

# Cell Centered Database

University of California, San Diego

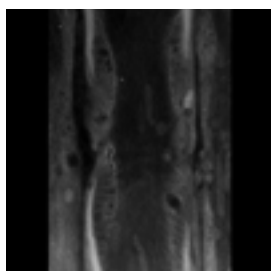
Maryann Martone

Microscopy Product #:49 HPF\_node

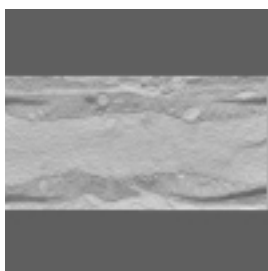
For the most updated information, please visit

<http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=49>

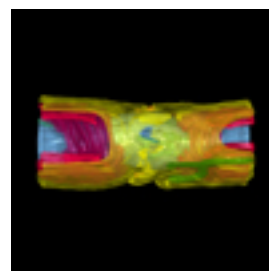
Image2D



Reconstruction



Segmentation



## Project Information:

PROJECT_ID	P1136
PROJECT_NAME	Dynamics of membrane organization at the node of Ranvier
PROJECT_DESCRIPTION	Serial tomogram of a conventionally prepared peripheral nerve Node of Ranvier
LEADER	<a href="#">Mark Ellisman</a> , <a href="#">Gina Sosinsky</a>
FUNDING_AGENCY	NIH NINDS
PROJECT_START_DATE	1995-08-01 00:00:00.0
PROJECT_END_DATE	2006-06-30 00:00:00.0
COLLABORATORS	N.A
PUBLICATION1	<a href="#">Gina E.Sosinsky</a> ; <a href="#">Thomas J.Deerinck</a> ; <a href="#">Rocco Greco</a> ; <a href="#">Casey H. Buitenhuys</a> ; <a href="#">Thomas M.Bartol</a> and <a href="#">Mark H. Ellisman</a> . Development of a model for microphysiological simulations: small nodes of ranvier from peripheral nerves of mice reconstructed by electron tomography. <i>Neuroinformatics</i> . 2005;3(2):133-62. PMID: 15988042
PUBLICATION2	
PUBLICATION3	

Experiment Information -	
PURPOSE	Structure and modeling
TITLE	Serial section electron tomography
EXPERIMENTER	Gina Sosinsky, Tom Deerinck
EXPERIMENT_NAME	
EXPERIMENT_DATE	2000-09-26 00:00:00.0

Subject Information -	
GROUP_BY	
SUBJECT_NAME	NA
FIXATION_METHOD_ID	
SCIENTIFIC_NAME	mus musculus
SPECIES	mouse
STRAIN	Unspecified
AGE	3 days
AGECLASS	neonate
ANIMAL_NAME	
LITTER_ID	
SEX	male
VENDOR	
WEIGHT	

Tissue -	
ANATOMIC_LOCATION	dorsal root
MICROTOME	Leica Ultracut UCT
ORIENTATION	longitudinal sec
THICKNESS	.5 um
TISSUE_PROD_STORAGE	Liquid nitrogen
EXTERNAL_FILE_NAME	
TISSUE_GROUP_TYPE	

Microscopy Product Information -	
MICROSCOPY_PRODUCT_ID	49
IMAGE_BASENAME	HPF_node
CREATE_DATE	2000-09-26 00:00:00.0
INSTRUMENT	JEOL 4000
MICROSCOPE_TYPE	IVEM
PLANE_COUNT	
PRODUCT_TYPE	single tilt
PURL	NA
SESSION_NAME	
TELESCIENCE_SRB	P1136/Experiment_29/Subject_30/Tissue_40/Microscopy_49
X_RESOLUTION	50 nm
Y_RESOLUTION	50 nm
XSIZE	800
YSIZE	1000

