



身體 · 心靈 · 文化 整合影像研究中心

IMAGING CENTER *for Integrated*
BODY, MIND AND CULTURE Research

Welcome to Prisma



System Manager: Chia-Wei Li

Operator: Ya-Chih Yu, Irene Hsu

- ▶ The newest generation of Siemens
with the 3 major advantages(1/3)

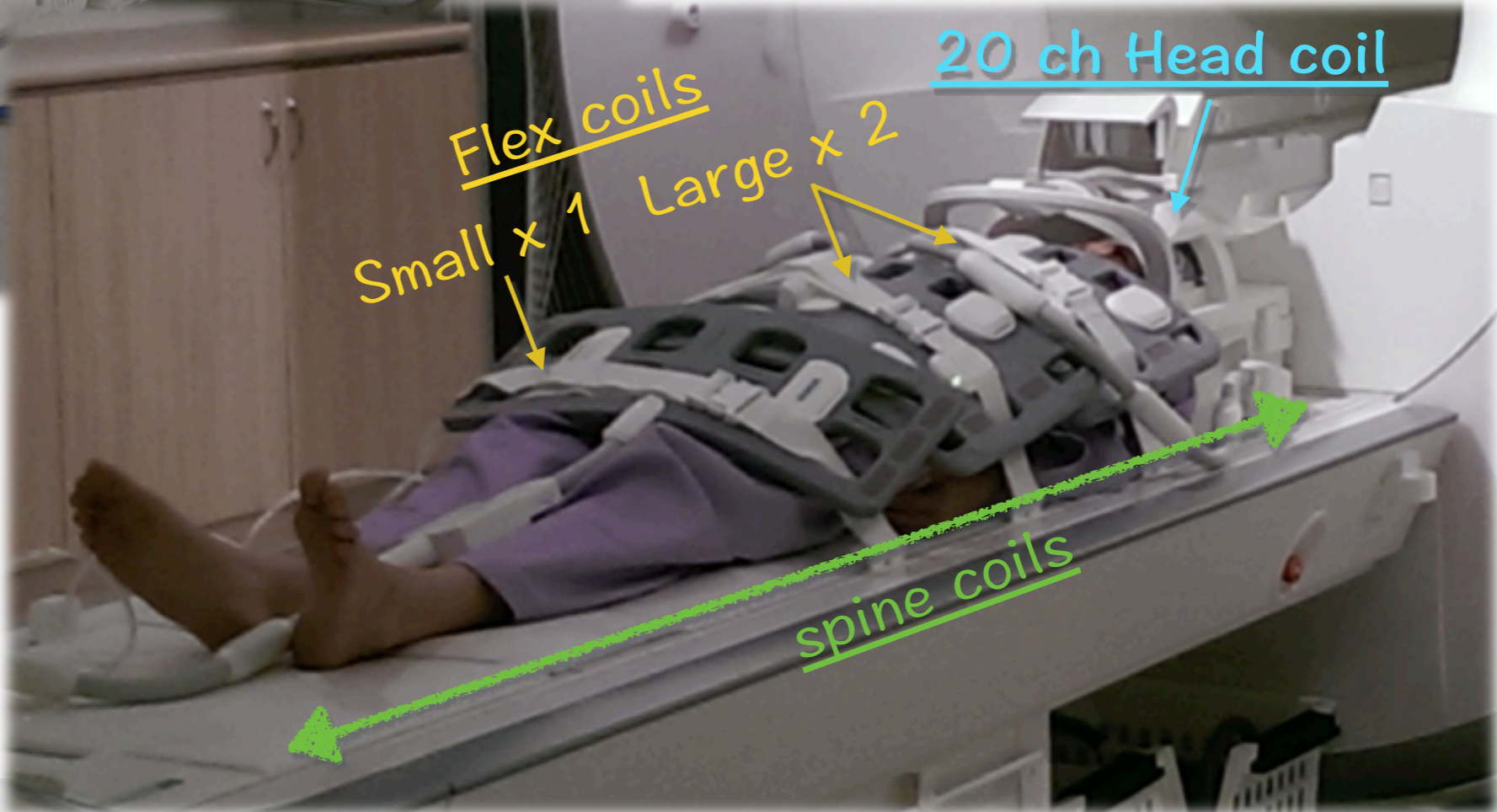
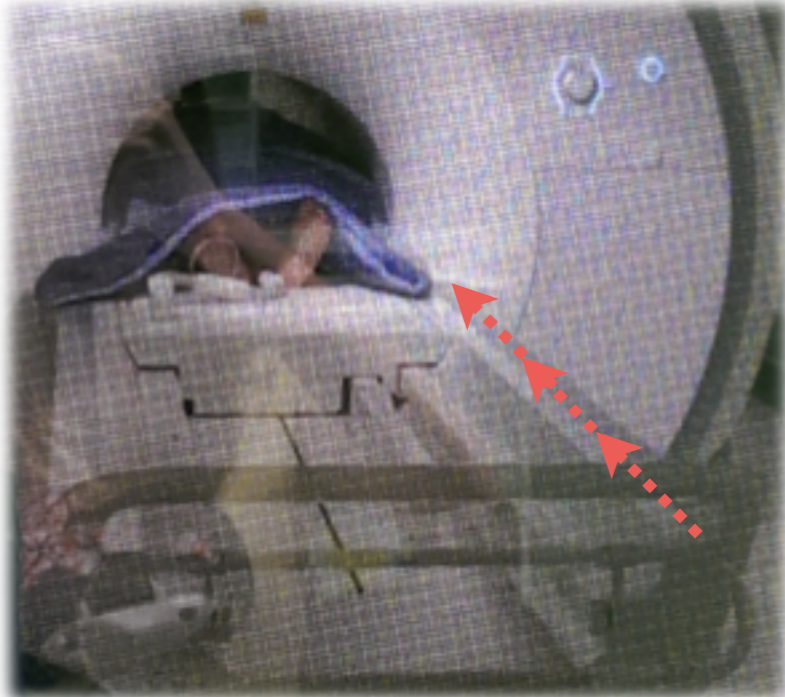
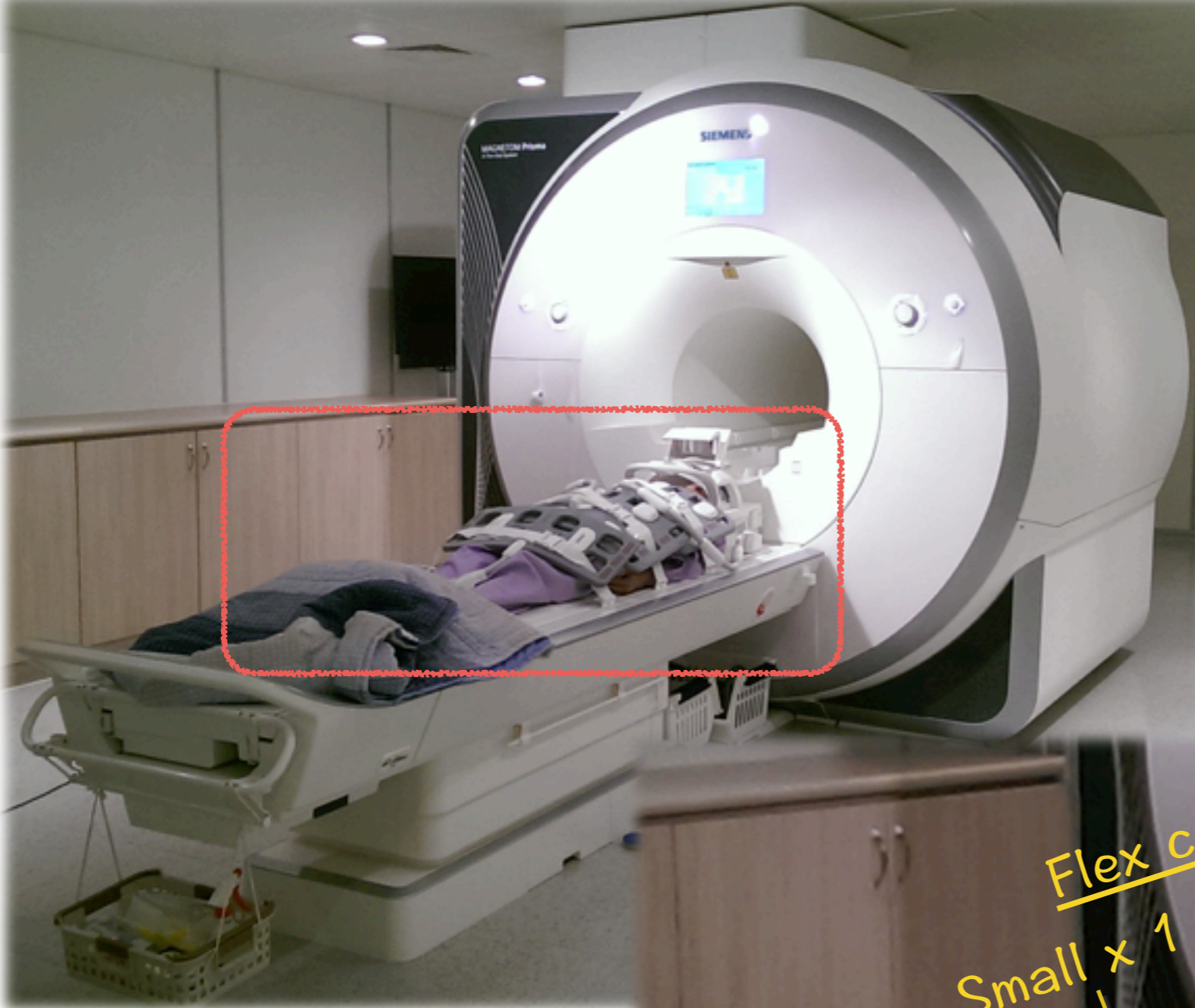
★ Moving-table technique

