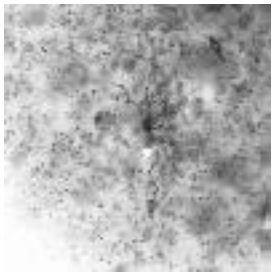
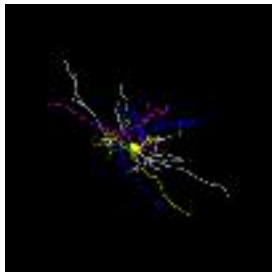
Cell Centered Database
University of California, San Diego
maryann@ncmir.ucsd.edu

Microscopy Product #:3384 050803E

For the most updated information, please visit
http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=3384

Image2D	Reconstruction	Segmentation
		

Project Information:

PROJECT_ID	P1207
PROJECT_NAME	Correlative microscopic characterization of dendritic spines in a transgenic mouse model of hyperdopaminergia: The dopamine transporter knockout mouse
PROJECT_DESCRIPTION	Multiscale characterization of DAT KO transgenic mouse
LEADER	Diana Price
FUNDING_AGENCY	NIH
PROJECT_START_DATE	2003-01-01 00:00:00.0
PROJECT_END_DATE	
COLLABORATORS	Aki Laakso, Michele Cyr, Maryann Martone, Naoko Yamada, Andrea Thor, Monica Berlanga
PUBLICATION1	
PUBLICATION2	
PUBLICATION3	

Experiment Information -	
PURPOSE	EMT reconstructions of medium spiny neuron dendrites
TITLE	P1207 Experiment 5
EXPERIMENTER	Diana Price, Masako Terada, Andrea Thor
EXPERIMENT_NAME	
EXPERIMENT_DATE	2003-04-22 00:00:00.0

Subject Information -	
GROUP_BY	genetic manipulation
SUBJECT_NAME	wildtype/control
FIXATION_METHOD_ID	
SCIENTIFIC_NAME	Mus Musculus
SPECIES	Mouse
STRAIN	C57BL/129SvJ
AGE	7 months
AGECLASS	Adult
ANIMAL_NAME	
LITTER_ID	
SEX	male
VENDOR	
WEIGHT	34 grams

Tissue -	
ANATOMIC_LOCATION	neostriatum 050803D&E
MICROTOME	Vibratome
ORIENTATION	coronal
THICKNESS	100 um
TISSUE_PROD_STORAGE	P1207Slidebox1
EXTERNAL_FILE_NAME	
TISSUE_GROUP_TYPE	

Microscopy Product Information -	
MICROSCOPY_PRODUCT_ID	3384
IMAGE_BASENAME	050803E
CREATE_DATE	2003-05-08 00:00:00.0
INSTRUMENT	Bio-Rad Radiance 2000
MICROSCOPE_TYPE	Confocal
PLANE_COUNT	41
PRODUCT_TYPE	THROUGH FOCUS SERIES
PURL	
SESSION_NAME	
TELESCIENCE_SRB	P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384
X_RESOLUTION	.29 um/pixels
Y_RESOLUTION	.29 um/pixels
XSIZE	1024
YSIZE	1024

Protocol:

