

Cell Centered Database

University of California, San Diego

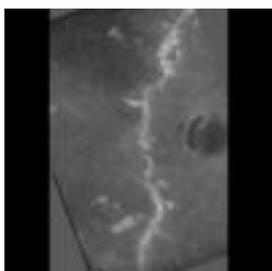
maryann@ncmir.ucsd.edu

Microscopy Product #:3561 datko2g26

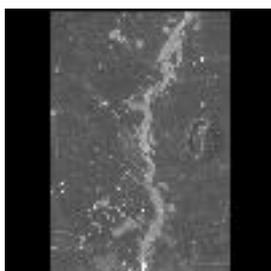
For the most updated information, please visit

<http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=3561>

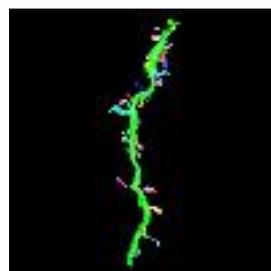
Image2D



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	Tomographic reconstruction of medium spiny dendrites from the neostriatum using UHVEM in a dopamine transporter knock out mouse
TITLE	P1207 Exp 2
EXPERIMENTER	Diana Price and Andrea Thor
EXPERIMENT_NAME	
EXPERIMENT_DATE	2003-02-20 00:00:00.0

Subject Information -	
GROUP_BY	genetic manipulation
SUBJECT_NAME	DATKO
FIXATION_METHOD_ID	
SCIENTIFIC_NAME	mus musculus
SPECIES	mouse
STRAIN	B6;129-/Slc6a3 tm2Mca
AGE	7.3 months
AGECLASS	adult
ANIMAL_NAME	
LITTER_ID	
SEX	unspecified
VENDOR	Marc Caron, Howard Hughs Medical Institute, Duke University
WEIGHT	26 grams

Tissue -	
ANATOMIC_LOCATION	dorsal lateral striatum Cell 2
MICROTOME	ultramicrotome
ORIENTATION	coronal
THICKNESS	4 um
TISSUE_PROD_STORAGE	
EXTERNAL_FILE_NAME	
TISSUE_GROUP_TYPE	none

Microscopy Product Information -	
MICROSCOPY_PRODUCT_ID	3561
IMAGE_BASENAME	datko2g26
CREATE_DATE	2006-04-10 00:00:00.0
INSTRUMENT	Hitachi UHVEM
MICROSCOPE_TYPE	UHVEM
PLANE_COUNT	
PRODUCT_TYPE	SINGLE TILT
PURL	
SESSION_NAME	1datko cell2 grid 26
TELESCIENCE_SRB	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561
X_RESOLUTION	.021 nm/pixels
Y_RESOLUTION	.021 nm/pixels
XSIZE	1024
YSIZE	1024

Protocol:

Experiment #1 DAT KO mouse

02/20/03

Description: Photoconverted dye-filled striatal medium spiny neurons for EM

Animal Info: ID# 1040

Weight: 26g

DOB: 7/12/02

Protocol

1. Perfusion (at Duke)

Nembutal; 4% paraformaldehyde + 0.1% gluteraldehyde

2. Sectioned on Vibratome (at NCMIR)

Thickness = 100 microns

Store in 1X PBS in fridge

3. Fill cells with Lucifer yellow

4. Store slices with filled cells in 4% para in fridge

5. Wash 6x with PBS 1X (on ice)

6. When ready to begin photoconversion, turn on the chiller in confocal room. Set at ~4 C. The refrigerator unit should be set at TEMP < 45 C. Switch ON. Stage needs around 20 minutes to come to temperature. Pull unit out into hallway (to avoid increase in temperature).