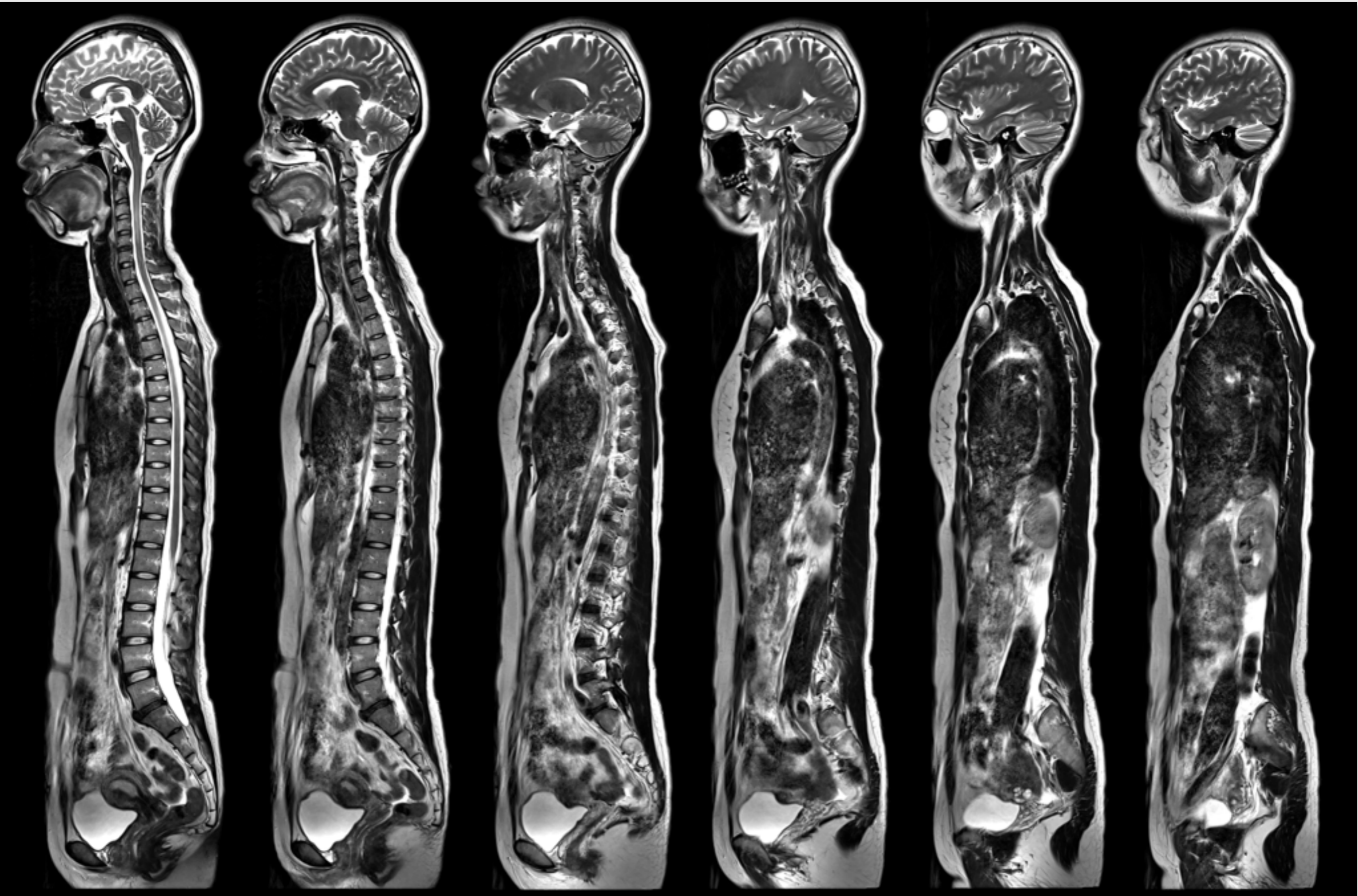
Continuously acquiring brain, neck, chest, and abdomen images

