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Standing at the intersection of neuroscience and information science, the field of **neuroinformatics** develops the tools to house, share and analyze neuroscientific data and to create computational models of the brain. With the view to promote international cooperation of neuroinformatics research, the International Neuroinformatics Coordinating Facility (**INCF**) was formally established on August 1st 2005. As a node of INCF, the Neuroinformatics Japan Center (**NIJC**) was established in RIKEN BSI in April 2005. NIJC organizes Japanese activities in neuroinformatics research and also participates in the international coalition of INCF.

J-Node : Neuroinformatics Japan Center (NIJC)

NIJC is the Japan Node of INCF. Together with the Japan Node Committee, the Platform Committees, and BSI laboratories, NIJC promotes domestic neuroinformatics (NI). Our services are to:

- Provide links and smooth integration of the NI Platforms (Portal site for NI Platforms in Japan)
- Support the NI Platforms
- Supply and support NI tools and system such as the base platform "XooNlps" in cooperation with BSI NI lab.
- Provide documents in Japanese on the activities of INCF

Neuroinformatics Platforms

Visiome: A web-based database system with a variety of digital research resources in vision science. This platform(PF) features Visual Neuron Simulator for computing and generating action potentials based on a visual neuron model in real time; Neocognitron, an artificial neural network model; Psychlops, an OpenGL-based visual stimulus generation system.

Brain Machine Interface (BMI): Allows all registered users to share experimental data, mathematical models, tools for various researches such as neuroscience, computational theory, and robotics etc.

Invertebrate Brain (IVB): Provides Invertebrate brain & behavior images, Models for neuron simulator, LSM images of neuron, Models of 3D neural structure and Research tools

Cerebellar Development Transcriptome Database (CDT-DB): Provides spatio-temporal gene expression profile information on the postnatal development of mouse cerebellum. It seeks to reproduce the genetic blueprint of cerebellar development.

Comprehensive Brain Science Network(CBSN): The CBSN database primarily contains information on researchers who provide support to other researchers in the CBSN network. Information about the researchers who receive CBSN support and the data they obtain are also stored in the CBSN database.

