Cell Centered Database
University of California, San Diego
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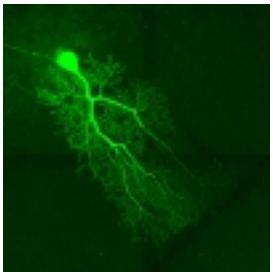
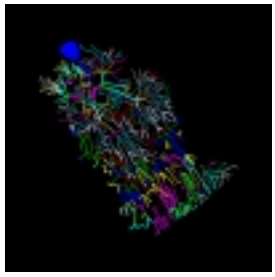
Microscopy Product #:4 e1cb4a1

For the most updated information, please visit
http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=4

Image2D	Reconstruction	Segmentation
		

Project Information:

PROJECT_ID	P1170
PROJECT_NAME	Mouse BIRN test data
PROJECT_DESCRIPTION	Neurolucida tracing of filled Purkinje neurons
LEADER	Maryann Martone
FUNDING_AGENCY	NIH
PROJECT_START_DATE	2002-03-01 00:00:00.0
PROJECT_END_DATE	
COLLABORATORS	Diana Price, Andrea Thor, Masako Terada, Hiro Hakozaki
PUBLICATION1	
PUBLICATION2	
PUBLICATION3	

Experiment Information -	
PURPOSE	to obtain multi resolution data for Mouse BIRN
TITLE	Intracellular injection of Purkinje neuron
EXPERIMENTER	Andrea Thor & Diana Price
EXPERIMENT_NAME	
EXPERIMENT_DATE	

Subject Information -	
GROUP_BY	
SUBJECT_NAME	
FIXATION_METHOD_ID	
SCIENTIFIC_NAME	mus musculus
SPECIES	mouse
STRAIN	C57BL/6
AGE	2 months
AGECLASS	adult
ANIMAL_NAME	
LITTER_ID	
SEX	male
VENDOR	
WEIGHT	23.6 grams

Tissue -	
ANATOMIC_LOCATION	cerebellum
MICROTOME	vibratome
ORIENTATION	sagittal
THICKNESS	100 um
TISSUE_PROD_STORAGE	
EXTERNAL_FILE_NAME	
TISSUE_GROUP_TYPE	

Microscopy Product Information -	
MICROSCOPY_PRODUCT_ID	4
IMAGE_BASENAME	e1cb4a1
CREATE_DATE	2002-04-16 00:00:00.0
INSTRUMENT	Biorad Radiance 2000 Confocal
MICROSCOPE_TYPE	confocal
PLANE_COUNT	1
PRODUCT_TYPE	Optical section series and mosaic
PURL	NA
SESSION_NAME	
TELESCIENCE_SRB	P1170/Experiment_3/Subject_3/Tissue_3/Microscopy_4
X_RESOLUTION	.12 um/pixel
Y_RESOLUTION	.12 um/pixel
XSIZE	1024
YSIZE	1024

Protocol:

N/A

Specimen Preparation Information:

Specimen Description -	
ANATOMICAL_DETAIL	4
ATLAS	Paxinos and Watson
ATLAS_COORD	.36, -7.6, -3.125
CELL_TYPE	Purkinje neuron
MAP_LOCATION	e1cb4a1/e1cb4a1_atlas.jpg
ORGAN	brain
REGION	cerebellum
STRUCTURE	dendritic tree
SYSTEM	central nervous system

Imaging Parameters:

