

Fukushima Brain Bank (FBB)

-----Based in a private geriatric hospital---

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【Introduction】

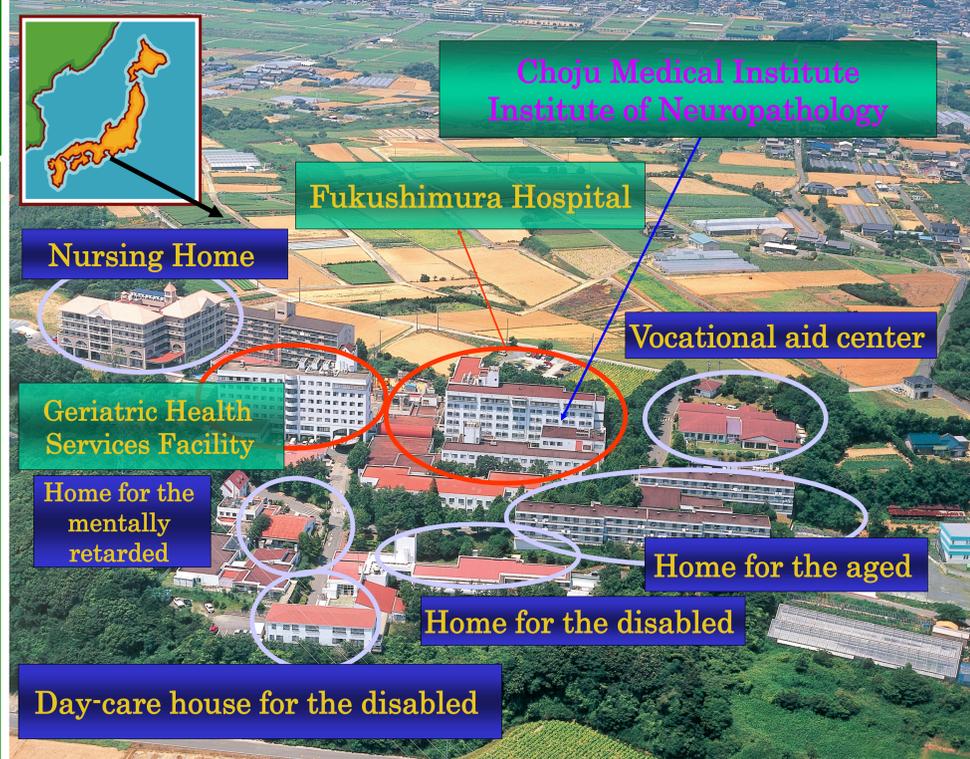
The FBB was established under the auspices of the Fukushima Hospital, a legally incorporated medical institution. It is managed completely within the private sector.

【Fukushima and Our Hospital】

“Fukushi” is a Japanese word that means welfare 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.

