

[1]  
[2]

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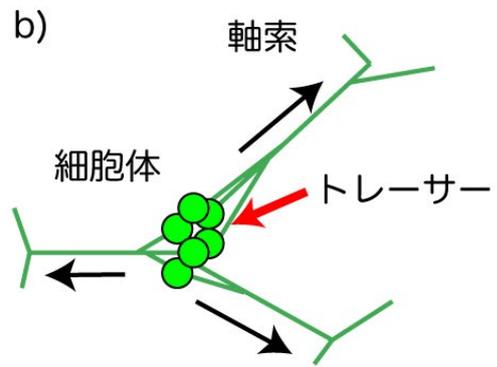
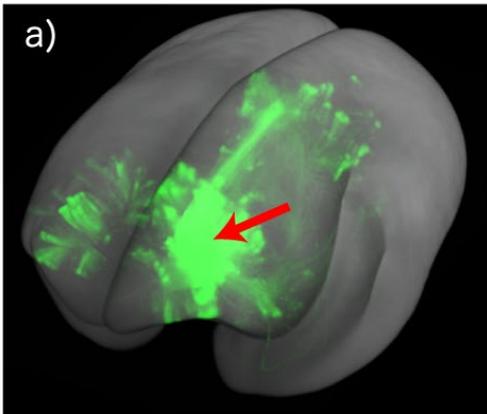
2014

[3]

3 3D

2

Neuron 5 16 5 17



3D

a

b

419 1

[4]

2014

1,000

1 2020

<https://www.mhlw.go.jp/content/12200000/000940708.pdf>

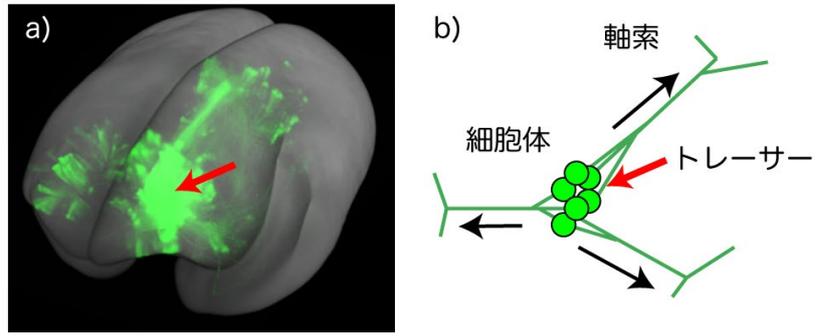
10 1 170 1

30 1

[5]

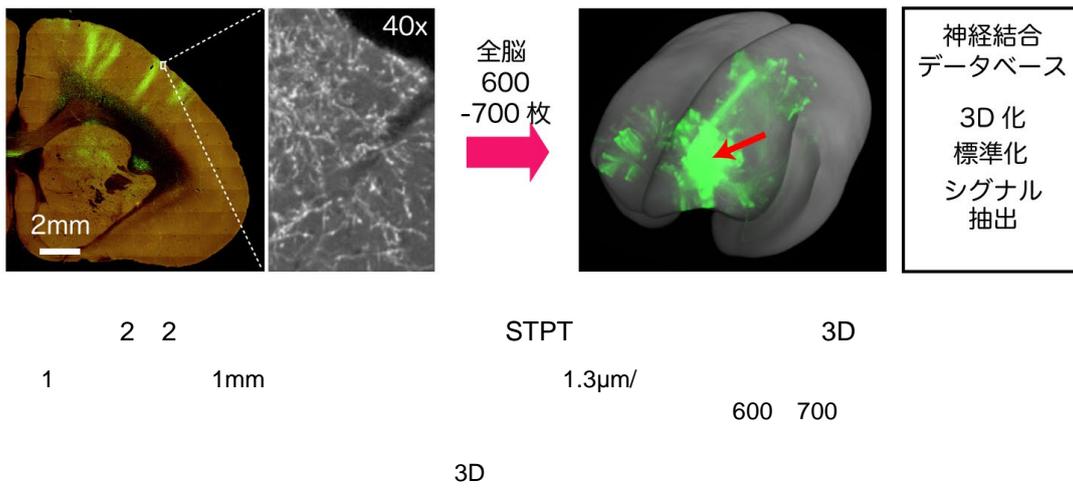
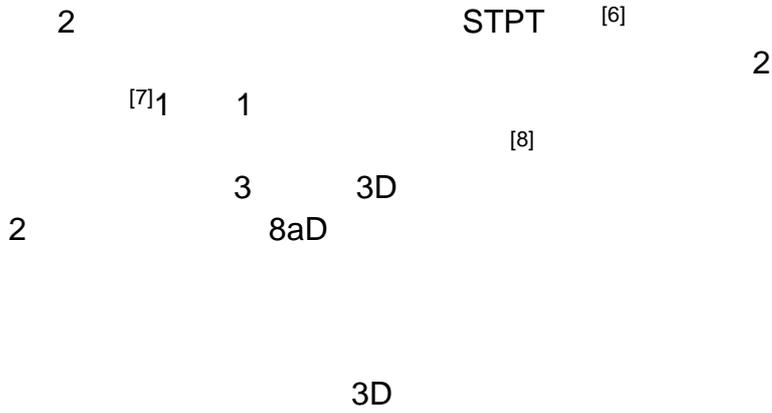
[3]