6. Place slices in 2% glut/PBS on ice for 15 minutes

0.8 ml 25% gluteraldehyde

2 ml 5x PBS

6.2 ml ddH₂O

7. Briefly wash slices in PBS

8. Place slices in PBS/glycine for a few minutes

38 mg glycine

10 ml 1x PBS

9. Follow instructions for Photoconversion of Lucifer Yellow-filled cells

10. After photoconversion, remove DAB solution and wash slice 3x 10 minutes in generous volumes of PBS on ice. Must remove all DAB before beginning osmification.

Microwaving protocol for osmication, dehydration, and embedding of photoconverted slices

* Prepare Resin mix and let it sit covered and undisturbed until needed (instructions by fume hood in embedding area).

* Rinse slices with a generous amount of cold 1X PBS on ice for ~ 10 min.

* Turn on circulating bath (over 20 C, ~ RT): water bath (left hand side) will fill.

* Insert temperature probe

* Fill other T-beaker with water

* Set temperature to 35 C

* Open new bottle of 100% ethanol and prepare following dilutions:

90% ethanol

70% ethanol

50% ethanol

* Make up osmium solution under fume hood and chill on ice

* 1% osmium tetroxide in PBS on ice.

2.0 ml PBS 5X

then 5.5 2x distilled H₂O

2.5 ml Osmium 4%

* Rinse w/ 2x distilled H₂O 3 x 5min

* Warm up microwave for 2 minutes on high

* Label tubes & place in rack on ice

* Fill tubes with osmium solution (w/ meniscus at 0.5)

* Using glass hooks, transfer slices to tubes

* Remove temperature probe & set temp above 50 C.

* Put rack w. tubes in for 40 sec at full power

* Change rear water load in T-beaker

* Change osmium solution on ice and microwave for another 40 seconds at full power

* Rinse samples for 2 minutes in distilled water on benchtop (at RT)

* Insert petri bath with H₂O under rack

* Dehydration steps (2 x 40 seconds per step; all @ 35 C)

1st
2nd
50% EtOH

70% EtOH

90% EtOH

100% EtOH

100% Acetone

* All of the dehydration steps should be carried out in microcentrifuge tubes filled with 600 ml of solution. Temperature probe should be in petri dish and set for 35. Change water in rear water load when warm to touch.

* Change from water to acetone in petri bath under rack & check acetone bath level every 3 minutes

* Infiltration steps (both @ 50 C):

With a 50/50 mixture of resin and acetone:

1 x 15
min
1:1 Resin:acetone

* Check rear water load at
7.5 minutes

Switch to 100% resin for 3 x 10 minutes:

1st
2nd
3rd
100% Resin

*Periodically check rear water
load

* Flat embed samples between mould release slides and place in embedding oven under vacuum.