Only taking **16** min for a whole spine image

Can be Speeded Up if it equips with the **WB** technique

Cover whole spine with Multi-Coil





in-plane resolution $0.93 \times 0.65 \text{ mm}^2$, Slice thickness 4mm



Prisma



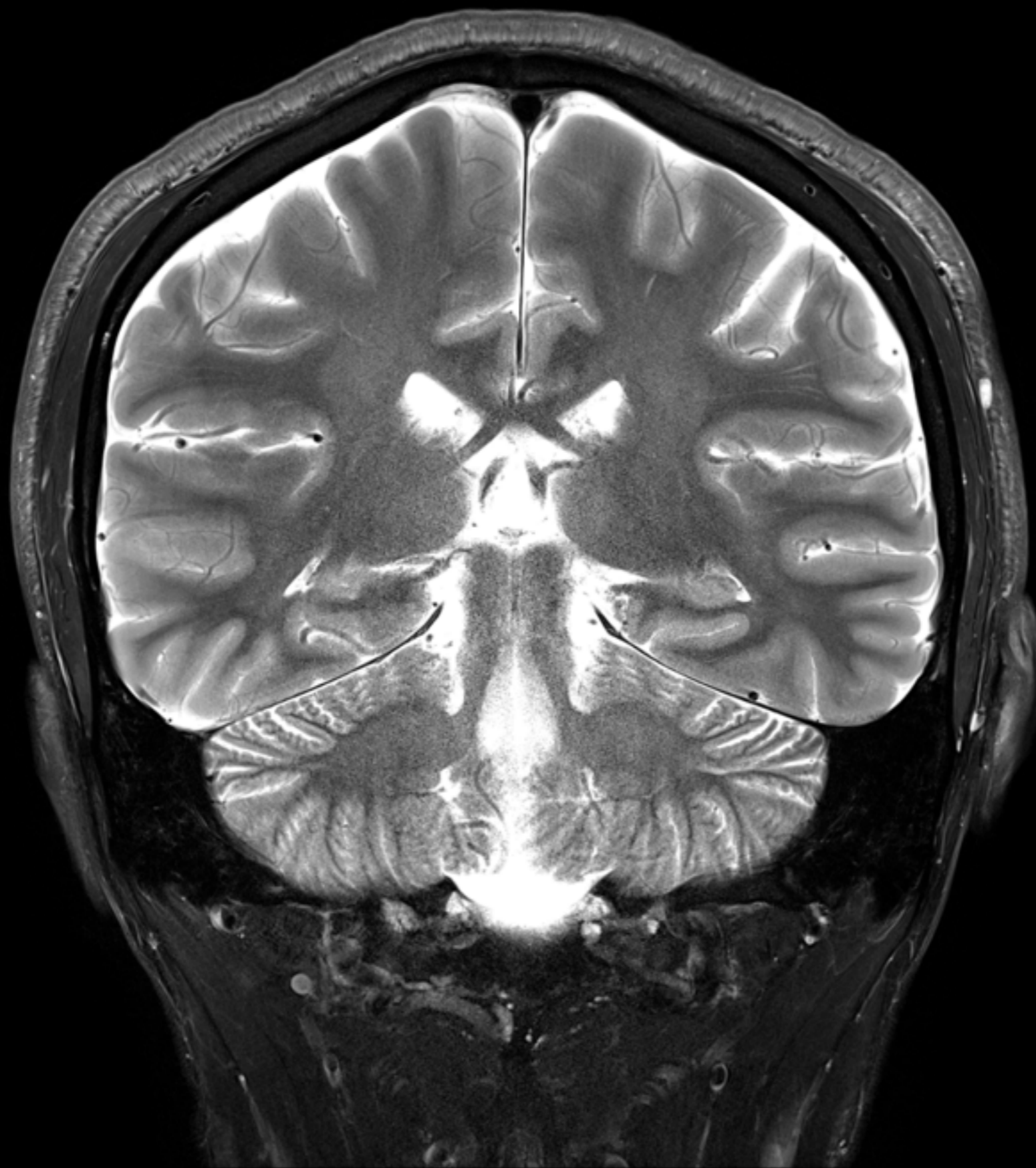
- ▶ The newest generation of Siemens
with the 3 major advantages(2-3/3)

★ Outstanding gradient strength (8 gauss/cm)