Image Type -	
OPTICAL_SECTION_SERIES	4
OPTICAL_Z_RESOLUTION	.5 um

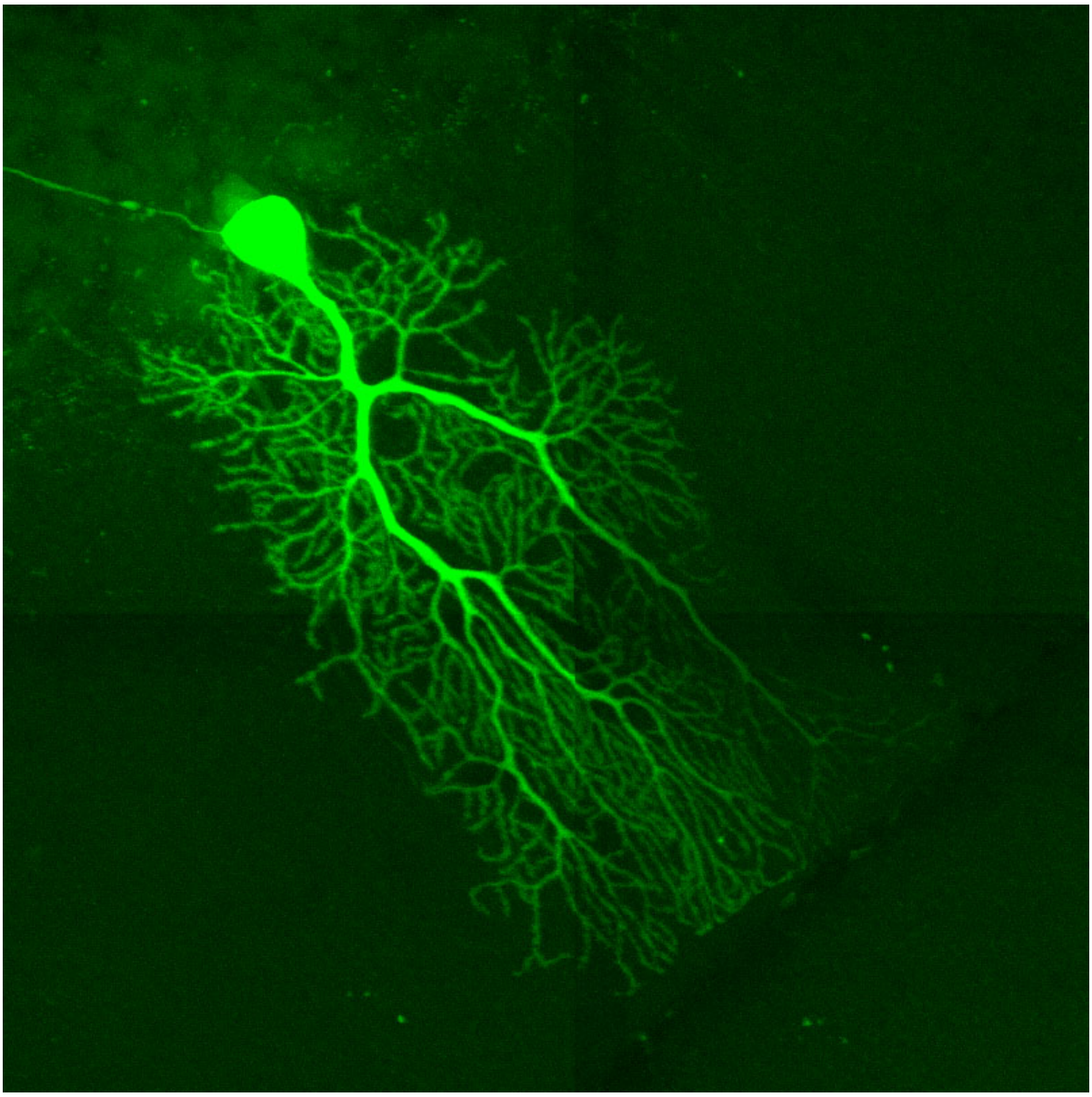
Light Microscopy Product -	
LMPRODUCT_ID	4
COVER_SLIP_THICKNESS	1 um
IMMERSION_MEDIUM	oil
LENS_MAGNIFICATION	60 X
MOUNTING_MEDIUM	gelvatol
NUMERICAL_APERTURE	1.4