N/A

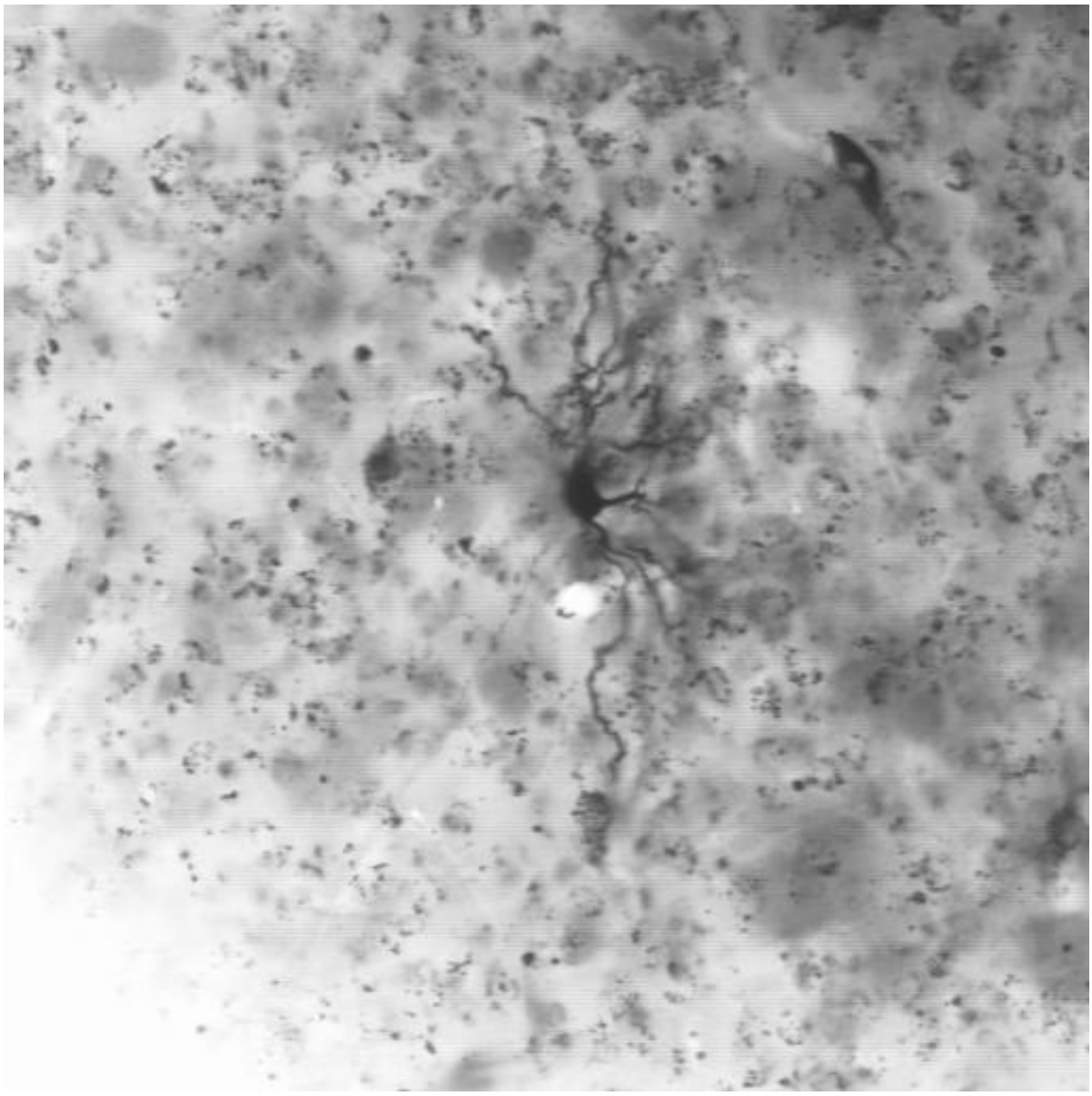
Image Type -	
THROUGH_FOCUS_SERIES_ID	6043
ZSTEP	.5microns
THROUGH_DESC	transmitted light z series through photoconverted medium spiny dendride
THROUGH_NOTES	null

Specimen Description -	
ANATOMICAL_DETAIL	6063
ATLAS	Paxinos and Franklin
ATLAS_COORD	-4.125, 1.5, .38
CELL_ID	050803E
CELL_TYPE	medium spiny neuron
MAP_LOCATION	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384/050803e_atlasplate28.jpg
ORGAN	brain
REGION	neostriatum
STRUCTURE	spiny dendrite
SYSTEM	central nervous
TISSUE	striatum

Light Microscopy Product -	
LMPRODUCT_ID	6086
IMMERSION_MEDIUM	air
LENS_MAGNIFICATION	40 X
MOUNTING_MEDIUM	resin
NUMERICAL_APERTURE	0.75