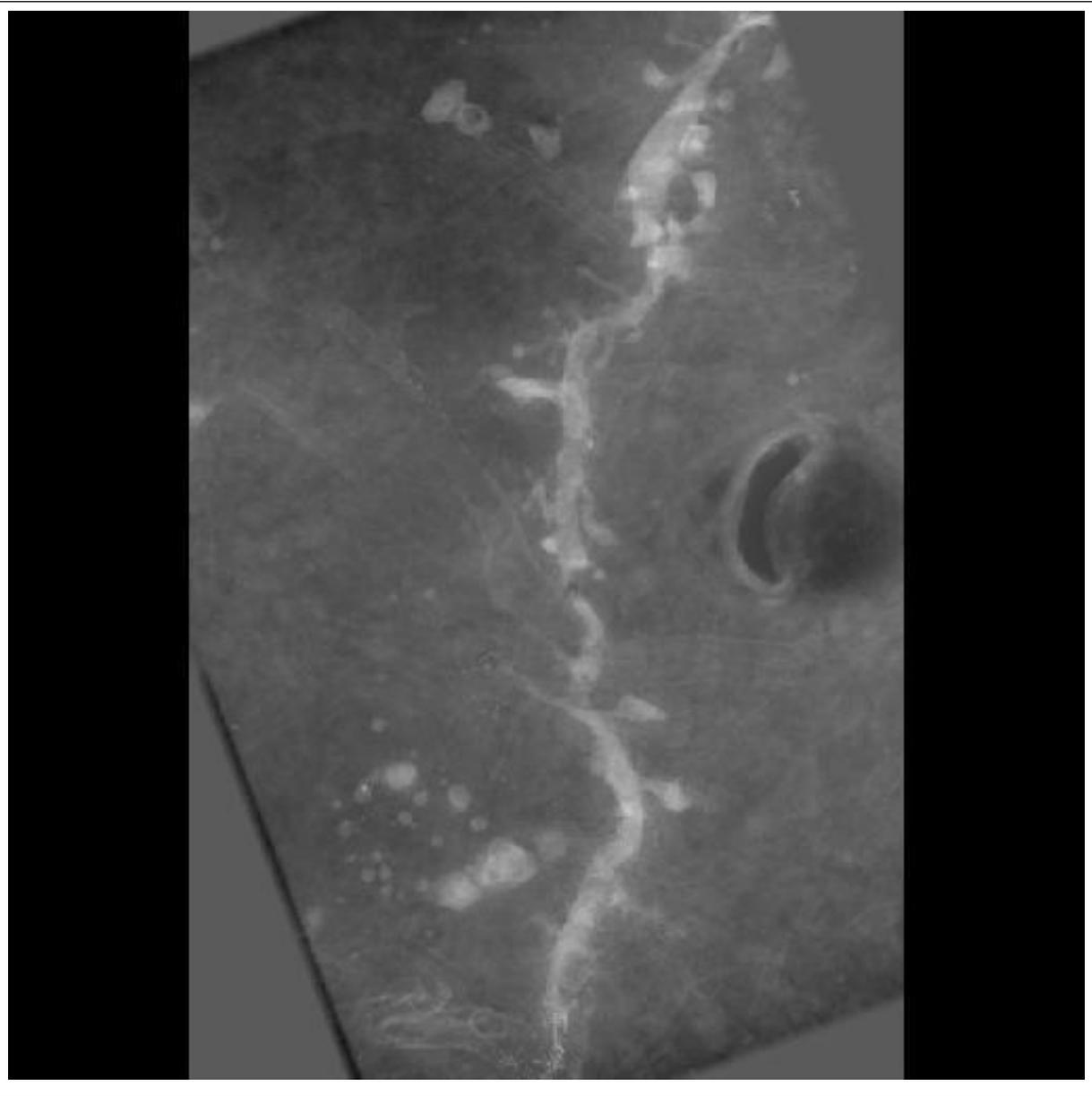
Image Type -	
SINGLE_TILT_IMAGE_SEQ_ID	6130
TILT_INCREMENT	2 degrees
SINGLET_DESC	Spiny Dendrite Tomo
SINGLE_TILT_NOTES	Missing angles: -30, +22, +44, +56
SINGLE_TILT_IMAGE_SEQ_ID	6130
TILT_INCREMENT	2 degrees
RANGE_MAX	70 degrees
RANGE_MIN	-70 degrees
SINGLET_DESC	Spiny Dendrite Tomo
SINGLE_NOTES	Missing angles: -30, +22, +44, +56

Specimen Description -	
ANATOMICAL_DETAIL	6164
ATLAS_COORD	, ,
CELL_TYPE	medium spiny neuron
ORGAN	brain
REGION	neostriatum
STRUCTURE	spiny dendrite
SYSTEM	central nervous system

Electron Microscopy Product -	
EM_PRODUCT_ID	6164
ACCELERATING_VOLTAGE	3 MeV
EMBEDDING_MEDIUM	resin
MAGNIFICATION	3000
RECORDING_MEDIUM	film