Raw 2D Image

Raw Low Resolution 2D Image -
N/A

Reconstruction

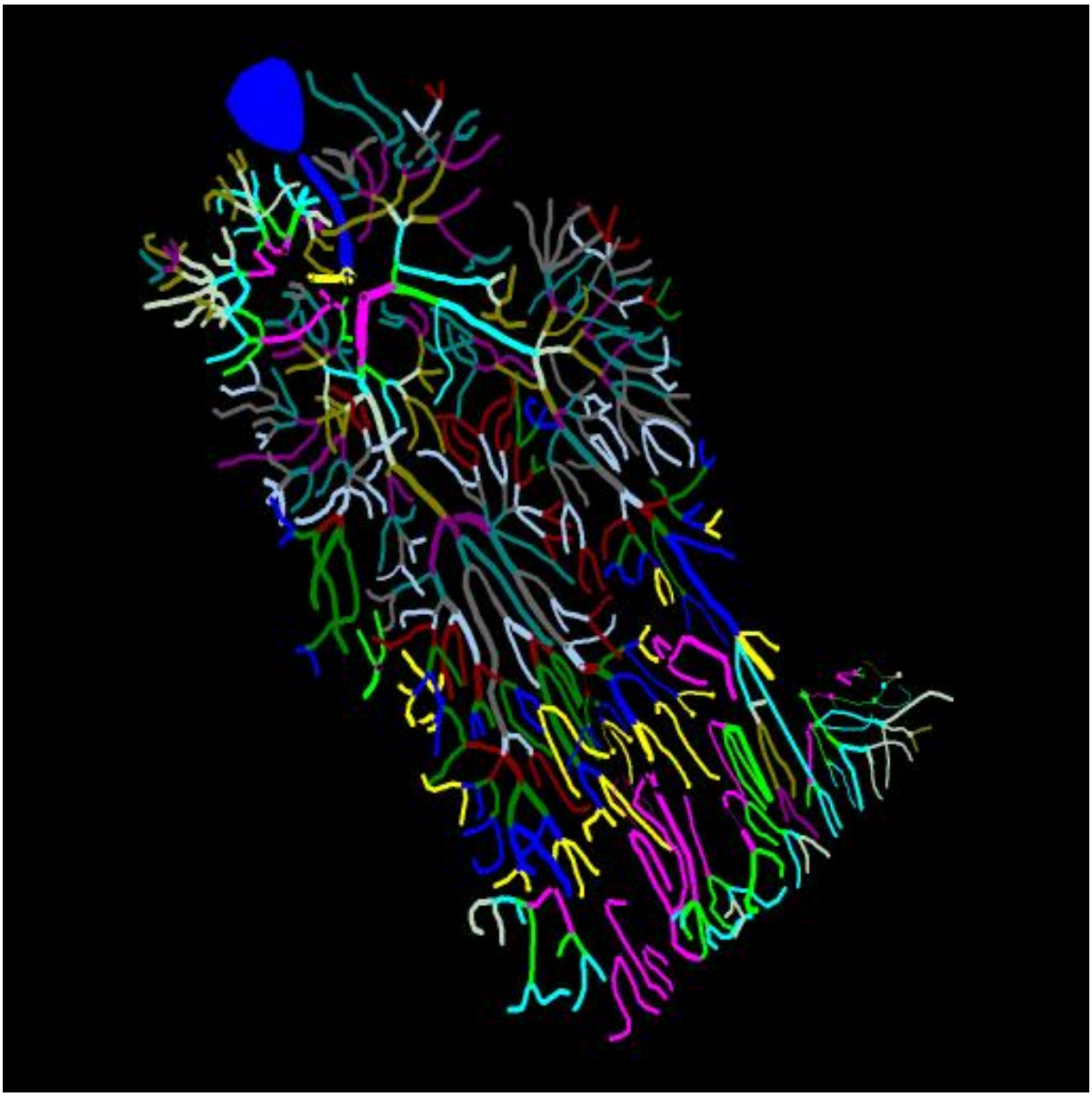
Reconstruction Image -



Reconstruction -	
RECONSTRUCTION3D_ID	4
CROPPING_COORDINATE1	,
CROPPING_COORDINATE2	,
DECONVO_PROGRAM	no
RECON_PROGRAM	Custom montaging software using Image J plug ins
RECON_TYPE	optical section series/mosaic
THUMBNAIL	P1170/e1cb4a1_vt.jpg
VOLUME_DIMENSION	2000, 2000, 80
VOLUME_NAME	e1cb4a1/e1cb4a1mont.tif
VOXEL_SCALE	, ,
RECONSTRUCTION_IMAGES_ID	4
RECON_IMAGE_DESC	Purkinje neuron from mouse cerebellum injected with Lucifer Yellow and imaged using confocal microscopy. This image represents a mosaic of 4 different volumes.
RECON_FILE_NAME	e1cb4a1/e1cb4a1mont_rec.jpg
VOLUME_THUMBNAIL	P1170/e1cb4a1_vt.jpg

Segmentation

Segmentation Image -



Segmentation -	
SEGMENTED_OBJECT_ID	4
ANALYZE_DESC	Manual tree tracing using Neurolucida 4.35c
ANALYZE_DESC	Manual tree tracing using Neurolucida 4.35c
IS_MANUAL	y
LABELING_RANK	none
OBJECT_DESC	traced tree
OBJECT_TYPE	tree
SEGMENTED_OBJ_2D_IMAGE	e1cb4a1/E1CB4A3_neuro2d.jpg
SEGMENT_PERSON_NAME	Andrea Thor
SEG_DESC	Segmentation of dendritic tree of Purkinje cell using Neurolucida
SEG_FILE_NAME	e1cb4a1/e1cb4a1.asc
THUMBNAIL	P1170/e1cb4a1_st.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 acknolwedgement 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