

**List of faculty members and research areas  
in PRI/WRC**

## **Primate Research Institute**

<http://www.pri.kyoto-u.ac.jp/index.html>

NOTE: \* The asterisk indicates faculty member who can co-supervise students only in collaboration with those without the mark. They cannot act as official main supervisors.

### **Director**

Dr. Takakazu YUMOTO : yumoto.takakazu.6w@kyoto-u.ac.jp

## **Center for International Collaboration and Advanced Studies in Primatology (CICASP)**

The Center for International Collaboration and Advanced Studies in Primatology (CICASP) promotes internationalization at Kyoto University's Primate Research Institute (PRI) through its research and educational activities. CICASP is dedicated to the recruitment of international students, the facilitation and support of international collaborations, and the education and encouragement of students to become leaders in their respective international scientific communities.

### **Director**

Dr. Takakazu YUMOTO : yumoto.takakazu.6w@kyoto-u.ac.jp

Ecology of tropical forests, relationships between primates and vegetation

### **Associate Professor**

Dr. Andrew MACINTOSH : macintosh.andrew.7r@kyoto-u.ac.jp

1. Infectious disease ecology & wildlife epidemiology; 2. Behavioral ecology; 3. Bio-complexity

### **Assistant Professor**

\*Dr. Yuko Hattori : hattori.yuko.8w@kyoto-u.ac.jp

Comparative cognition, rhythmic entrainment and the evolution of musicality

## Department of Evolution and Phylogeny

We aim to elucidate the evolutionary history of primates including humans based on the functional morphology and phylogenetic analysis of fossil and living primates.

### *Evolutionary Morphology Section*

The section aims to reveal the evolution of primates through intensive and multidisciplinary investigations of their morphology. We investigate the development, growth and aging of living primates and fossils dating back ten to twenty million years ago in Africa and Asia

#### **Professor**

Dr. Yuzuru HAMADA : hamada.yuzuru.2a@kyoto-u.ac.jp

Growth and aging of primates and biogeography of Old World Monkeys from viewpoints of morphology and body color.

#### **Associate Professor**

Dr. Eishi HIRASAKI : hirasaki.eishi.6x@kyoto-u.ac.jp

Evolution and adaptation of primate locomotion

### *Systematics and Phylogeny Section*

To understand the process of primate evolution, we take a multidisciplinary approach in the investigation of the morphology and distribution of living and fossil primates, taking into account of the effects of regional and global environmental changes.

#### **Professor**

Dr. Masanaru TAKAI : takai@pri.kyoto-u.ac.jp

1. Evolutionary history of the Paleogene primates in East Asia; 2. Evolutionary history of Asian Old World monkeys.

#### **Associate Professor**

Dr. Takeshi NISHIMURA : nishimura.takeshi.2r@kyoto-u.ac.jp

1. Morphological studies on the speech evolution; 2. Comparative morphology and phylogenetic studies of fossil and living primates using CT and MRI.

#### **Assistant Professor**

\*Dr. Naoko EGI : egi.naoko.6z@kyoto-u.ac.jp

1. Comparative and functional morphology of limb bones in primates and carnivorans; 2. Phylogeny and paleobiogeography of Paleogene mammals.

## Department of Ecology and Social Behavior

We conduct research on primate ecology, behavior, social structure, and conservation of primates and their habitats based largely on field work.

### *Social Systems Evolution Section*

This section conducts research in Africa and Asia on wild primate populations in order to elucidate the processes of evolution of social systems and hominization using behavioral and ecological methodologies

#### **Professor**

Dr. Takeshi FURUICHI : furuichi@pri.kyoto-u.ac.jp

1. Ecology, reproductive strategy, and social behavior of wild chimpanzees and bonobos; 2. Evolution of social structure of apes and human.

#### **Associate Professor**

Dr. Michael. A. HUFFMAN : huffman@pri.kyoto-u.ac.jp

Ecology and behavior of macaques and chimpanzees, with a special focus on aspects of self-medication and the transmission of behavioral traditions.

#### **Assistant Professor**

\*Dr. Yamato TSUJI : tuji.yamato.4n@kyoto-u.ac.jp

Feeding ecology of forest guenons in Africa, and Japanese macaques and mustelid species in Japan.

### *Ecology and Conservation Section*

We conduct fieldwork in Japan, Africa, and Southeast Asia to study population dynamics, feeding and behavioral ecology of wild primates and the environmental factors on them. We also study the interactions between primates and other living things and primate conservation ecology.

#### **Professor**

Dr. Takakazu YUMOTO : yumoto.takakazu.6w@kyoto-u.ac.jp

Ecology of tropical forests, relationships between primates and vegetation

#### **Associate Professor**

Dr. Goro HANYA : hanya.goro.5z@kyoto-u.ac.jp

Population ecology and feeding ecology of Asian primates.

#### **Assistant Professor**

\*Dr. Chie HASHIMOTO : hashimoto.chie.2n@kyoto-u.ac.jp

The ecology and behavior of chimpanzees and bonobos.