Raw 2D Image

Raw Low Resolution 2D Image -



Raw 2D Image -	
IMAGE2D_ID	6121
BIT_DEPTH	8 bit
DIGITIZING_PLATFORM	Biorad Radiance2000 confocal
IMAGE_DESC	Zip file containing original transmitted light z series in BioRad PIC format and also a version in multi-image tiff format
IMAGE_FILE_FORMAT	BioRad PIC
IMAGE_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384/050803e_img.jpg
RAW_ANIMATION_DESC	nimation stepping through a through focus series of a photoconverted medium spiny cell from the neostriatum of a wild type mouse. Flocculent material surrounding the labeled cell is likely photoconverted mitochondria or non-specific debris produced by the photoconversion procedure. File was downsized from original for display purposes.
RAW_ANIMATION_FILE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384/050803e_img.avi
RAW_DATA_FILE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384/050803e_img.zip
THUMBNAIL_DESC	Single transmitted light section from a through focus series through a photoconverted medium spiny cell from the neostriatum of a wild type mouse. Flocculent material surrounding the labeled cell is likely photoconverted mitochondria or non-specific debris produced by the photoconversion procedure.
THUMBNAIL_FILE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384/050803e_img_thmb.jpg
X_RESOLUTION	.29 um/pixel
Y_RESOLUTION	.29 um/pixel
X_SIZE	1024 pixels
Y_SIZE	1024 pixels