## Protocol:

N/A

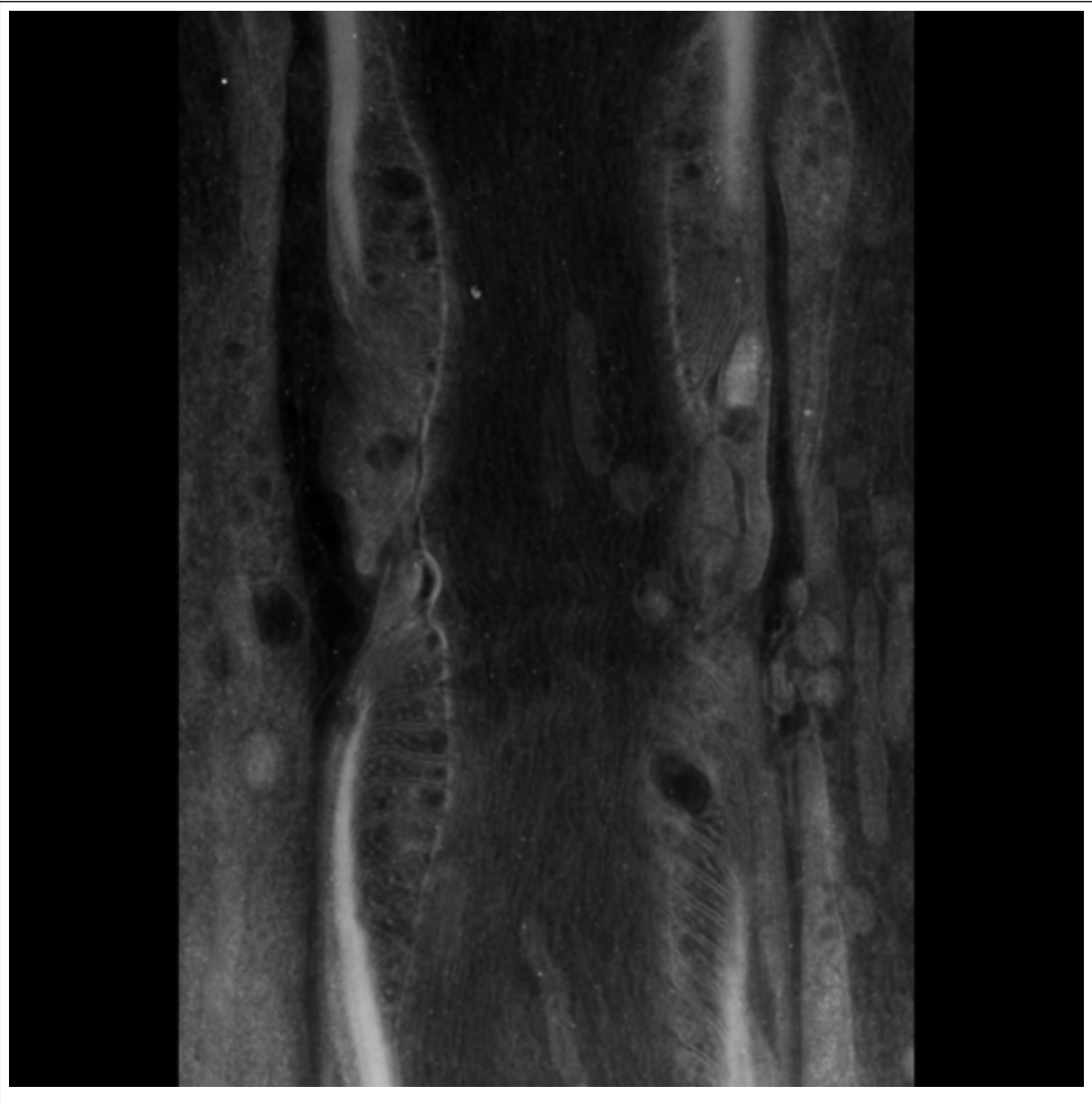
Image Type -	
SINGLE_TILT_IMAGE_SEQ_ID	16
TILT_INCREMENT	2 degrees
SINGLE_TILT_IMAGE_SEQ_ID	16
TILT_INCREMENT	2 degrees
RANGE_MAX	60 degrees
RANGE_MIN	-60 degrees

