

# Cell Centered Database

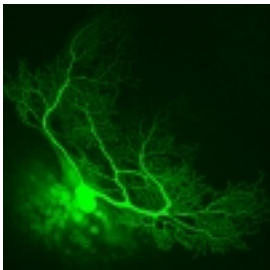
University of California, San Diego

[maryann@ncmir.ucsd.edu](mailto:maryann@ncmir.ucsd.edu)

Microscopy Product #:6 e1cb4a3

For the most updated information, please visit

<http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=6>

| Image2D | Reconstruction  | Segmentation |
|---------|---|--------------|
|         |  |              |

## Project Information:

|                     |  |
|---------------------|--|
| PROJECT_ID          | P1170  |
| PROJECT_NAME        | Mouse BIRN test data   |
| PROJECT_DESCRIPTION | NeuroLucida tracing of filled Purkinje neurons   |
| LEADER              | <a href="#">Maryann Martone</a>  |
| FUNDING_AGENCY      | NIH  |
| PROJECT_START_DATE  | 2002-03-01 00:00:00.0  |
| PROJECT_END_DATE    |  |
| COLLABORATORS       | <a href="#">Diana Price</a> , <a href="#">Andrea Thor</a> , Masako Terada, Hiro Hakozaki |
| PUBLICATION1        |  |
| PUBLICATION2        |  |
| PUBLICATION3        |  |

| Experiment Information - |  |
|--------------------------|--|
| PURPOSE                  | to obtain multi resolution data for Mouse BIRN |
| TITLE                    | Intracellular injection of Purkinje neuron     |
| EXPERIMENTER             | Andrea Thor & Diana Price                      |
| EXPERIMENT_NAME          |  |
| EXPERIMENT_DATE          |  |

| Subject Information - |              |
|-----------------------|--------------|
| GROUP_BY              |              |
| SUBJECT_NAME          |              |
| FIXATION_METHOD_ID    |              |
| SCIENTIFIC_NAME       | mus musculus |
| SPECIES               | mouse        |
| STRAIN                | C57BL/6      |
| AGE                   | 2 months     |
| AGECLASS              | adult        |
| ANIMAL_NAME           |              |
| LITTER_ID             |              |
| SEX                   | male         |
| VENDOR                |              |
| WEIGHT                | 23.6 grams   |

| Tissue -            |            |
|---------------------|------------|
| ANATOMIC_LOCATION   | cerebellum |
| MICROTOME           | vibratome  |
| ORIENTATION         | sagittal   |
| THICKNESS           | 100 um     |
| TISSUE_PROD_STORAGE |            |
| EXTERNAL_FILE_NAME  |            |
| TISSUE_GROUP_TYPE   |            |

| Microscopy Product Information - |  |
|----------------------------------|--|
| MICROSCOPY_PRODUCT_ID            | 6  |
| IMAGE_BASENAME                   | e1cb4a3  |
| CREATE_DATE                      | 2002-04-16 00:00:00.0                              |
| INSTRUMENT                       | Biorad Radiance 2000 Confocal                      |
| MICROSCOPE_TYPE                  | confocal   |
| PLANE_COUNT                      | 1  |
| PRODUCT_TYPE                     | optical section series                             |
| PURL                             | NA   |
| SESSION_NAME                     |  |
| TELESCIENCE_SRB                  | P1170/Experiment_3/Subject_3/Tissue_3/Microscopy_6 |
| X_RESOLUTION                     |  |
| Y_RESOLUTION                     |  |
| XSIZE                            | 1024   |
| YSIZE                            | 1024   |

## Protocol:

N/A

## Specimen Preparation Information:

| Specimen Description - |                           |
|------------------------|---------------------------|
| ANATOMICAL_DETAIL      | 6                         |
| ATLAS_COORD            | .36, -7.375, -2.875       |
| CELL_TYPE              | Purkinje neuron           |
| MAP_LOCATION           | e1cb4a3/e1cb4a3_atlas.jpg |
| ORGAN                  | brain                     |
| REGION                 | cerebellum                |
| SYSTEM                 | central nervous system    |

