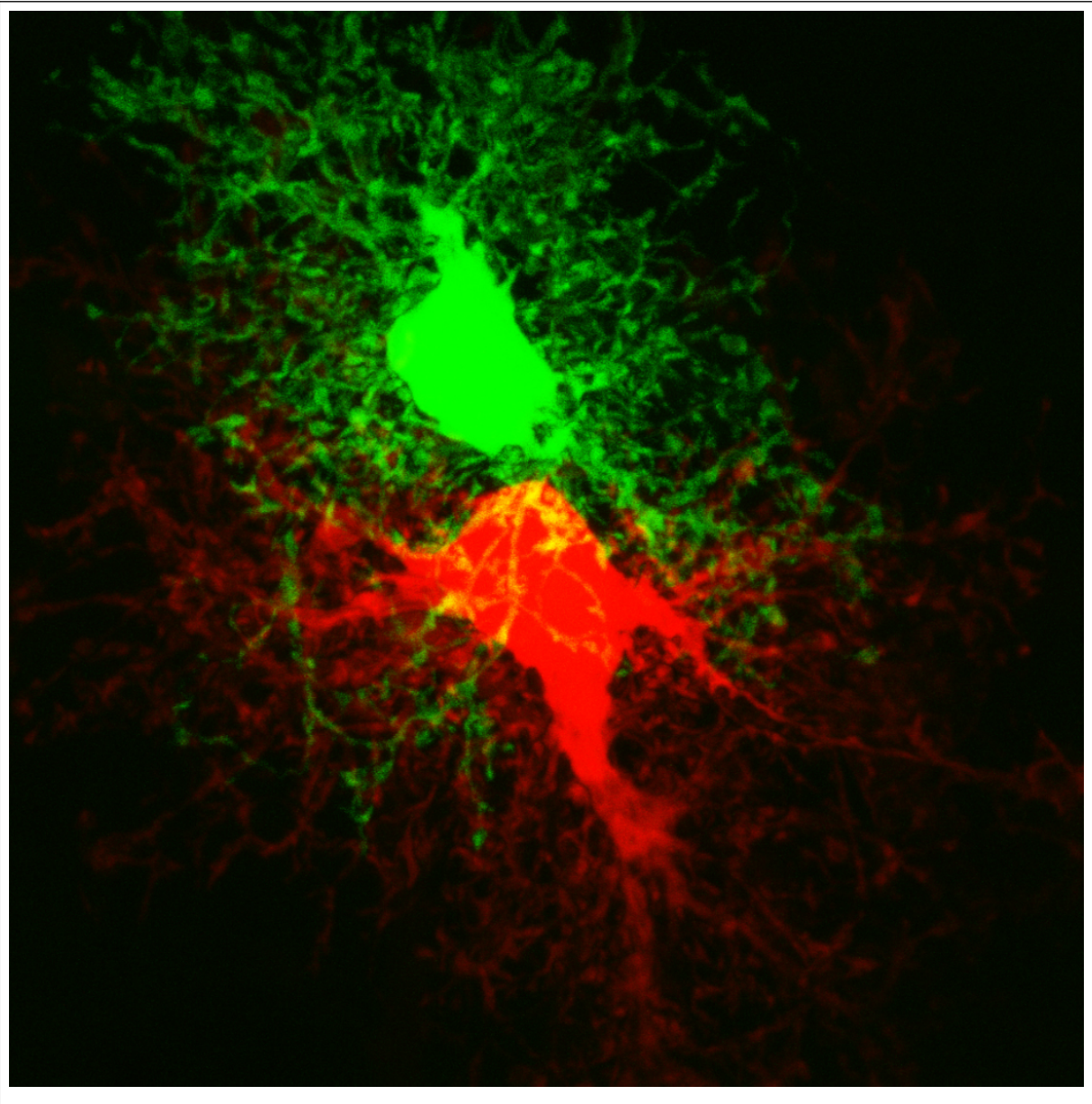
Image Type -	
THROUGH_FOCUS_SERIES_ID	56
ZSTEP	.15um
OPTICAL_SECTION_SERIES	56

Specimen Description -	
ANATOMICAL_DETAIL	56
ATLAS_COORD	, ,
CELL_TYPE	protoplasmic astrocyte
ORGAN	brain
REGION	hippocampus
SYSTEM	central nervous system

Light Microscopy Product -	
LMPRODUCT_ID	56
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	56
BASENAME_ORIGFILE	NA
CROPPING_COORDINATE1	,
CROPPING_COORDINATE2	,
RECON_TYPE	optical section series
THUMBNAIL	P1230/1wk-both1hm_vt.jpg
VOLUME_DIMENSION	, ,
VOLUME_NAME	Feb2004E/1wk/both/1wk-both1hm/1wk-both1hm-proj.tar
VOXEL_SCALE	, ,
RECONSTRUCTION_IMAGES_ID	56
RECON_IMAGE_DESC	Optical section series through adjacent hippocampal astrocytes injected with Lucifer Yellow (green) and Alexa568 (red) respectively, and immunolabeled for GFAP (blue), imaged with confocal microscopy
RECON_FILE_NAME	Feb2004E/1wk/both/1wk-both1hm/1wk-both1hm-proj.jpg
VOLUME_THUMBNAIL	P1230/1wk-both1hm_vt.jpg

## **USER AGREEMENT**

Data Sharing and Citation Policy: The mission of the CCDB is to promote data sharing among scientists interested in cellular and subcellular anatomy and in developing computer algorithms for 3D reconstruction and modeling of such data. Data sets may be viewed or shared at the discretion of the author of the data. In some cases, the data may be freely viewed and downloaded without contacting the original author while in other cases, permission of the author may have to be obtained prior to downloading the data. In either case, failure to cite or give proper credit to the original authors who collected these data in subsequent published articles or presentations is a material breach of this User Agreement. CCDB requires all researchers re-analyzing these published data via the CCDB access to reference the original published article and the CCDB. An example of an appropriate acknowledgement is provided on the CCDB web site. CCDB is not in a position to police every intended use of these data. The scientific community will self-police the compliance of this contractual obligation.

## **DISCLAIMER**

THE DATA PROVIDED BY THE CCDB ARE FREELY DISTRIBUTED AND WITHOUT CHARGE. THESE DATA ARE PROVIDED BY THE CCDB "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT, TO ANY THIRD PARTY RIGHTS. IN NO EVENT SHALL THE CCDB BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THESE DATA, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## **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.

Maryann Martone