Specimen Description -	
ANATOMICAL_DETAIL	49
ATLAS_COORD	, ,
CELL_TYPE	Schwann cell
REGION	dorsal root
STRUCTURE	Node of Ranvier
SYSTEM	peripheral nervous system
TISSUE	peripheral nerve

Electron Microscopy Product -	
EM_PRODUCT_ID	16
ACCELERATING_VOLTAGE	400 KeV
MAGNIFICATION	25000

# Raw 2D Image

Raw Low Resolution 2D Image -

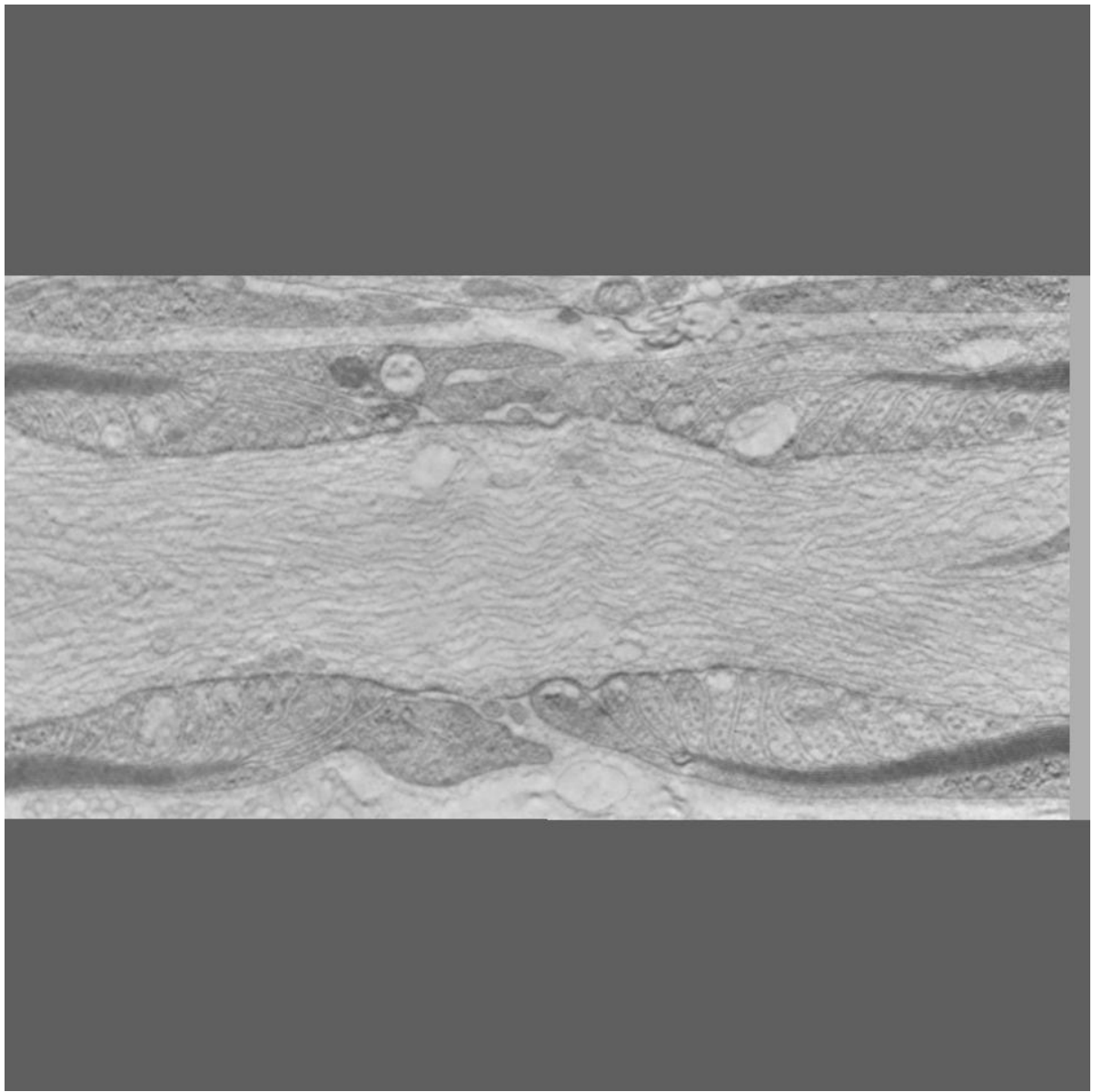


**Raw 2D Image -**

IMAGE2D_ID	49
IMAGE_FILE_NAME	P1136GINA/HPF_node/HPF_img.jpg
RAW_DATA_FILE	P1136GINA/HPF_node/HPF_node_img.tar
THUMBNAIL_DESC	Zero tilt image through a 0.500 um section of the Node of Ranvier
THUMBNAIL_FILE	P1136/HPF_img_thmb.jpg