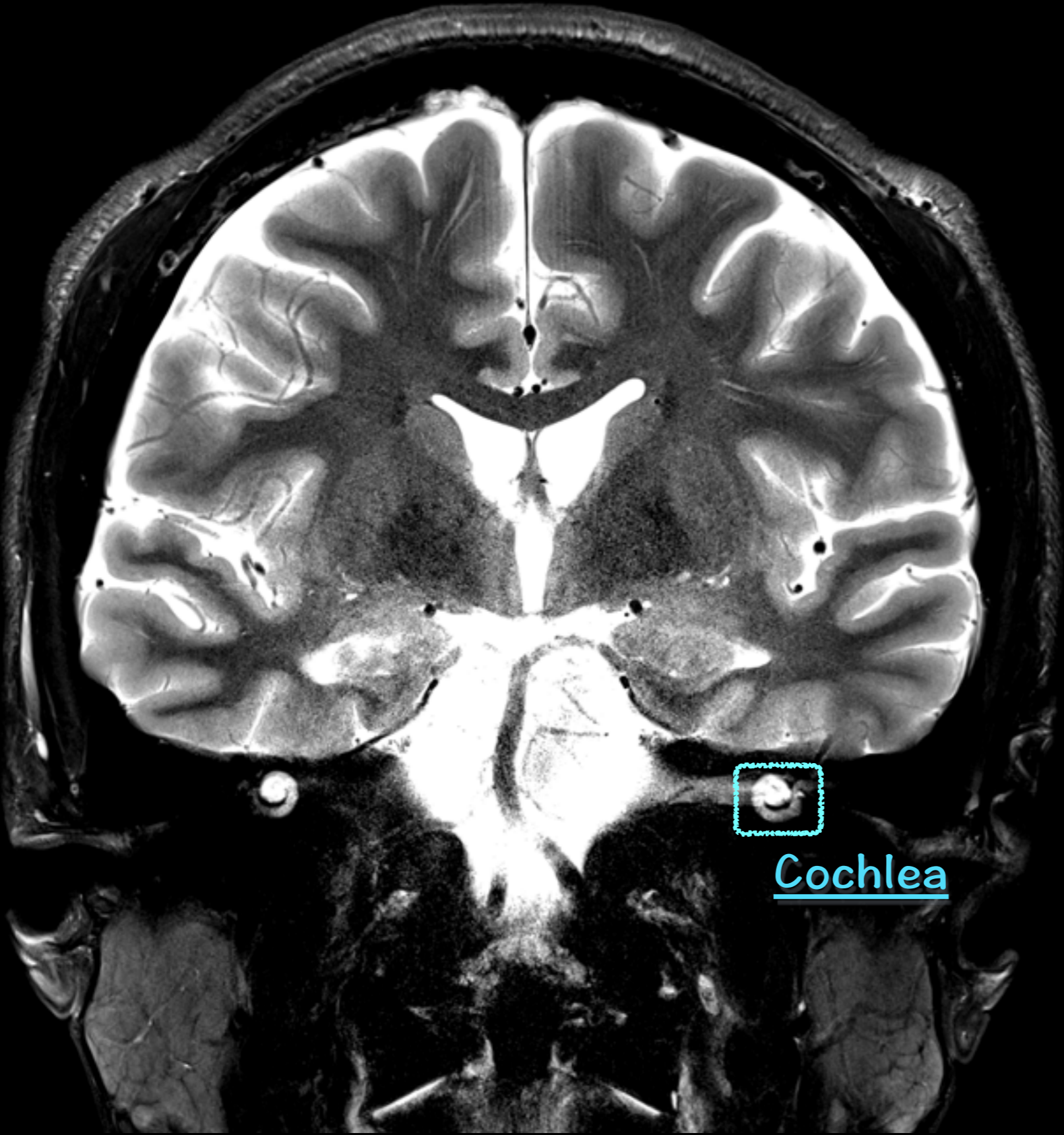
Taking 9 min for an astonishing high-resolution brain images