1



1  
a)  
3D  
b)

3D



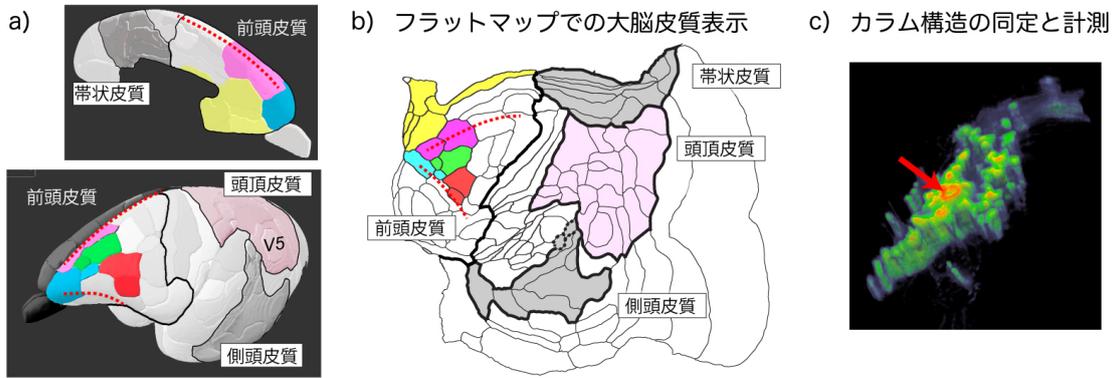
1 2 2 1mm

STPT 3D  
1.3μm/ 600 700

3D

3a

3c



3

a)

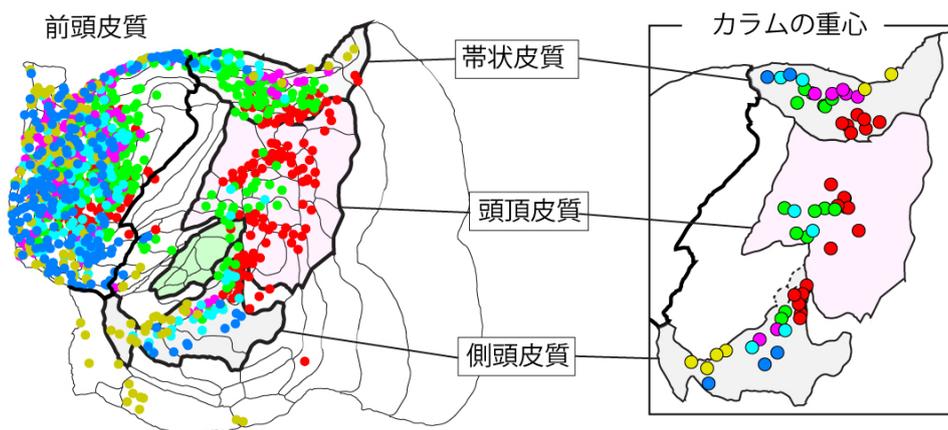
b) a

c)

2

[9] [9] [9]  
[9]

4



4

MRI MRI [10] MRI

Local and long-distance organization of prefrontal cortex circuits in the marmoset brain

Akiya Watakabe, Henrik Skibbe, Ken Nakae, Hiroshi Abe, Noritaka Ichinohe, Muhammad Febrian Rachmadi, Jian Wang, Masafumi Takaji, Hiroaki Mizukami, Alexander Woodward, Rui Gong, Junichi Hata, David C. Van Essen, Hideyuki Okano, Shin Ishii, Tetsuo Yamamori

*Neuron*

DOI

10.1016/j.neuron.2023.04.028

[1]

300 500g

1

2

[2]

ADHD

[3]

10 100 $\mu$ m

mm

2

AAV

[4]

Brain/MINDS Project  
Brain Project

China Brain Project  
2013

BRAIN Initiative

; Human

[5]

MRI 2  
mm

$\mu$ m

STPT

[6] 2

2012

Ragan

STPT

2014

2

imaging

2

STPT

Serial two-photon tomography

[7]

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[8]

2

1

3

[9]

3

[10]

MRI

MRI f-MRI  
Resonance Imaging

DWI  
MRI Magnetic

Jian Wang

Henrik Skibbe

Muhammad Febrian Rachmadi

Alexander Woodward  
Rui Gong

David C. Van Essen

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