

# Cell Centered Database

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Microscopy Product #:3693 DATKOK

For the most updated information, please visit

<http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=3693>

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	<a href="#">Diana Price</a>
FUNDING_AGENCY	NIH
PROJECT_START_DATE	2003-01-01 00:00:00.0
PROJECT_END_DATE	
COLLABORATORS	Aki Laakso, Michele Cyr, <a href="#">Maryann Martone</a> , <a href="#">Naoko Yamada</a> , <a href="#">Andrea Thor</a> , Monica Berlanga
PUBLICATION1	
PUBLICATION2	
PUBLICATION3	

Experiment Information -	
PURPOSE	EMT reconstructions of medium spiny neuron dendrites
TITLE	P1207 Experiment 1
EXPERIMENTER	Diana Price, Masako Terada, Andrea Thor
EXPERIMENT_NAME	
EXPERIMENT_DATE	2003-01-09 00:00:00.0

Subject Information -	
GROUP_BY	genetic manipulation
SUBJECT_NAME	Dopamine Transporter (DAT) knockout
FIXATION_METHOD_ID	
SCIENTIFIC_NAME	mus musculus
SPECIES	mouse
STRAIN	C57BL/129SvJ
AGE	6 months
AGECLASS	adult
ANIMAL_NAME	
LITTER_ID	
SEX	male
VENDOR	
WEIGHT	27 grams

Tissue -	
ANATOMIC_LOCATION	neostriatum DATKOK/Q
MICROTOME	vibratome
ORIENTATION	coronal
THICKNESS	100 um
TISSUE_PROD_STORAGE	Slide Box #1
EXTERNAL_FILE_NAME	
TISSUE_GROUP_TYPE	

Microscopy Product Information -	
MICROSCOPY_PRODUCT_ID	3693
IMAGE_BASENAME	DATKOK
CREATE_DATE	2003-03-24 00:00:00.0
INSTRUMENT	Biorad 1024 MRC confocal
MICROSCOPE_TYPE	TRANSMITTED LIGHT
PLANE_COUNT	178
PRODUCT_TYPE	THROUGH FOCUS SERIES
PURL	
SESSION_NAME	
TELESCIENCE_SRB	P1207/Experiment_20/Subject_20/Tissue_200/Microscopy_3693
X_RESOLUTION	.248 um/pixels
Y_RESOLUTION	.248 um/pixels
XSIZE	1024
YSIZE	1024

## Protocol:

N/A

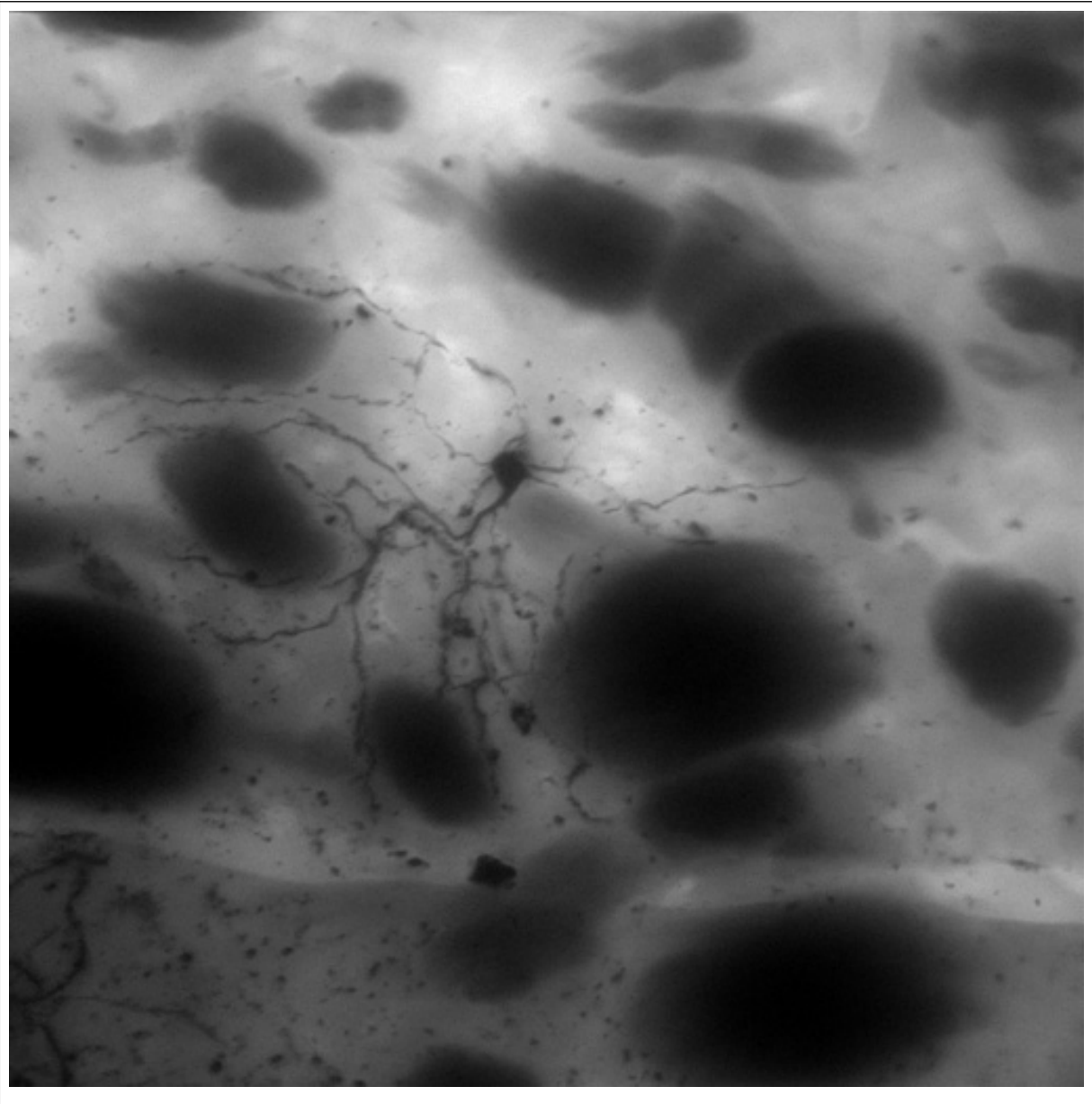
Image Type -	
THROUGH_FOCUS_SERIES_ID	6081
ZSTEP	.54um
THROUGH_NOTES	Zoom = 1; Kalman = 4