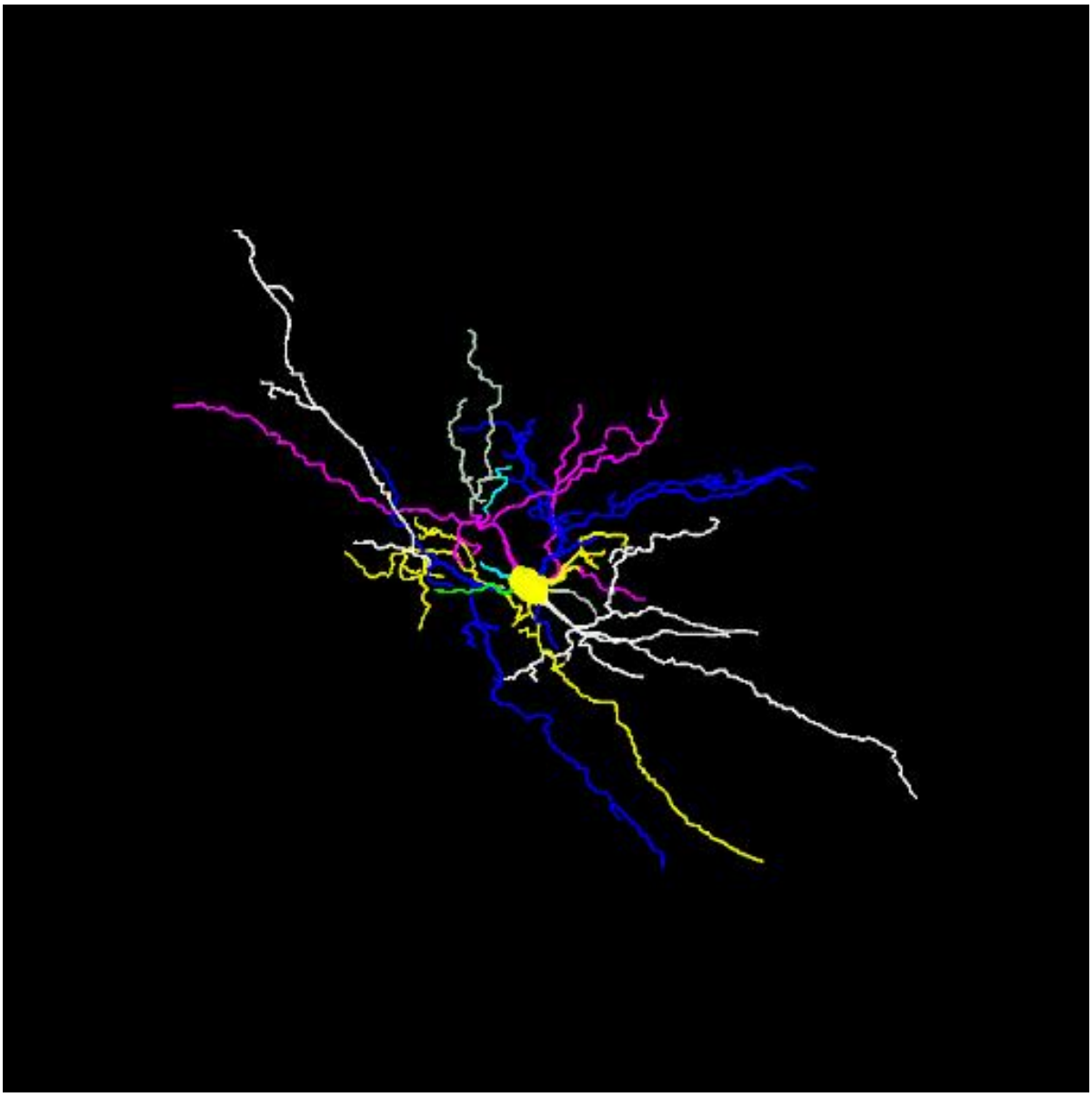
Reconstruction

Reconstruction Image -

Reconstruction -	
RECONSTRUCTION3D_ID	6105
CROPPING_COORDINATE1	,
CROPPING_COORDINATE2	,
IMAGE_MAP_FILE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384/050803e_map_img.jpg
VOLUME_DIMENSION	, ,
VOXEL_SCALE	, ,
RECONSTRUCTION_IMAGES_ID	6105

Segmentation

Segmentation Image -



Segmentation -	
SEGMENTED_OBJECT_ID	6314
DISPLAY_IMAGE_DESC	Rendering of a segmented spiny neuron dendritic tree from a photoconverted medium spiny neuron from the neostriatum of a wildtype mouse. Tree structure was segmented through manual tracing using Neurolucida. Cell body = blue; dendrites = different colors. Dendritic spines were segmented but are not pictured in this rendering.
DOWNLOADABLE_FILE_DESC	Zip file containing Neurolucida trace file in ascii format (050803b_finaltrace.ASC), along with the output in VRML format.
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	0
SEGMENT_PERSON_NAME	Andrea Thor
SEG_DESC	Manual tracing of dendrites using Neurolucida. Spines were traced but these were difficult to see, so the number may not be accurate.
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384/050803e_seg.zip

Segmentation -	
SEGMENTED_OBJECT_ID	6315
DISPLAY_IMAGE_DESC	Rendering of a segmented spiny neuron dendritic tree from a photoconverted medium spiny neuron from the neostriatum of a wildtype mouse. Tree structure was segmented through manual tracing using Neurolucida. Cell body = blue; dendrites = different colors. Dendritic spines were segmented but are not pictured in this rendering.
DOWNLOADABLE_FILE_DESC	Zip file containing Neurolucida trace file in ascii format (050803b_finaltrace.ASC), along with the output in VRML format.
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	0
SEGMENTED_OBJ_2D_IMAGE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384/0500803e_seg.jpg
SEGMENT_PERSON_NAME	Andrea Thor
SEG_DESC	Manual tracing of dendrites using Neurolucida. Spines were traced but these were difficult to see, so the number may not be accurate.
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384/050803e_seg.zip
THUMBNAIL	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384/0500803e_seg_thmb.jpg

Segmentation -	
SEGMENTED_OBJECT_ID	6313
DISPLAY_IMAGE_DESC	Rendering of a segmented spiny neuron dendritic tree from a photoconverted medium spiny neuron from the neostriatum of a wildtype mouse. Tree structure was segmented through manual tracing using Neurolucida. Cell body = blue; dendrites = different colors. Dendritic spines were segmented but are not pictured in this rendering.
DOWNLOADABLE_FILE_DESC	Zip file containing Neurolucida trace file in ascii format (050803b_finaltrace.ASC), along with the output in VRML format.
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	0
SEGMENT_PERSON_NAME	Andrea Thor
SEG_DESC	Manual tracing of dendrites using Neurolucida. Spines were traced but these were difficult to see, so the number may not be accurate.
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_49/Tissue_64/Microscopy_3384/050803e_seg.zip

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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