# Reconstruction

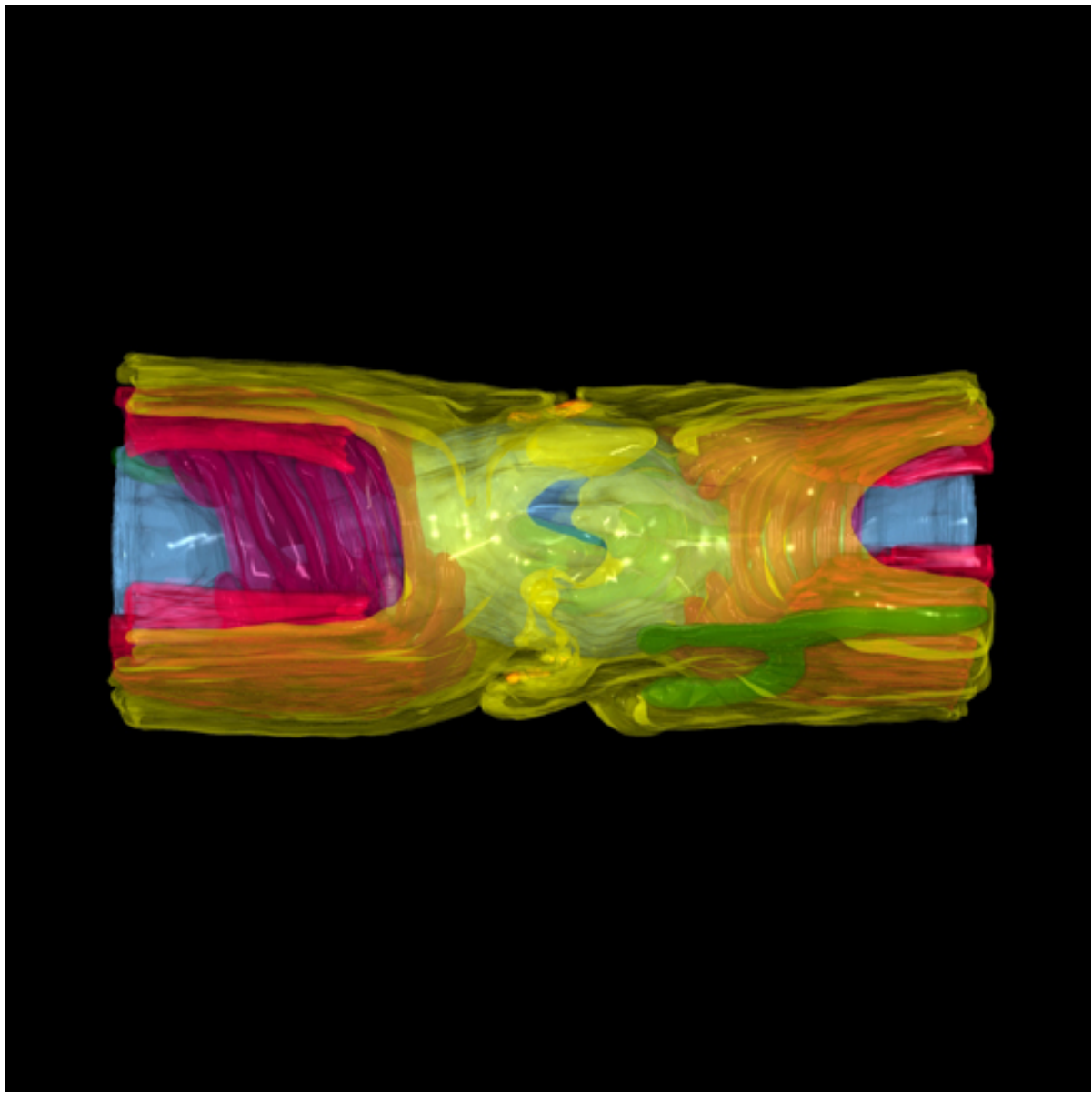
Reconstruction Image -



Reconstruction -	
RECONSTRUCTION3D_ID	49
ALIGNMENT_METHOD	Suprim
ALIGNMENT_PROGRAM	Suprim, Imod
BASENAME_ORIGFILE	NA
CROPPING_COORDINATE1	,
CROPPING_COORDINATE2	,
RECON_ALGORITHM	R-weighted back projection
RECON_DATE	2002-06-05 00:00:00.0
RECON_DESC	Serial tomographic reconstruction from 3 serial volumes. The resulting volume was mirrored and merged with the original to form a relatively complete node of Ranvier. The downloadable zip file contains the merged volume in Analyze 7.5 format
RECON_PROGRAM	Suprim, IMOD
RECON_TYPE	double tilt electron tomography
THUMBNAIL	P1136/HPF_node_vt.jpg
VOLUME_DIMENSION	950, 950, 199
VOLUME_NAME	P1136GINA/HPF_node/HPF_node_vol.tar
VOXEL_SCALE	.005, .005, .008
RECONSTRUCTION_IMAGES_ID	49
RECON_IMAGE_DESC	Single slice through a single tilt tomogram of the Node of Ranvier from mouse sciatic nerve prepared by high pressure freezing and freeze substitution of aldehyde fixed material
RECON_RAW_FILENAME	P1136GINA/HPF_node/HPF_node_vol.zip
RECON_FILE_NAME	P1136GINA/HPF_node.jpg
VOLUME_THUMBNAIL	P1136/HPF_node_vt.jpg
IMAGE_BASENAME	HPF_node
ANIMATION_FILE	P1136GINA/node-video1-sm.mov
EMAIL	gina@ncmir.ucsd.edu
OWNER	Gina Sosinsky
PUBLICATION	Gina E.Sosinsky;Thomas J.Deerinck;Rocco Greco;Casey H. Buitenhuis;Thomas M.Bartol and Mark H. Ellisman. Development of a Model for Microphysiological Simulations: Small Nodes of Ranvier from Peripheral Nerves of Mice Reconstructed by Electron Tomography. Neuroinformatics. 2005. ISSN 1539-2791/05/1-30
ANIMATION_DESC	Annotated movie traversing the slices of the serial tomogram and identifying the segmented objects in the surface rendering

# Segmentation

Segmentation Image -





Segmentation -	
SEGMENTED_OBJECT_ID	6057
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	lysosome
OBJECT_NAME	Lysosome_1
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6057
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6070
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	compact myelin

## Segmentation -

OBJECT_NAME	compact_myelin_mergedown
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6070
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6085
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop7_lower
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6085
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	198
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be

Segmentation -	
	complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	198
SEGMENT_PERSON_NAME	Casey Buitenhuys
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6054
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	endoplasmic reticulum
OBJECT_NAME	ER
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6054
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg

## Segmentation -

SEGMENTED_OBJECT_ID	6055
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	endoplasmic reticulum below the large lysosome
OBJECT_NAME	ER_lower
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6055
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6056
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	Loop8_II

## Segmentation -

OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6056
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6058
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	lysosome
OBJECT_NAME	Lysosome_2
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6058
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6059
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure.