Raw 2D Image

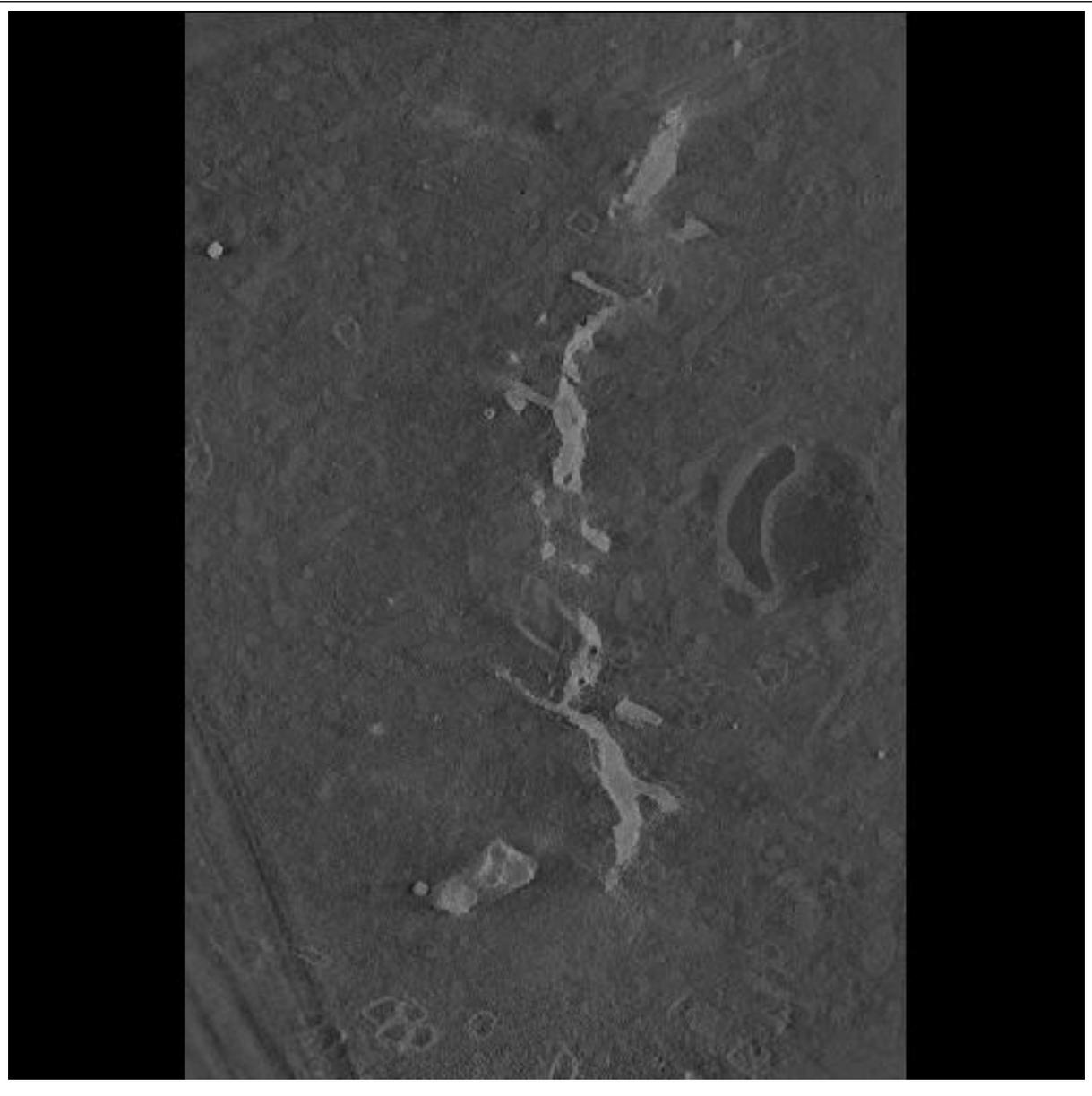
Raw Low Resolution 2D Image -



Raw 2D Image -	
IMAGE2D_ID	6147
IMAGE_DATE	2006-09-05 00:00:00.0
IMAGE_DESC	Tar file containing IMOD files (datkoc2g26.com/.log/.st/.preali/.fid/.rawtlt) used for the alignment and the original tiff images (in the TIFF folder in the format datkoc2g26000.tif.gz)
IMAGE_FILE_FORMAT	imod mrc
IMAGE_FILE_NAME	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_img.jpg
MAGNIFICATION	3000 X
RAW_ANIMATION_DESC	Animation of aligned electron microscopic tilt series of a selectively-stained spiny dendrite from a medium spiny neuron contained in a 4 um thick section from a dopamine transporter knock out mouse, imaged using ultra high voltage electron microscopy. Tilt series was obtained at 2 degree increments through +/- 70 degrees of tilt.
RAW_ANIMATION_FILE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_img.mpg
RAW_DATA_FILE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_img.tar
THUMBNAIL_DESC	Electron micrograph of a selectively-stained spiny dendrite from a medium spiny neuron contained in a 4 um thick section from a dopamine transporter knock out mouse, imaged using ultra high voltage electron microscopy.
THUMBNAIL_FILE	P1207/mp_3561_r_thumbnail.jpg
X_RESOLUTION	.021 um/pixel
Y_RESOLUTION	.021 um/pixel
X_SIZE	2242 pixels
Y_SIZE	3340 pixels