its in-plane resolution can achieve 195×195 micrometres

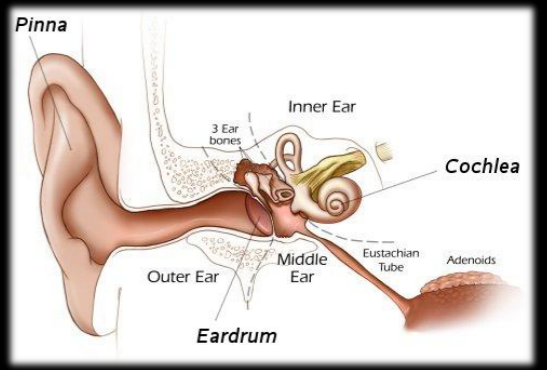
★ Parallel transmit technique



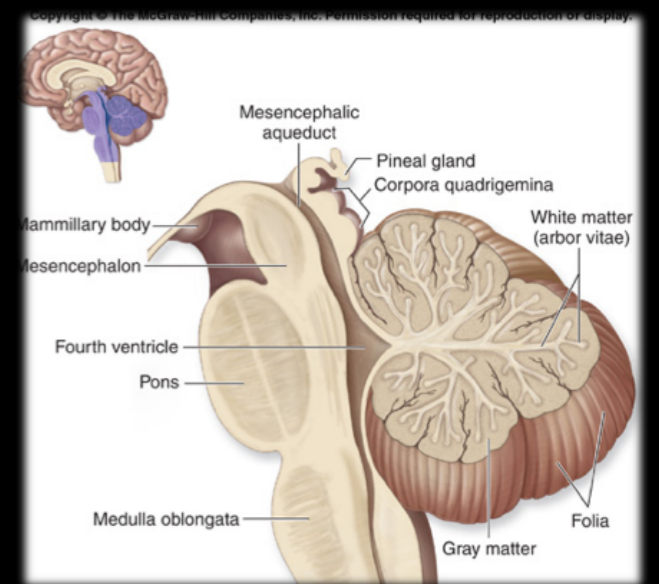
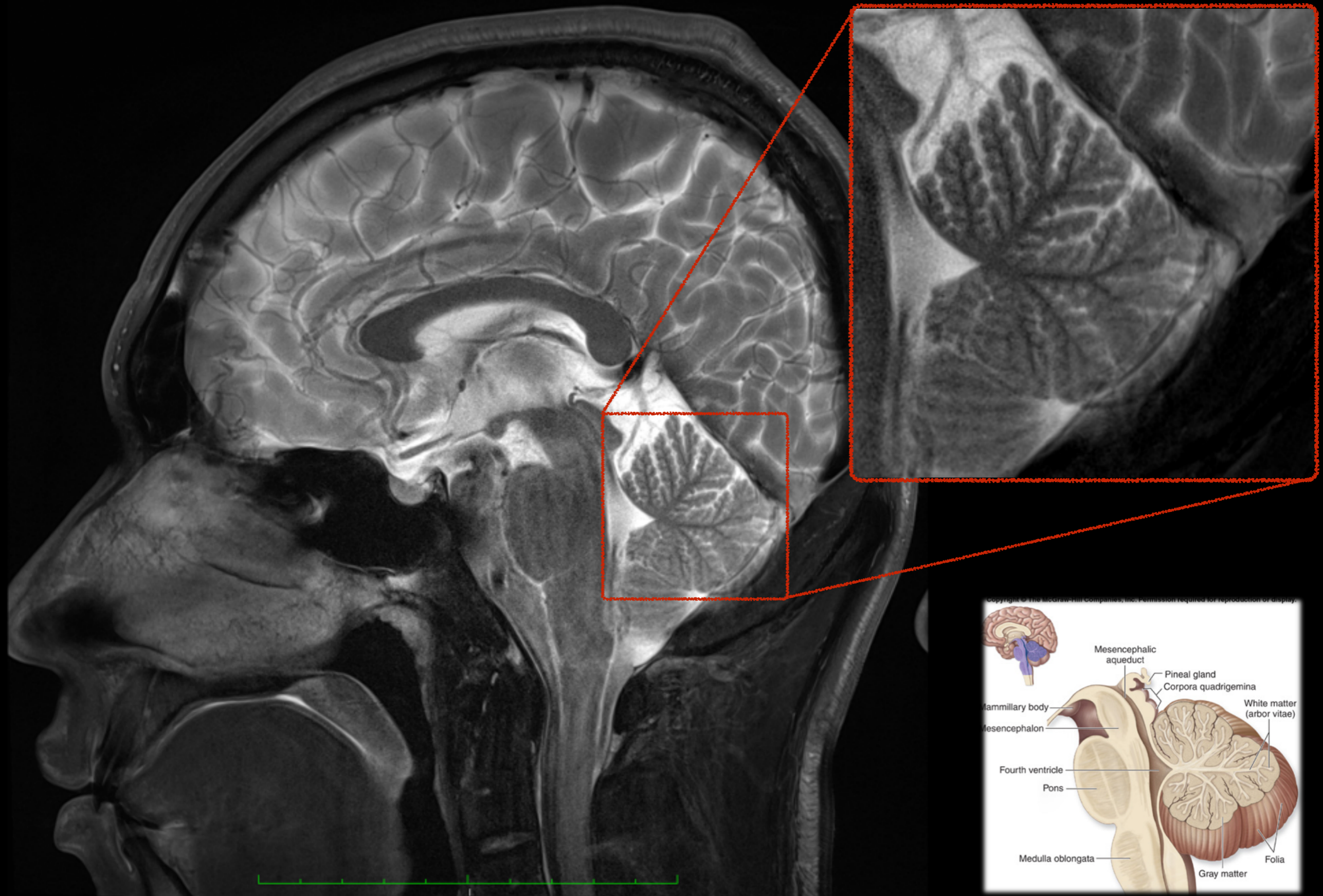
in-plane resolution $195 \times 195 \text{ } \mu\text{m}^2$, Slice thickness 5 mm