Specimen Description -	
ANATOMICAL_DETAIL	6192
ATLAS	Paxinos and Frankliin, 2000
ATLAS_COORD	1.75, -3.25, .62
CELL_ID	DATKOK
CELL_TYPE	medium spiny neuron
MAP_LOCATION	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_25/Microscopy_3339/DATKOQ_atlasplate26.jpg
ORGAN	brain
REGION	neostriatum
SYSTEM	central nervous system

Light Microscopy Product -	
LMPRODUCT_ID	6111
IMMERSION_MEDIUM	oil
LENS_MAGNIFICATION	40 X
MOUNTING_MEDIUM	epoxy

# Raw 2D Image

Raw Low Resolution 2D Image -



Raw 2D Image -	
IMAGE2D_ID	4000
BIT_DEPTH	8 bit
DIGITIZING_PLATFORM	BioRad 1024 MRC
IMAGE_DATE	2003-03-24 00:00:00.0
IMAGE_DESC	Zip archive containing original through focus series in BioRadPIC format (DATKOK.PIC) and in multiimage tiff format (DATKOKTLseries.tif).
IMAGE_FILE_FORMAT	BioRad PIC
IMAGE_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_200/Microscopy_3693/DATKOK_img.jpg
RAW_ANIMATION_DESC	Animation through the through focus series of a medium spiny neuron from a dopamine transporter knock out mouse, iinjected with Lucifer Yellow and then photoconverted. Contrast has been adjusted compared to the original data and the size adjusted for display purposes. The original data is available for download.
RAW_ANIMATION_FILE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_200/Microscopy_3693/DATKOK_img.mov
RAW_DATA_FILE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_200/Microscopy_3693/DATKOK_img.zip
THUMBNAIL_DESC	Z projection through a through-focus series of a medium spiny neuron from a dopamine transporter knock out mouse, iinjected with Lucifer Yellow and then photoconverted.
THUMBNAIL_FILE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_200/Microscopy_3693/DATKOK_img_thmb.jpg
X_RESOLUTION	.248 um/pixel
Y_RESOLUTION	.248 um/pixel
X_SIZE	1024 pixels
Y_SIZE	1024 pixels

