Cell Centered Database

University of California, San Diego Maryann Martone

Microscopy Product #:2 ALXP

For the most updated information, please visit

http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=2

Image2D	Reconstruction	Segmentation

Project Information:

PROJECT_ID	P0001
PROJECT_NAME	Compartmental models of Purkinje neurons
PROJECT_DESCRIPTION	Neurolucida tracing of filled Purkinje neurons
LEADER	Maryann Martone
FUNDING_AGENCY	NIH
PROJECT_START_DATE	1998-04-01 00:00:00.0
PROJECT_END_DATE	2003-03-31 00:00:00.0
COLLABORATORS	Eric Bushong
PUBLICATION1	
PUBLICATION2	
PUBLICATION3	

Experiment Information -	
PURPOSE	To develop a canonical Purkinje neuron
TITLE	Intracellular injection of Purkinje neuron
EXPERIMENTER	Ed Esquenazi
EXPERIMENT_NAME	
EXPERIMENT_DATE	

Subject Information -	
GROUP_BY	
SUBJECT_NAME	
FIXATION_METHOD_ID	
SCIENTIFIC_NAME	rattus norvegicus
SPECIES	rat
STRAIN	Sprague Dawley
AGE	
AGECLASS	adult
ANIMAL_NAME	
LITTER_ID	
SEX	unspecified
VENDOR	
WEIGHT	

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	2
IMAGE_BASENAME	ALXP
CREATE_DATE	
INSTRUMENT	BioRad MRC 1024 Confocal
MICROSCOPE_TYPE	confocal
PLANE_COUNT	1
PRODUCT_TYPE	optical section series
PURL	NA
SESSION_NAME	
TELESCIENCE_SRB	P0001/Experiment_2/Subject_2/Tissue_2/Microscopy_2
X_RESOLUTION	
Y_RESOLUTION	
XSIZE	1024
YSIZE	1024

Protocol:

Image Type -	
OPTICAL_SECTION_SERIES	2
OPTICAL Z RESOLUTION	.36 um

Specimen Description -	
ANATOMICAL_DETAIL	2
ATLAS	Paxinos and Watson
ATLAS_COORD	.9, -11.52, -3.34
CELL_TYPE	Purkinje neuron
MAP_LOCATION	ALXP/alxpAtlas.gif
ORGAN	brain
REGION	cerebellum
STRUCTURE	dendritic tree
SYSTEM	central nervous system

Light Microscopy Product -	
LMPRODUCT_ID	2
COVER_SLIP_THICKNESS	1 um
IMMERSION_MEDIUM	oil
LENS_MAGNIFICATION	40 X
MOUNTING_MEDIUM	gelvatol
NUMERICAL_APERTURE	1.3

Reconstruction

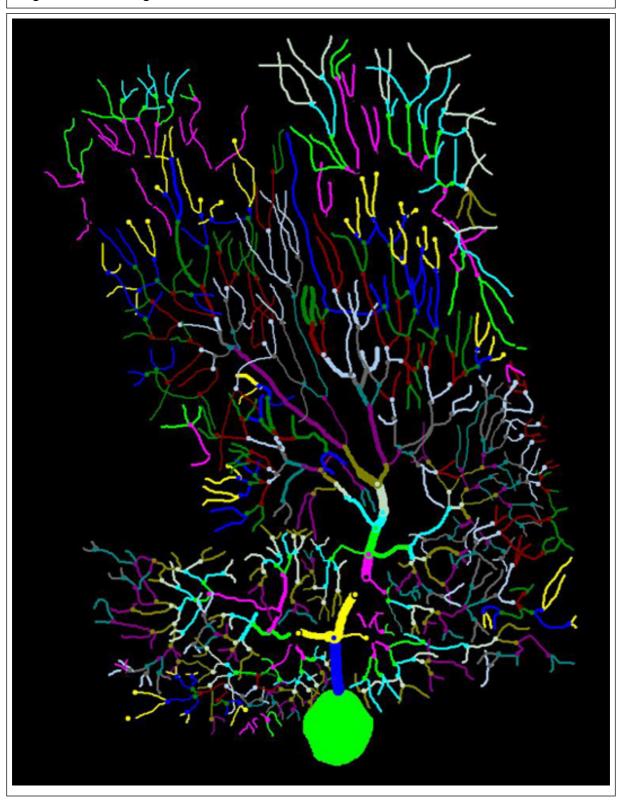
Reconstruction Image -



Reconstruction -	
RECONSTRUCTION3D_ID	2
CROPPING_COORDINATE1	,
CROPPING_COORDINATE2	,
RECON_TYPE	optical section series
THUMBNAIL	P0001/ALXP_vt.jpg
VOLUME_DIMENSION	, ,
VOLUME_NAME	ALXP/alxp.pic
VOXEL_SCALE	, ,
RECONSTRUCTION_IMAGES_I	2
RECON_IMAGE_DESC	Purkinje neuron from rat cerebellum injected with Lucifer Yellow and imaged using confocal microscopy
RECON_FILE_NAME	ALXP/alxp_thumbnail.jpg
VOLUME_THUMBNAIL	P0001/ALXP_vt.jpg
ANIMATION_FILE	ALXP/alxp2_0.avi
ANIMATION_DESC	Rotation loop of a maximum intensity projection of a Purkinje neuron injected with Lucifer Yellow, rotated along the y axis

Segmentation

Segmentation Image -



Segmentation -	
SEGMENTED_OBJECT_ID	2
ANALYZE_DESC	Manual tree tracing using Neurolucida 4.35c
ANALYZE_DESC	Manual tree tracing using Neurolucida 4.35c
IS_MANUAL	у
LABELING_RANK	none
OBJECT_DESC	traced tree
OBJECT_TYPE	tree
SEGMENTED_OBJ_2D_IMAGE	ALXP/alxp_neuro2d.jpg
SEGMENTED_OBJECT_ID	2
SEGMENT_PERSON_NAME	Eduardo Esquenazi
SEG_FILE_NAME	ALXP/alexP.asc
THUMBNAIL	P0001/ALXP_st.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.

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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.

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Maryann Martone