Reconstruction

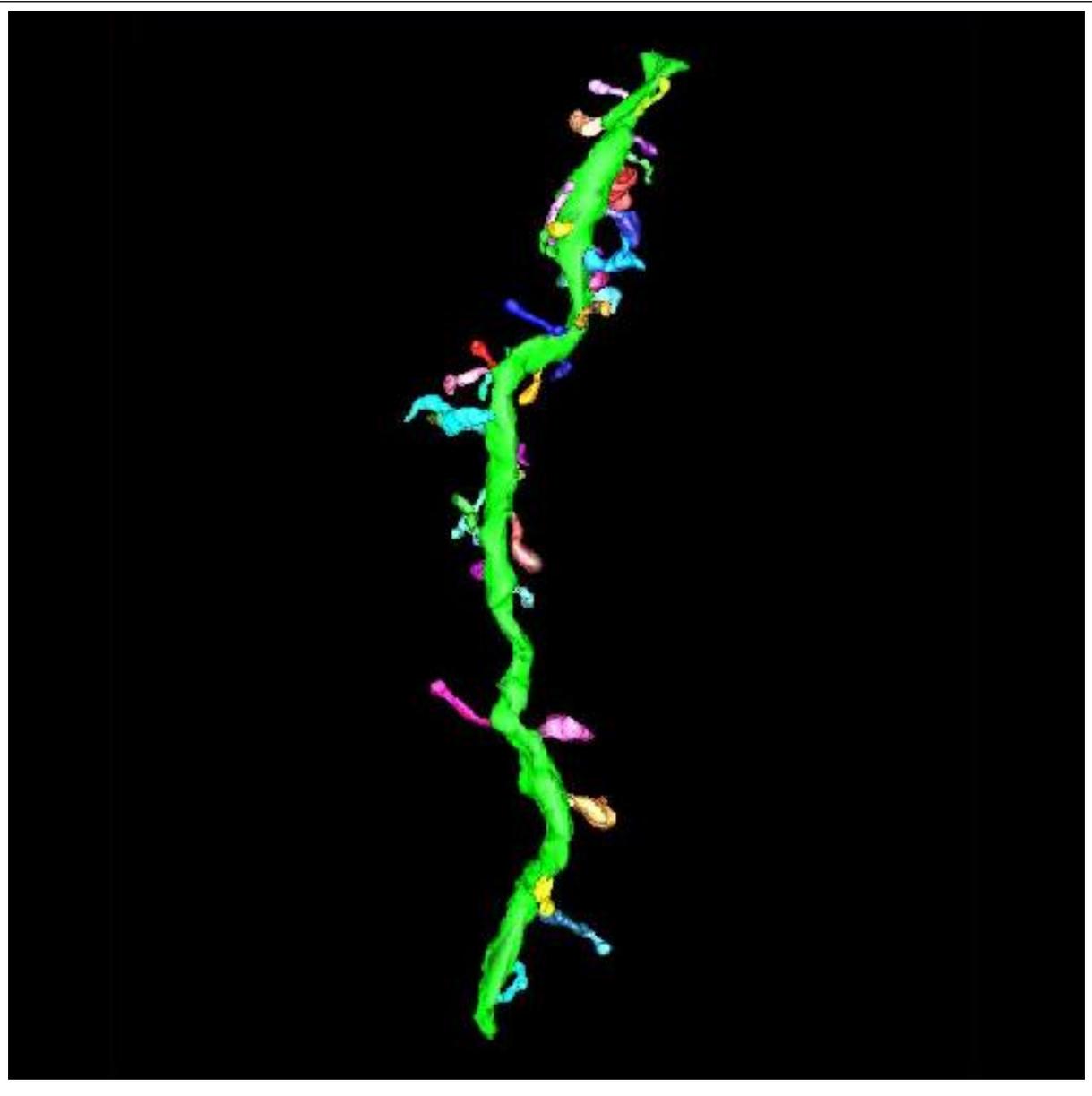
Reconstruction Image -



Reconstruction -	
RECONSTRUCTION3D_ID	6129
ALIGNMENT_METHOD	Imod
ALIGNMENT_PROGRAM	IMOD
CROPPING_COORDINATE1	,
CROPPING_COORDINATE2	,
FIDUCIAL_MARK_FILE	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26.fid
RECON_ALGORITHM	R-weighted back projection
RECON_DATE	2006-09-06 00:00:00.0
RECON_DESC	Tar file containing the IMOD .rec format (datkoc2g26_full.rec) for the volume reconstruction and Amira .am/.hx format image stack of the labels used (datkoc2g26_full-labels.am, datkoc2g26.hx).
RECON_PROGRAM	IMOD
RECON_TYPE	single tilt electron tomography
VOLUME_DIMENSION	1122, 200, 1670
VOLUME_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_vol.tar
VOXEL_SCALE	, ,
RECONSTRUCTION_IMAGES_ID	6129
RECON_IMAGE_DESC	Single computed slice through a tomographic reconstruction of a selectively-stained spiny dendrite from a medium spiny neuron contained in a 4 um thick section from the neostriatum of a dopamine transporter knock out mouse.
RECON_FILE_NAME	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_vol1.jpg
VOLUME_THUMBNAIL	P1207/datkoc2g26_thumb_vol2.jpg
ANIMATION_FILE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_vol1.mpg
ANIMATION_FILE_FORMAT	mpg
ANIMATION_DESC	Animation through the computed slices of a tomographic reconstruction of a selectively-stained spiny dendrite from a medium spiny neuron contained in a 4 um thick section from the neostriatum of a dopamine transporter knock out mouse.