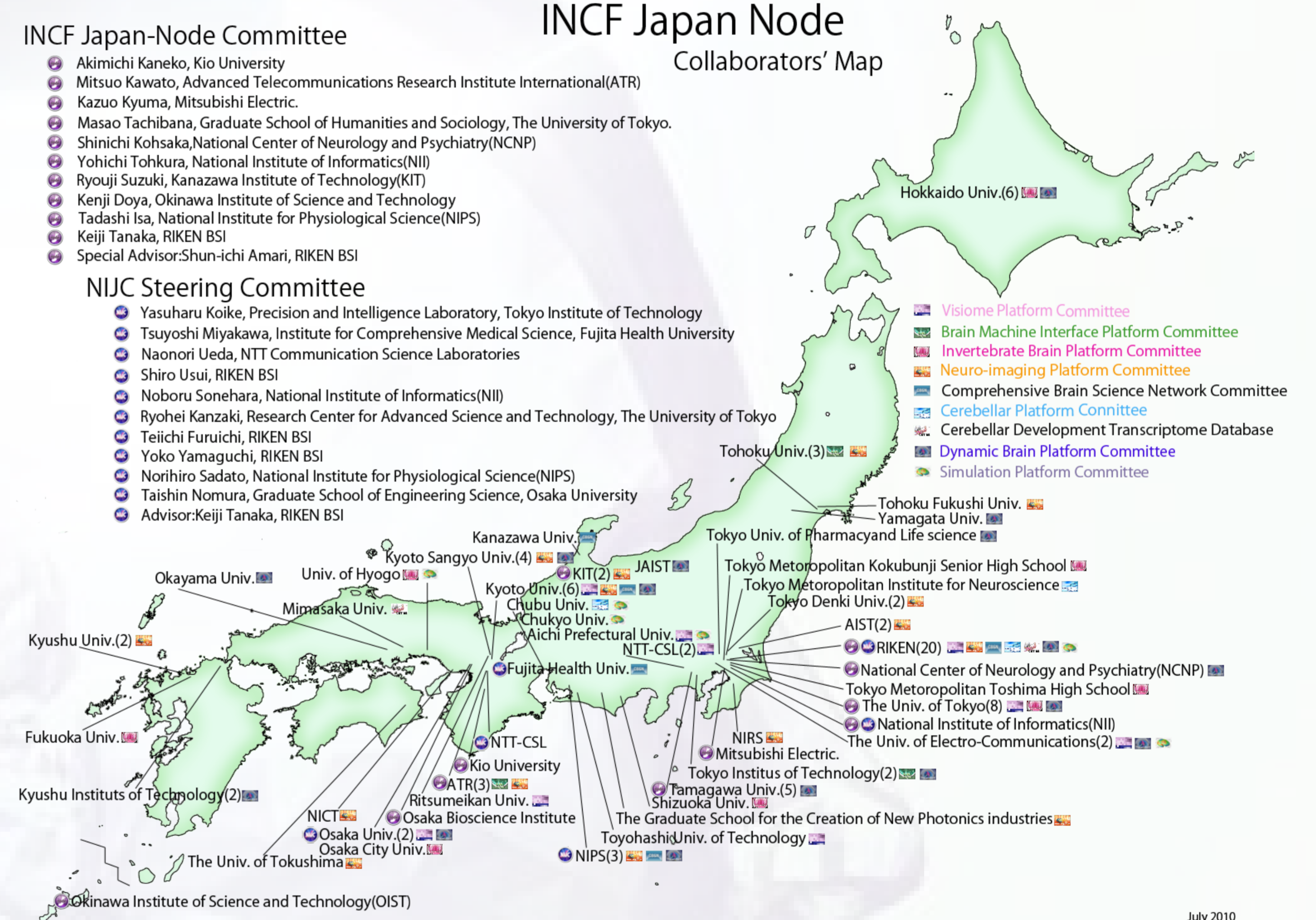
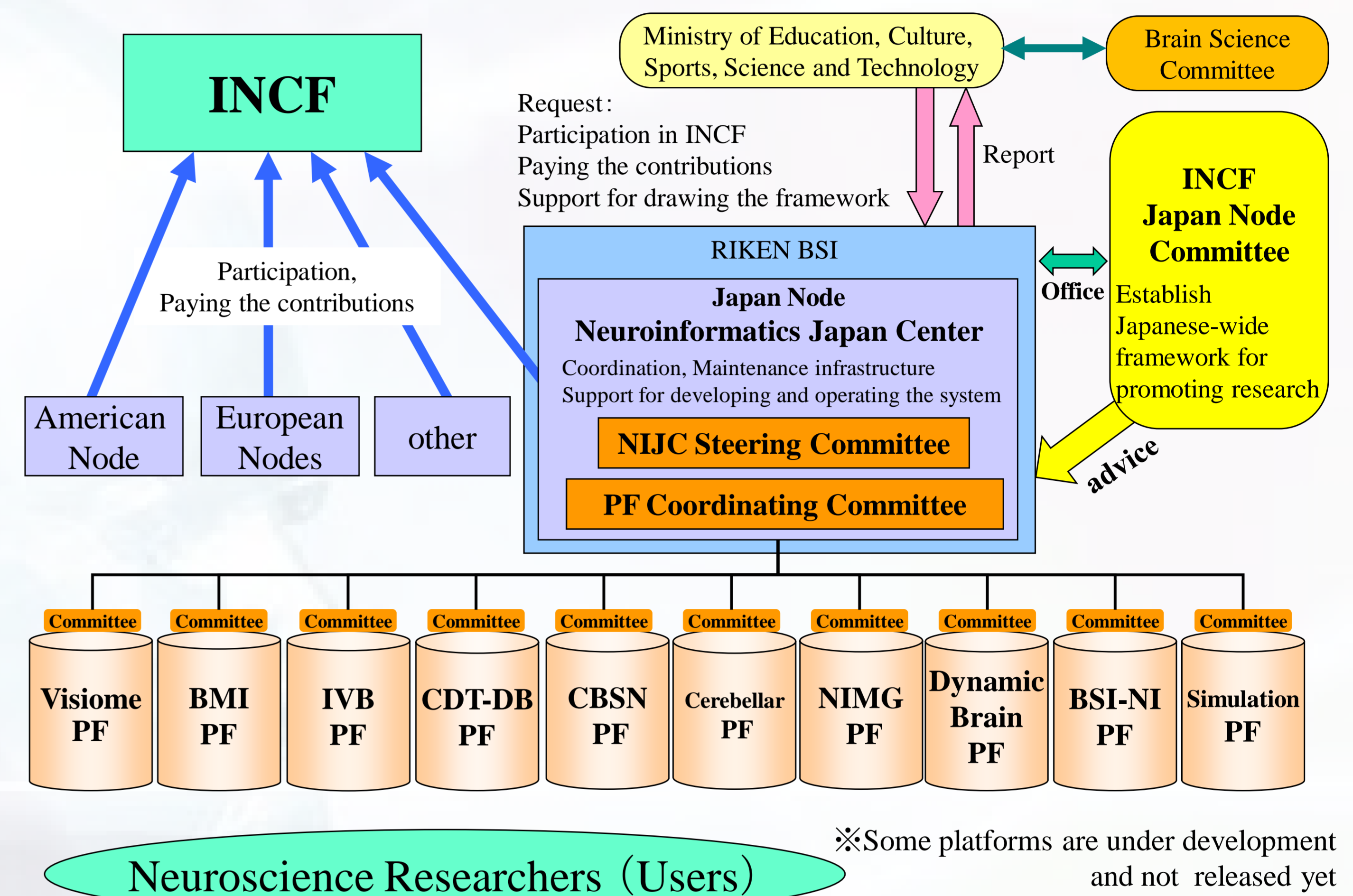
Cerebellar: Based on the concepts of the cerebellum, references and images, experimental data for the modeling, source codes of neural network models and other tools for the study in this field are available.

