Three-dimensional digital template atlas of the Macaque brain

Article  (Supplemental Material)


This version is available from Sussex Research Online: http://sro.sussex.ac.uk/id/eprint/63053/

This document is made available in accordance with publisher policies and may differ from the published version or from the version of record. If you wish to cite this item you are advised to consult the publisher's version. Please see the URL above for details on accessing the published version.

Copyright and reuse:
Sussex Research Online is a digital repository of the research output of the University.

Copyright and all moral rights to the version of the paper presented here belong to the individual author(s) and/or other copyright owners. To the extent reasonable and practicable, the material made available in SRO has been checked for eligibility before being made available.

Copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.
Figure 2

Original D99 T1
(Lacks contrast and sharpness)

DB58 T1
(High contrast ex-vivo brain)

DB58 nonlinearly aligned to D99

Surrogate D99
with high spatial resolution (0.25 mm),
and gray/white matter contrast
Subject MQ registered to Digital atlas

Digital atlas registered to subject MQ

Same section as in Fig. 7F
(slightly rotated to match with histology section shown in Fig. 7J)
Fig. 7

Registration of 3D atlas to test subjects with histological confirmation of architectonic areas

Subject MQ (in-vivo MRI)  Digital atlas (D99) registered to MQ  Histology section of MQ (SMI-32 staining)

A  E  I  M
slice # 32

B  F  J  N
slice # 20

C  G  K  O
slice # 9

D  H  L  P

Subject BASS (in-vivo MRI)  Digital atlas (D99) registered to BASS  Histology section of BASS (Nissl staining)

D  H  L  S

See Fig. 3F in Scott et al. (2015)

area A1 (auditory core)

area RM (auditory medial belt)

STN (Subthalamic nucleus)  SN (substantia nigra)  MB (Mammillary bodies)

area EC (entorhinal cortex)

CA1 region of hippocampus

area TGdd (medial temporal pole)
Suppl. Figure 1

Ex-vivo surrogate D99

Original D99 with Gibbs artifacts removed

A

B

+20

+15