Segmentation

Segmentation Image -



Segmentation -	
SEGMENTED_OBJECT_ID	6765
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	mushroom
OBJECT_NAME	spine7
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	3.3379 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.3844 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6773
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	double headed spine
OBJECT_NAME	spine15
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	3.3285 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.3128 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6782
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
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DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	mushroom
OBJECT_NAME	spine24
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	3.9633 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.4771 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6787
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
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DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine29
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	2.6145 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.1909 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6791
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
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DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	filopodia
OBJECT_NAME	spine33
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	.9401 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0365 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6795
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
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DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine37
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	.609 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0275 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6761
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
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DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine3
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.644 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.1594 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6778
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
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DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine20
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	2.7045 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.2307 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6794
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	double headed spine
OBJECT_NAME	spine36
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.5305 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.09 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6759
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	double headed spine
OBJECT_NAME	spine1
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	4.9003 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.4703 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6760
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine2
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	2.3968 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.2166 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6783
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine25
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.7914 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	1.7914 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6769
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	mushroom
OBJECT_NAME	spine11
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	3.6833 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.4419 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6764
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine6
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	.7884 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0403 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6790
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine32
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	.8139 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0508 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6774
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	filopodia
OBJECT_NAME	spine16
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.1006 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0666 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6762
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin/filopodial
OBJECT_NAME	spine4
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.5999 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0893 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6763
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine5
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	.8934 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0555 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6766
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin
OBJECT_NAME	spine8
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	3.9329 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.4907 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6767
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	n/a
OBJECT_NAME	spine9p
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	2.4118 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.2407 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6768
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin/filopodia
OBJECT_NAME	spine10
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.0693 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0663 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6796
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine38
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.771 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.121 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6797
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine39
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.3352 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0727 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6799
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	stubby
OBJECT_NAME	spine41
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	.2408 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0105 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6798
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	filopodia
OBJECT_NAME	spine40
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.396 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0597 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6771
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	mushroom
OBJECT_NAME	spine13
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	3.5012 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.4111 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6772
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine14
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.104 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0758 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6775
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	filopodia
OBJECT_NAME	spine17
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	.9929 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0526 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6776
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine18
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.698 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.1141 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6779
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine21
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.4171 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.084 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6780
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine22
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.3893 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0805 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6781
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine23
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.4182 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0862 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6784
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	double headed spine
OBJECT_NAME	spine26
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	2.5333 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.1892 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6785
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine27
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	.6526 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0361 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6786
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine28
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.1746 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0611 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6788
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	filopodia
OBJECT_NAME	spine30
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.495 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0778 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6789
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	mushroom
OBJECT_NAME	spine31
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	3.1835 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.3573 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6792
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine34
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.7644 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.098 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6793
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine35
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	.9105 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0439 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6770
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	thin spine
OBJECT_NAME	spine12
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.8891 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.1772 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6777
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
NUMBER_OF_OBJECT	1
OBJECT_DESC	filopodia
OBJECT_NAME	spine19
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	1.5052 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	.0928 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	6758
ANALYSIS_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/segmented_object_input_template_datkoc2g26.xls
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
ANALYZE_DESC	Volume and surface area of individual spines were calculated using IMOD, and the length of the shaft was calculated using Amira. Partial dendrites are noted with a "p" in their object names. Subsequently, their measurements are not taken.
DISPLAY_IMAGE_DESC	Surface rendering of a spiny dendrite from a medium spiny neuron in the neostriatum of a dopamine transporter knock out mouse that were manually segmented and then surfaced. Each spine was segmented separately. The dendritic shaft is rendered in green and the spines are multiple colors.
DOWNLOADABLE_FILE_DESC	a .tar file containing the segmentation files of a dendritic shaft and individual spines in IMOD's .mod format (datkoc2g26_full.mod)
IS_MANUAL	Y
LABELING_RANK	none
LENGTH	32.35 um
NUMBER_OF_OBJECT	1
OBJECT_DESC	Dendritic shaft
OBJECT_NAME	shaft
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.jpg
SEGMENT_PERSON_NAME	James Obayashi
SEG_ALGORITHM	Manual via IMOD
SEG_DESC	Manual tracing of dendritic spines from tomographic volume using IMOD version 3.7, followed by surfacing using IMOD with smoothsurf
SEG_FILE_NAME	/telescience/home/CCDB_DATA_USER.portal/P1207/Experiment_19/Subject_19/Tissue_33/Microscopy_3561/datkoc2g26_seg.tar
SURFACE_AREA	74.1779 um ²
THUMBNAIL	P1207/datkoc2g26_seg_thumb.jpg
VOLUME	11.2622 um ³

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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:

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Maryann Martone