## Imaging Parameters:

| Image Type -           |        |
|------------------------|--------|
| OPTICAL_SECTION_SERIES | 6      |
| OPTICAL_Z_RESOLUTION   | .25 um |

| Light Microscopy Product - |          |
|----------------------------|----------|
| LMPRODUCT_ID               | 6        |
| COVER_SLIP_THICKNESS       | 1 um     |
| IMMERSION_MEDIUM           | oil      |
| LENS_MAGNIFICATION         | 60 X     |
| MOUNTING_MEDIUM            | gelvatol |
| NUMERICAL_APERTURE         | 1.4      |

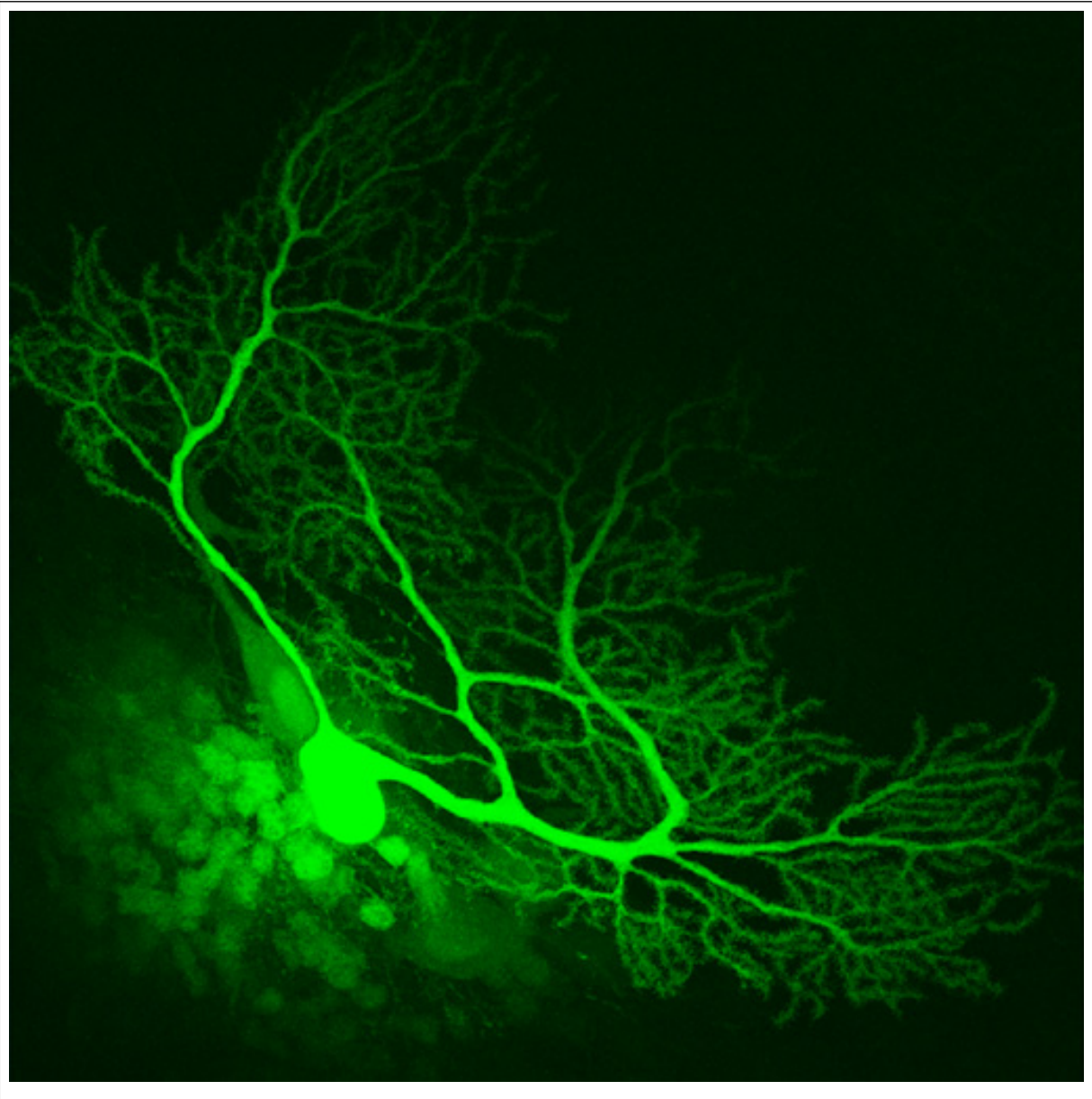
# Raw 2D Image

Raw Low Resolution 2D Image -

N/A

# Reconstruction

Reconstruction Image -



| Reconstruction -         |   |
|--------------------------|---|
| RECONSTRUCTION3D_ID      | 6   |
| CROPPING_COORDINATE1     | ,   |
| CROPPING_COORDINATE2     | ,   |
| DECONVO_PROGRAM          | no  |
| RECON_DATE               | 2002-04-16 00:00:00.0   |
| RECON_TYPE               | optical section series/mosaic   |
| THUMBNAIL                | P1170/e1cb4a3_vt.jpg  |
| VOLUME_DIMENSION         | 1024, 1024, 69  |
| VOLUME_NAME              | e1cb4a3/e1cb4a3_raw.pic   |
| VOXEL_SCALE              | .12, .12, .25   |
| RECONSTRUCTION_IMAGES_ID | 6   |
| RECON_IMAGE_DESC         | Purkinje neuron from mouse cerebellum injected with Lucifer Yellow and imaged using confocal microscopy                     |
| RECON_FILE_NAME          | e1cb4a3/E1CB4A3_MIP.jpg   |
| VOLUME_THUMBNAIL         | P1170/e1cb4a3_vt.jpg  |
| ANIMATION_FILE           | e1cb4a3/e1cb4a3_movie.avi   |
| ANIMATION_DESC           | Rotation loop of a maximum intensity projection of a Purkinje neuron injected with Lucifer Yellow, rotated along the y axis |

# Segmentation

Segmentation Image -

N/A

Segmentation -

SEGMENTED\_OBJECT\_ID

6



## **USER AGREEMENT**

Data Sharing and Citation Policy: The mission of the CCDB is to promote data sharing among scientists interested in cellular and subcellular anatomy and in developing computer algorithms for 3D reconstruction and modeling of such data. Data sets may be viewed or shared at the discretion of the author of the data. In some cases, the data may be freely viewed and downloaded without contacting the