

Fukushima Brain Bank (FBB) -The initiative of a private hospital-

Hiroyasu Akatsu ¹⁾, Zenjiro Matsuyama ¹⁾, Mitsuo Takahashi ¹⁾, Noriyuki Matsukawa ²⁾
 Tatsuo Yamada ³⁾, Yoshio Hashizume ⁵⁾, Kenji Kosaka ⁶⁾, Osamu Kohashi ¹⁾
 Kenji Okuda ¹⁾, Akira Hori ¹⁾, Hidechika Okada ¹⁾, Takayuki Yamamoto ¹⁾

1) Choju Medical Institute, Fukushima Hospital, 2) Department of Neurology, Nagoya City University Graduate School of Medical Sciences, 3) Department of Neurology, Fukuoka University, 4) Institute for Medical Science of Aging, Aichi Medical University, 5) Yokohama HouYuu Hospital

【Introduction】

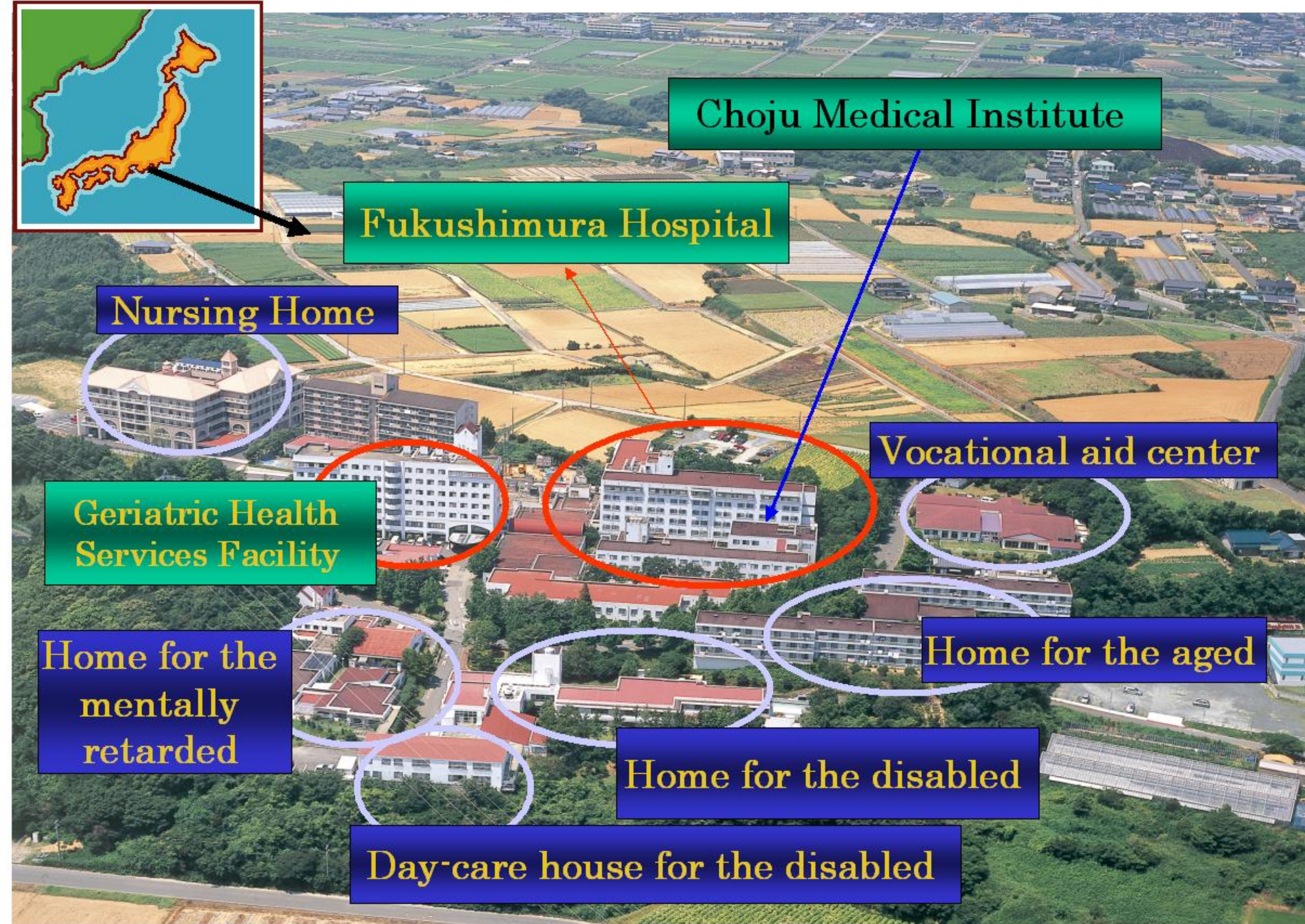
The FBB was established under the auspices of the Fukushima Hospital, a legally incorporated medical institution. It is managed completely within the private sector.