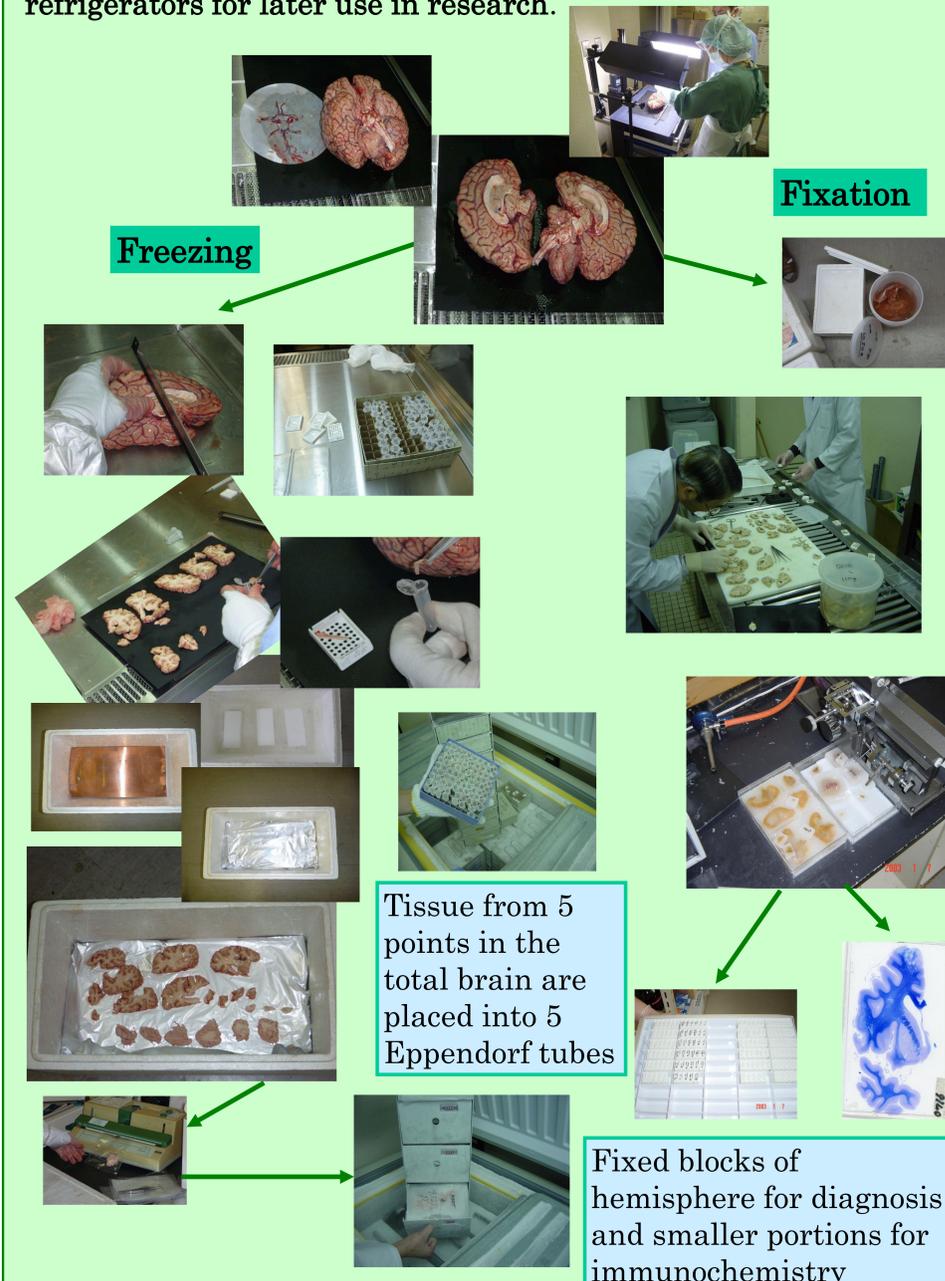
【Fukushima Brain Bank】

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.