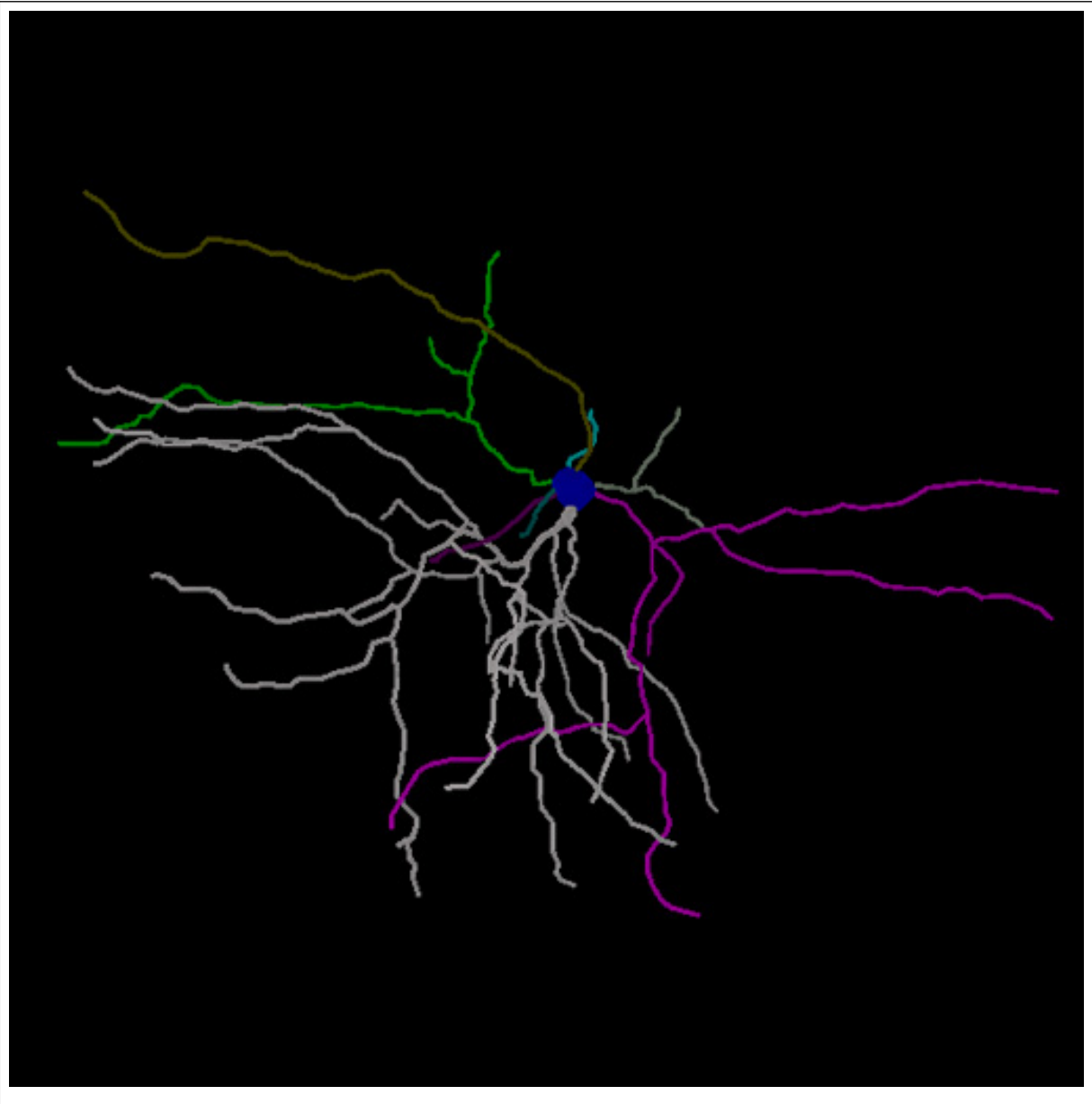
# Reconstruction

Reconstruction Image -

Reconstruction -	
RECONSTRUCTION3D_ID	6155
CROPPING_COORDINATE1	,
CROPPING_COORDINATE2	,
IMAGE_MAP_FILE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_25/Microscopy_3339/3339_grid.tif
NOTES	No further processing was performed on the through focus series prior to segmentation
VOLUME_DIMENSION	, ,
VOXEL_SCALE	, ,
RECONSTRUCTION_IMAGES_ID	6155

# Segmentation

Segmentation Image -





Segmentation -	
SEGMENTED_OBJECT_ID	6800
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	0
SEGMENTED_OBJ_2D_IMAGE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_200/Microscopy_3693/datkok_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_20/Subject_20/Tissue_200/Microscopy_3693/DATKOK_seg.zip
THUMBNAIL	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_200/Microscopy_3693/datkok_seg_thmb.jpg

Segmentation -	
SEGMENTED_OBJECT_ID	6801
CELL_BODY_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_200/Microscopy_3693/datkok_cellbody.txt
DENDRITE_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_200/Microscopy_3693/datkok_dendrites.txt
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	0
SEGMENTED_OBJ_2D_IMAGE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_200/Microscopy_3693/datkok_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_20/Subject_20/Tissue_200/Microscopy_3693/DATKOK_seg.zip
THUMBNAIL	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_20/Subject_20/Tissue_200/Microscopy_3693/datkok_seg_thmb.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