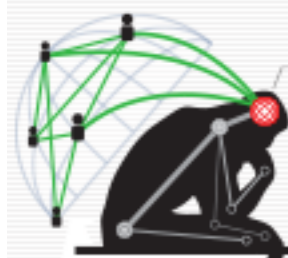


Cochlea



Cerebellum with 10 lobules





- ▶ In this center, we provide many accessories for the functional researches



2 projectors + MR-compatible 3D goggle system

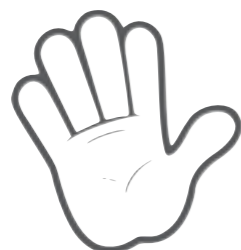


MR-compatible earphone with microphone

MR-compatible earphone with active noise cancelation



Smelling stimulator could offer 6 different smelling stimulating



Tactile stimulator



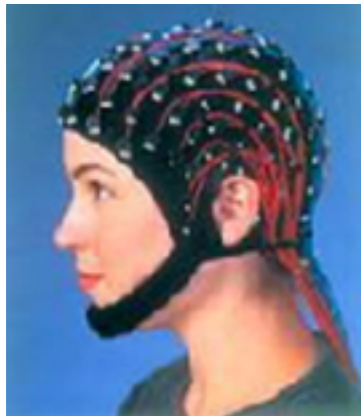
Response recording



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- ▶ In addition, we also provide



MR-compatible EEG system

MR-compatible NIRS system



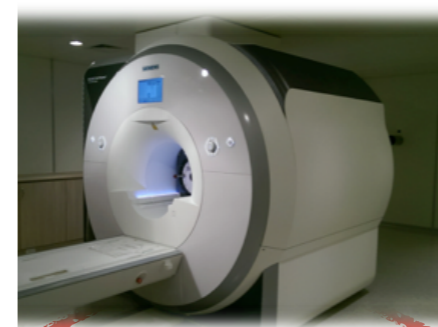
Infant incubator



rTMS (repetitive Transcranial Magnetic Stimulation)

Hyperscanning system

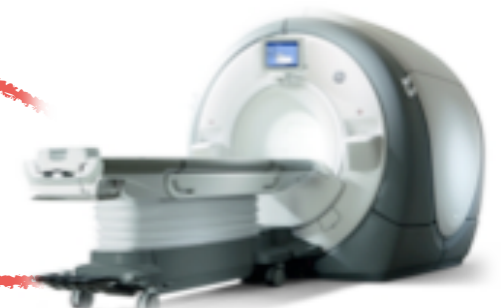
Ex. Playing Tetris



Prisma@NTU



Bruker@NTU



MR 750@NCKU

Scanning simultaneously



Image Files Ref. /Users/ntuprisma/Irene_Bash/[Demo]