Neuro-Imaging (NIMG): Has become one of the most important key technologies for studying human brain mechanisms. NIMG's free standalone software, sBrain, was developed to display 3D-brain images and search papers that include activations at the locations specified by pointing on the images.

Dynamic Brain: The Dynamic Brain Platform promotes studies on the dynamic principles of brain functions through unifying experimental and computational approaches in cellular, local circuit, global network and behavioral levels. Our goal is to capture the autonomy and the creativity in living organisms which enlightens the complexity of nature and society.

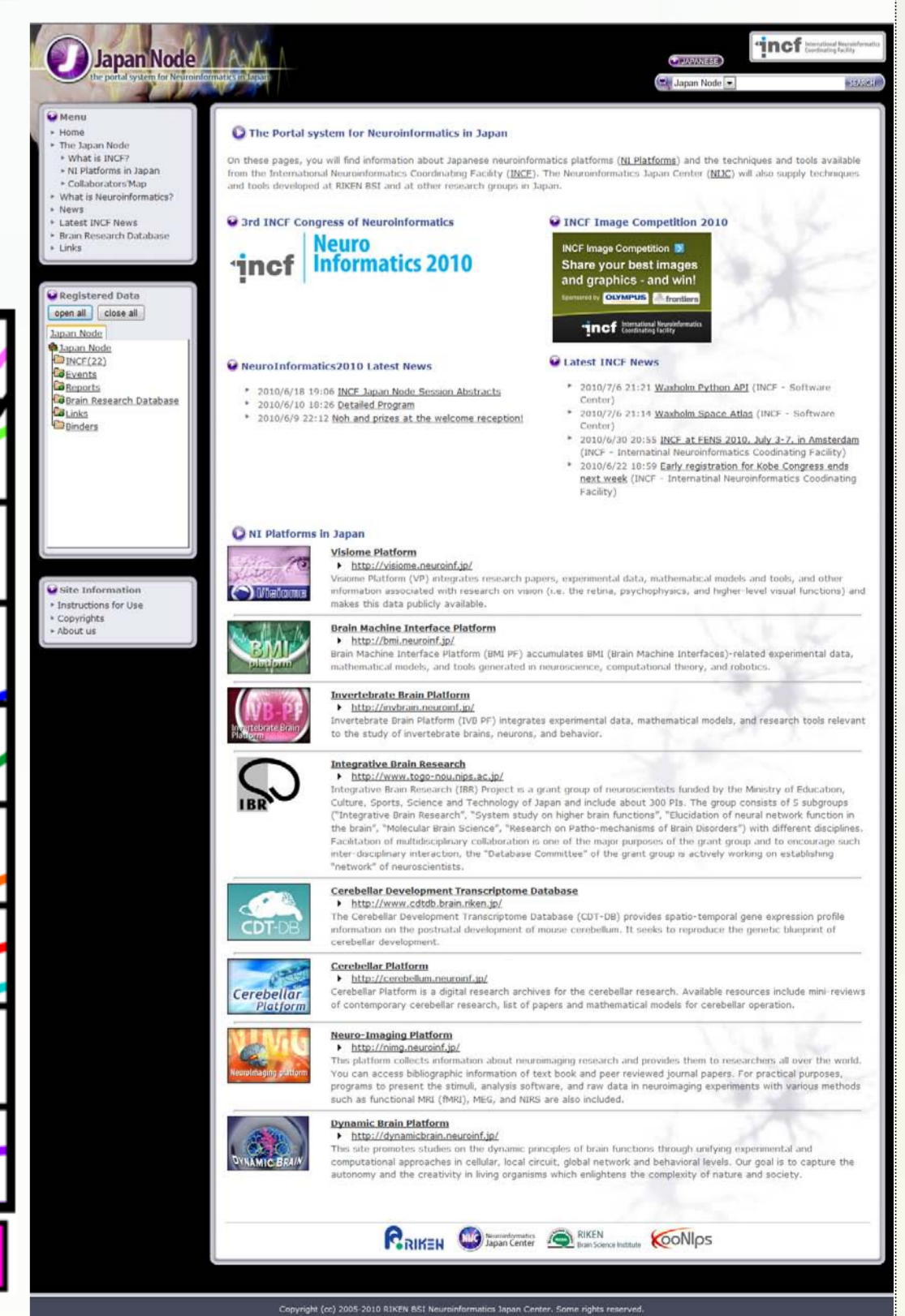
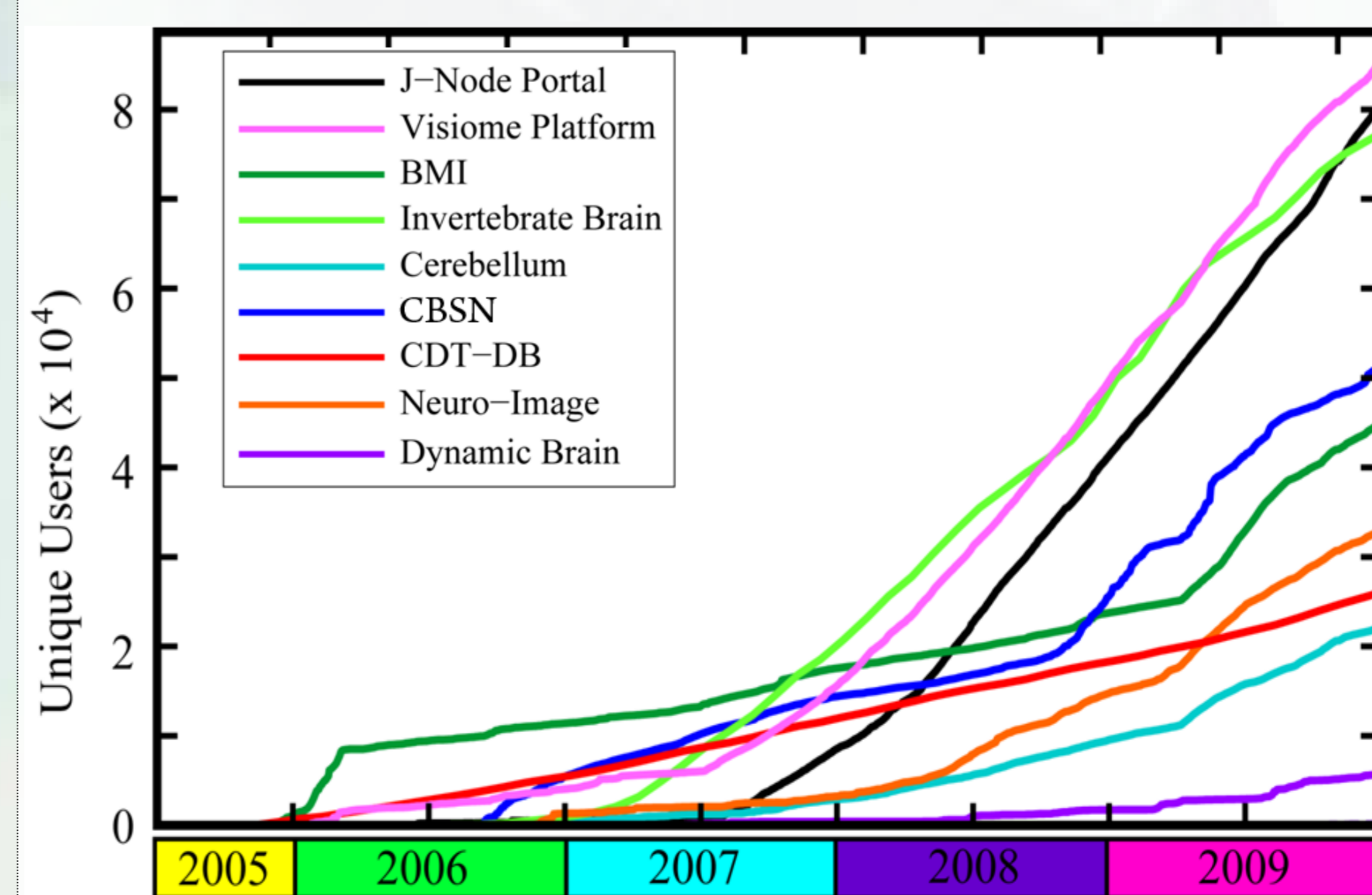
Simulation: Simulation Platform for provides a common environment for testing, evaluating and sharing computational models via web browser. Users can run a trial of computational models that are registered on PFs and Neuroinformatics databases; no need to install any software on their computers.

BSI-NI: RIKEN has been participating in the Integrated Database Project launched by MEXT in 2006 to develop and promote life science databases in Japan. To meet the same needs in the area of brain science, the RIKEN Brain Science Institute (BSI) established a BSI-NI Committee to promote neuroinformatics (NI) in April 2008.



Platform Visitors Statistics

Cumulative unique visitors per a day



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