【What is Fukushima and Fukushima Hospital】

“Fukushi” means welfare in Japanese and “mura” is a village. As shown in the aerial photograph on the right, we have several buildings for the aged and disabled, and about 800 elderly people reside in our village. The Fukushima Hospital was established in 1982 and is managed by the Sawarabi Medical Cooperative. It currently has 487 beds. Our patients mainly have dementia and cerebrovascular problems. The hospital plays a pivotal role within the village and acts as the central facility.

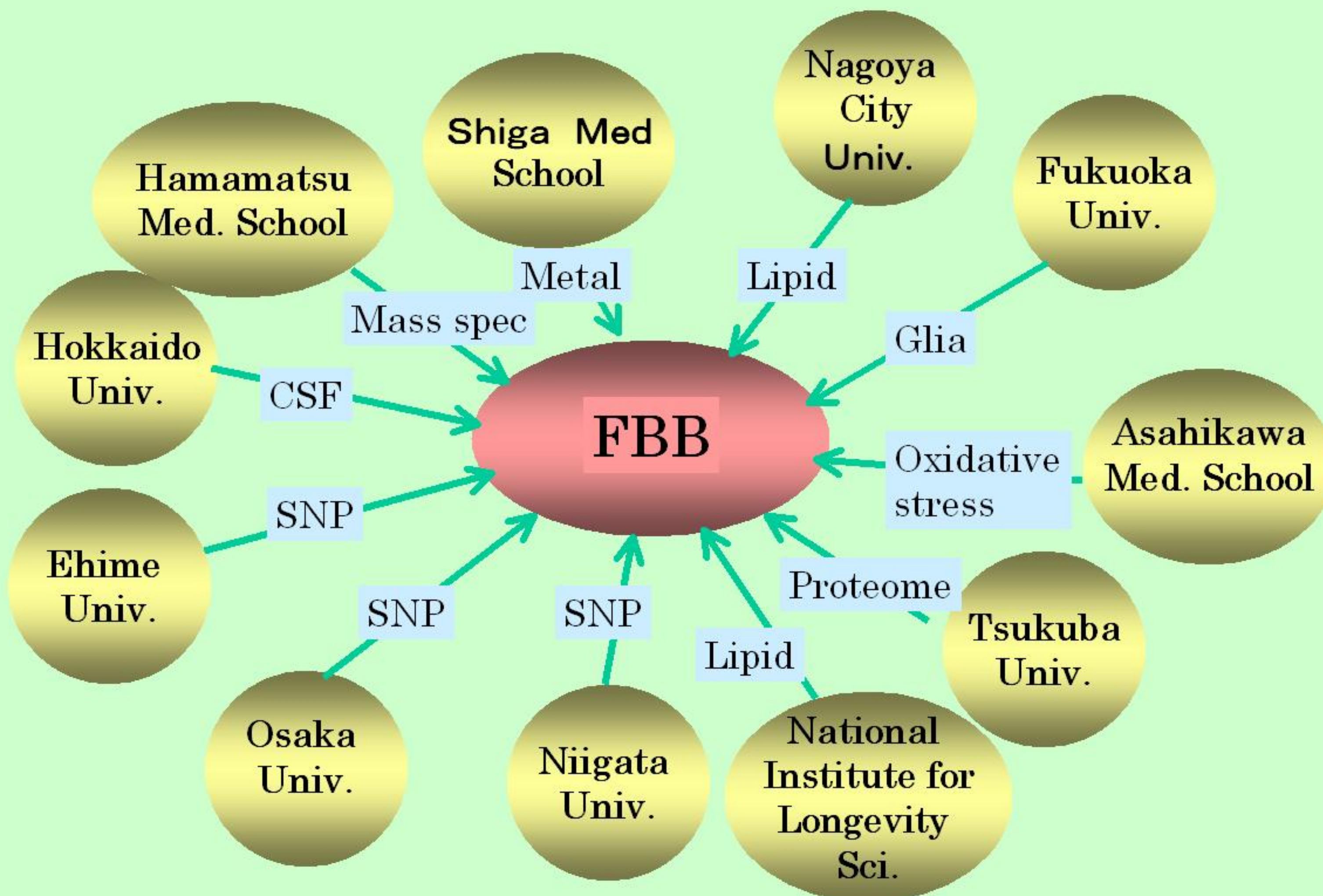
【Fukushima Brain Bank】

Fukushima Brain Bank was established in 1990. We have a long record of collecting samples, not only from patients but also from residents of our care houses and nursing homes within the Fukushima complex. This allows us as medical doctors and researchers to obtain clinical information or blood samples, sometimes even before the onset of illness. In our institute, all Brain Bank data is held in the office of individual data management.