Segmentation -	
	See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	lysosome
OBJECT_NAME	Lysosome3
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6059
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6060
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	microvilli
OBJECT_NAME	Mlcro3_r
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6060
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg

## Segmentation -

SEGMENTED_OBJECT_ID	6061
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	microvilli
OBJECT_NAME	Micro1_I IN
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6061
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6062
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	microvilli
OBJECT_NAME	Micro1_r

## Segmentation -

OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6062
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6063
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	microvilli
OBJECT_NAME	Micro2_I
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6063
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6064
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure.



Segmentation -	
	See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	microvilli
OBJECT_NAME	Micro2_r
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6064
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6065
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	mitochondria inside of the axon
OBJECT_NAME	Mitochondria1
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6065
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg

## Segmentation -

SEGMENTED_OBJECT_ID	6066
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	mitochondria in the Schwann cell
OBJECT_NAME	Schwann_mito
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6066
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6067
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	Schwann cell
OBJECT_NAME	Shwann_lowermerge

## Segmentation -

OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6067
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6068
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	cisternae inside paranodal loop
OBJECT_NAME	U.L.Cisternae
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6068
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6069
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure.

<b>Segmentation -</b>	
	See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	nodal axon
OBJECT_NAME	axon
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6069
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6071
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	compact myelin
OBJECT_NAME	compact_myelin_mergeup
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6071
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg

## Segmentation -

SEGMENTED_OBJECT_ID	6072
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	crop
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6072
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6073
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop1_lower

## Segmentation -

OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6073
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6074
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop1_lower_best
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6074
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6075
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure.

Segmentation -	
	See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop2_lower
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6075
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6076
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop2_upper
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6076
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg

## Segmentation -

SEGMENTED_OBJECT_ID	6077
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop3_lower
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6077
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6078
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop3_upper



## Segmentation -

OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6078
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6079
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop4_lower
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6079
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6080
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure.

Segmentation -	
	See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop4_upper
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6080
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6081
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop5_lower
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6081
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg

## Segmentation -

SEGMENTED_OBJECT_ID	6082
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop5_upper
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6082
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6083
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop6_lower

## Segmentation -

OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6083
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6084
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop6_upper
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6084
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6086
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure.

Segmentation -	
	See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop7_upper
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6086
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6087
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop8_upper
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6087
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg

## Segmentation -

SEGMENTED_OBJECT_ID	6088
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loop9_upper
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6088
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6089
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loop
OBJECT_NAME	loops

## Segmentation -

OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6089
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6090
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	paranodal loops
OBJECT_NAME	mito1
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6090
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6091
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure.

Segmentation -	
	See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	cisternae inside paranodal loop
OBJECT_NAME	sister_nay
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6091
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg
SEGMENTED_OBJECT_ID	6092
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
ANALYZE_DESC	Prior to segmentation, a "complete" version of the Node was created by mirroring the original volume which comprised a sagittal cut through the middle of the axon. Segmented objects appear to be complete, but they are based on only half of the actual structure. See paper for more details.
DOWNLOADABLE_FILE_DESC	Zip archive containing the trace file node_marge2.trace and the segmented objects in synu (*.synu) and Amira (*.iv) format. Also included are several renderings of the surface model. These segmentations were produced from the mirrored volume file to mimic a complete node. That is, the original reconstruction of a sagittal section through a node was mirrored to produce the appearance of a single complete node.
OBJECT_DESC	Schwann cell
OBJECT_NAME	upperschwannmerge
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	P1136GINA/HPF_node/HPF_node_seg.jpg
SEGMENTED_OBJECT_ID	6092
SEG_DESC	Manual segmentation of axonal and glial components of the Node of Ranvier using Xvoxtrace v 2.9. Different parts of the myelin sheath were segmented as different objects. Objects were surfaced using both Synu and Amira
SEG_FILE_NAME	P1136GINA/HPF_node/HPF_node_seg.zip
THUMBNAIL	P1136/HPF_node_seg_thmb.jpg



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## **ACKNOWLEDGEMENT**

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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