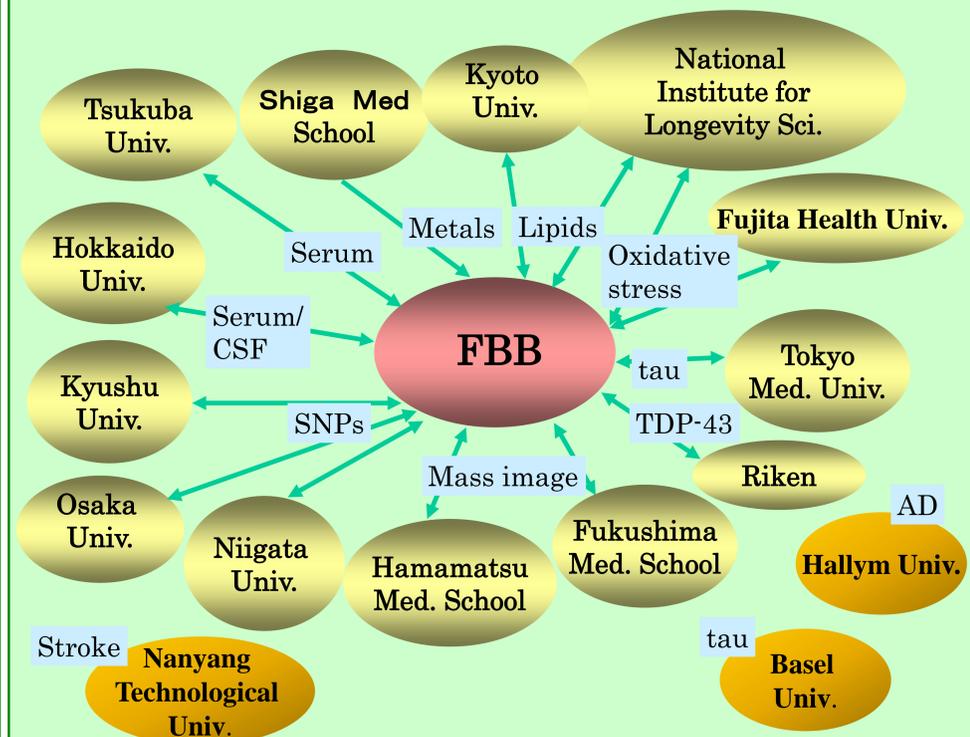
【Regarding the sampling section】

In collecting FBB samples, we always keep in mind future biochemical and molecular analyses and collaborations. The brains are separated into two hemispheres. One hemisphere is fixed in formalin for neuropathological analysis and the other is precisely subdivided into coronary sections and small blocks which are saved in Eppendorf tubes. After samples are photographed, they are frozen on dry ice (slices) and in liquid nitrogen (tubes). Finally, all material is stored at -80 degrees in 8 refrigerators for later use in research.

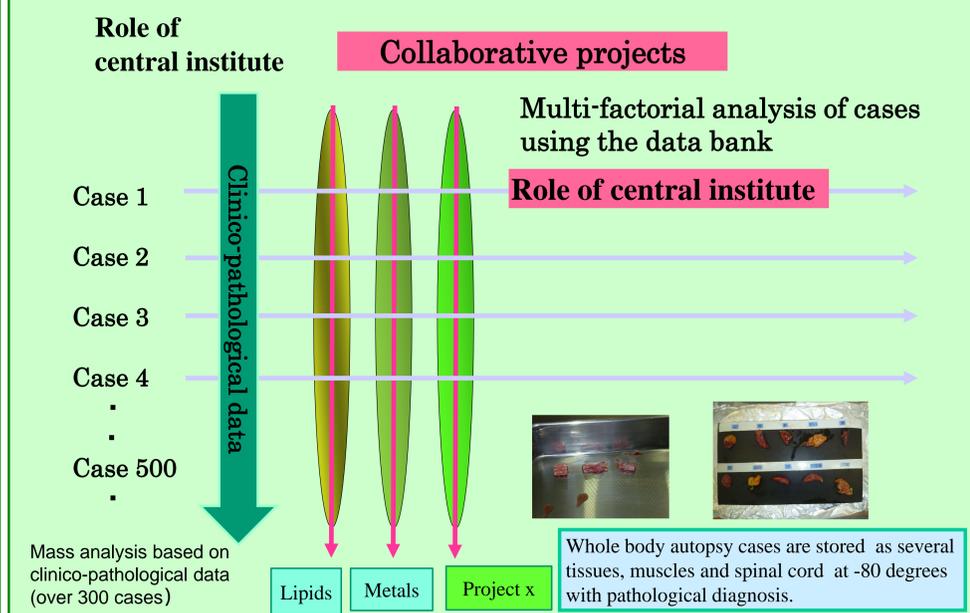


Major on-going collaborations

SNP: Single Nucleotide Polymorphism
CSF: Cerebrospinal fluid
AD: Alzheimer's disease



Longitudinal and Transverse analysis with FBB Samples



Conclusions:

Although our bank has gone unrecognized in the past, our farsighted 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 and we became a member of the **Comprehensive Brain Science Network** in 2010. 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.

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