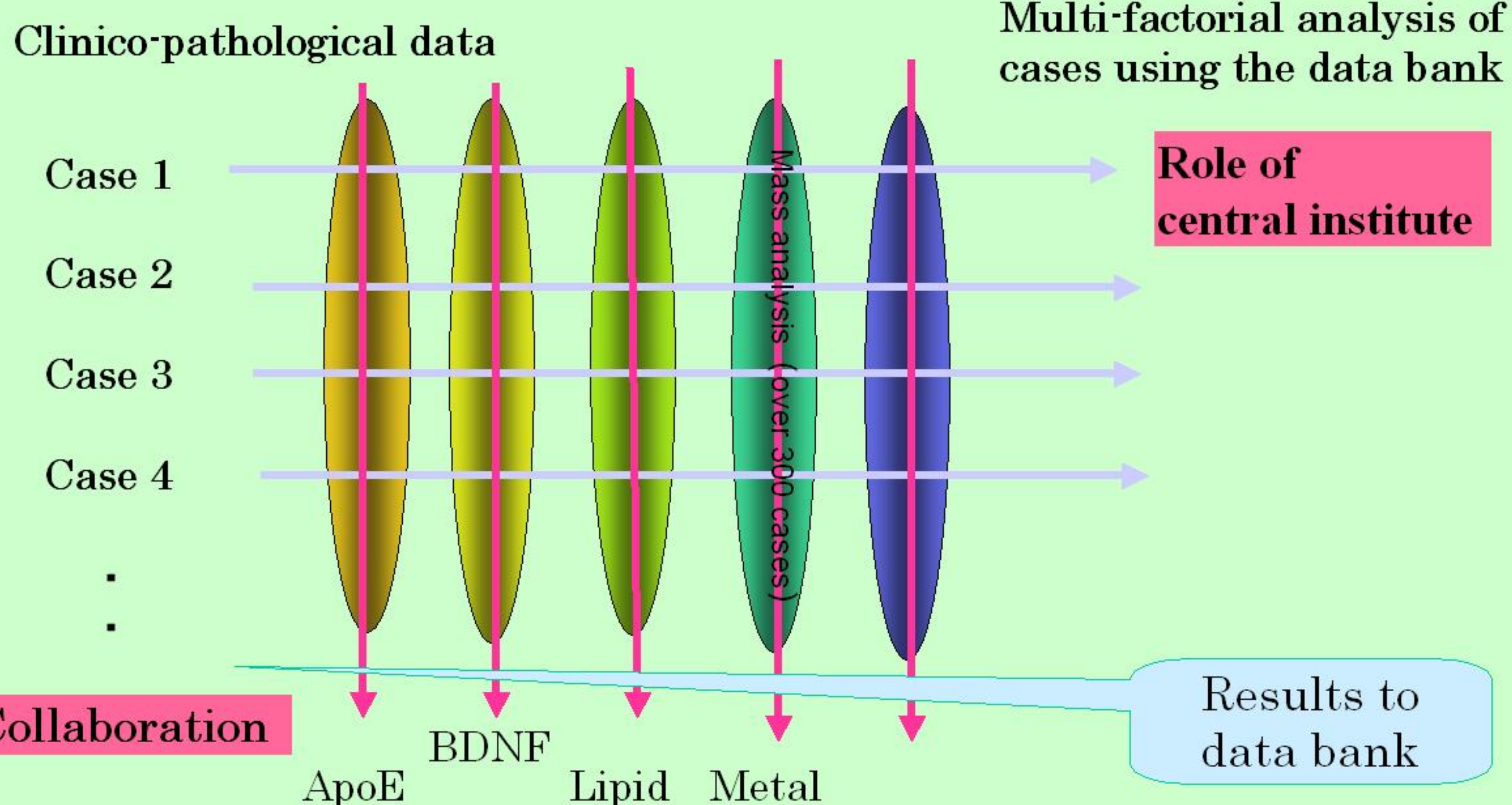


Current collaborations and access to data on individuals from other institutes

SNP: Single Nucleotide Polymorphism
 CSF: Cerebrospinal fluid

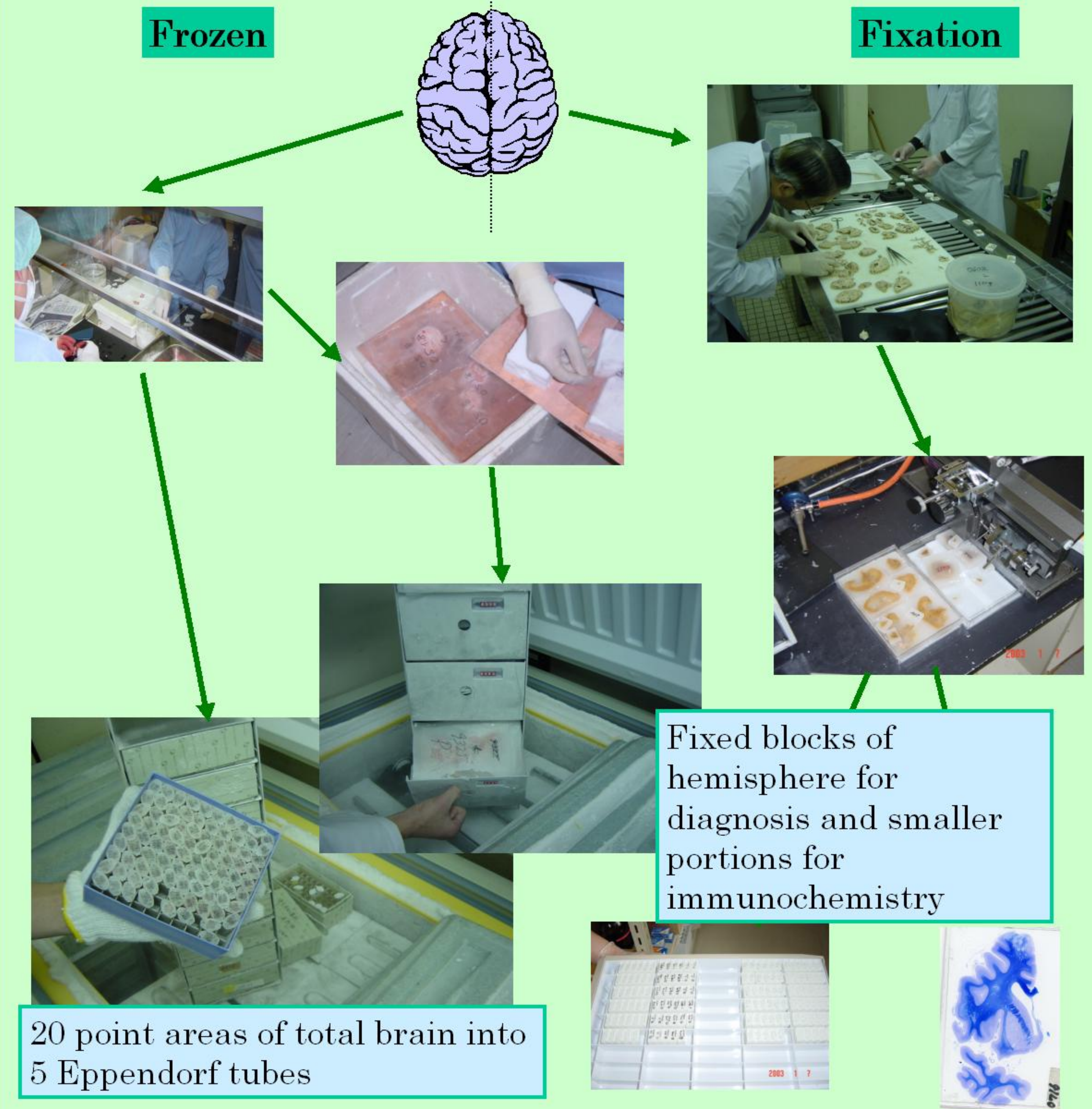


Longitudinal and Transverse analysis with FBB Samples



【Regarding the sampling section】

For collection of FBB samples, we bear the biochemical and molecular analysis and collaboration in the mind. The brains are separated into two hemispheres. One hemisphere is fixed in formalin for neuropathological analysis and the other is precisely subdivided into small blocks which are saved in Eppendorf tubes, and frozen in a -80 degree frozen for later use in research.



The FBB is run by medical doctors in clinical practice with the assistance of a small technical staff. All cases are discussed regularly with clinicians on a monthly basis (CPC).

Conclusions

Although our bank has gone unrecognized in the past, our far-sighted efforts have been gaining considerable attention in recent years in Japan. We now have over 20 collaborators and supply more than 30 research institutes with our samples. In addition, our research institute was approved in 2004 by the Ministry of Education, Culture, Sports, Science and Technology, as one of the non-governmental institutes which is permitted to apply for governmental grants. At this meeting, we present the FBB at the Choju Medical Institute as a unique facility and one of the most active brain banks in the world.