original author while in other cases, permission of the author may have to be obtained prior to downloading the data. In either case, failure to cite or give proper credit to the original authors who collected these data in subsequent published articles or presentations is a material breach of this User Agreement. CCDB requires all researchers re-analyzing these published data via the CCDB access to reference the original published article and the CCDB. An example of an appropriate acknowledgement is provided on the CCDB web site. CCDB is not in a position to police every intended use of these data. The scientific community will self-police the compliance of this contractual obligation.

## **DISCLAIMER**

THE DATA PROVIDED BY THE CCDB ARE FREELY DISTRIBUTED AND WITHOUT CHARGE. THESE DATA ARE PROVIDED BY THE CCDB "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT, TO ANY THIRD PARTY RIGHTS. IN NO EVENT SHALL THE CCDB BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THESE DATA, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## **USER NOTIFICATION**

For large size image data, it will take several minutes to download, please be patient. Thanks!

## **ACKNOWLEDGEMENT**

Data used from the CCDB should be appropriately referenced, including both the author of the data and the CCDB. If the data were from a published study, the reference is included in the database record. The following reference should be cited for the CCDB:

Martone, M. E., Gupta, A., Wong, M., Qian, X., Sosinsky, G., Ludaescher, B., and Ellisman, M. H. A cell centered database for electron tomographic data. *J. Struct. Biology* 138: 145-155, 2002.

In addition, the support for the Cell Centered Database should be included in the acknowledgement section of any publication: The Cell Centered Database is supported by NIH grants from NCRR RR04050, RR RR08605 and the Human Brain Project DA016602 from the National Institute on Drug Abuse, the National Institute of Biomedical Imaging and Bioengineering and the National Institute of Mental Health, and NSF grants supporting the National Partnership for Advanced Computational Infrastructure NSF-ASC 97-5249 and MCB-9728338.

Maryann Martone