## Department of Cognitive Sciences

The department has been conducting interdisciplinary research in human and nonhuman primates for understanding the evolutionary origin of human minds and behavior.

### *Cognition and Learning Section*

The section aims to uncover the evolution of primate cognition by comparing how humans and monkeys recognize their environment. The principal focus of our research is on vocal-auditory modality.

#### **Professor**

Dr. Nobuo MASATAKA : masataka.nobuo.7r@kyoto-u.ac.jp  
Ethological studies of vocal ontogeny in monkeys and human infants.

#### **Associate Professor**

Dr. Yukiori GOTO : goto.yukiori.5c@kyoto-u.ac.jp  
Biological mechanisms of psychiatric disorders; Neural bases of cognitive and affective function

#### **Assistant Professor**

\*Dr. Hiroki KODA : koda.hiroki.7a@kyoto-u.ac.jp  
Evolution of vocal communication in primates.

### *Language and Intelligence Section*

This section aims to explore higher cognitive functions in apes, especially in chimpanzees. The approach of comparative cognitive science will lead us to understand human Language and intelligence from an evolutionary perspective. Photo: A chimpanzee, Ayumu, leaning a numerical ordering

#### **Professor**

Dr. Masaki TOMONAGA : tomonaga.masaki.4m@kyoto-u.ac.jp  
1. Comparative cognition in chimpanzees and other primates; 2. Comparative cognitive development in primates.

#### **Associate Professor**

Dr. Ikuma ADACHI : adachi.ikuma.2c@kyoto-u.ac.jp  
Comparative explorations of animal cognition.

#### **Assistant Professor**

\*Dr. Misato HAYASHI : hayashi.misato.4e@kyoto-u.ac.jp  
Comparative cognitive development in chimpanzees and humans

## Department of Neuroscience

This department aims at elucidating the structure and function of highly developed primate brains, by means of a variety of cutting-edge methodologies, to explore the mechanisms underlying motor control and cognitive behavior.

### *Cognitive Neuroscience Section*

The section aims to understanding brain mechanisms underlying emotion, memory, perception and communication. We are analyzing single neuron activity, neural connections, and effects of various molecules on behavior. We also conduct human brain imaging studies.

#### **Professor**

Dr. Katsuki NAKAMURA : katsuki@pri.kyoto-u.ac.jp  
Studies on social and emotional cognition

#### **Associate Professor**

Dr. Shigehiro MIYACHI : miyachi.shigehiro.8e@kyoto-u.ac.jp  
Neurophysiological and neuroanatomical studies on cognition and action.

#### **Assistant Professor**

\*Dr. Masumi WAKITA : wakita.masumi.2e@kyoto-u.ac.jp  
Neurophysiological and psychological studies on perception.

#### **Assistant Professor**

\*Dr. Naho KONOIKE : konoike.naho.8x@kyoto-u.ac.jp  
Neurophysiology, cognitive science and experimental psychology

### *Systems Neuroscience Section*

This section aims at exploring the structure and function of neural networks in primate brains by integration of neuroanatomical, neurophysiological, neurobehavioral, and molecular biological approaches. A major interest is focused on the architectures and roles of networks linking the cerebral cortex, the basal ganglia, and the cerebellum to provide clues to mechanisms underlying higher brain functions (such as motor and cognition) and neurological/psychiatric disorders (such as Parkinson's disease and schizophrenia). Currently, leading techniques are being pursued to develop transgenic monkey models by network-selective in vivo gene transfer with viral vectors. In this section, genome analyses with DNA microarrays are also applied to examine genetic profiles specific to primate brains and clarify molecular mechanisms of neural development, plasticity, and aging.

#### **Professor**

Dr. Masahiko TAKADA : takada.masahiko.7x@kyoto-u.ac.jp  
Understandings of structural bases and functional roles of neural networks.

#### **Associate Professor**

Dr. Takao OISHI : toishi@pri.kyoto-u.ac.jp  
Studies of neural plasticity and development.

#### **Assistant Professor**

\*Dr. Ken'ichi Inoue : inoue.kenichi.6z@kyoto-u.ac.jp  
Studies of pathogenesis and treatment in basal ganglia disorders; Development of cell manipulation techniques for studies of high-order brain functions

## **Department of Cellular and Molecular Biology**

We promote molecular and cellular biology research of primates for their evolution and conservation, and also for establishment of model organisms.

### ***Molecular Biology Section***

We investigate the following items in primates using genomes, genes and proteins. 1) Evolution based on segmental DNA and chromosomes 2) Evolution of sensory function of vision, olfaction, and taste etc. 3) Neurogenomics for deciphering of humanness via comparative omics approach

#### **Professor**

Dr. Hiroo IMAI : imai.hiroo.5m@kyoto-u.ac.jp  
Biochemistry and molecular biology of sensory receptors.

#### **Assistant Professor**

\*Dr. Masanori Imamura : imamura.masanori.2m@kyoto-u.ac.jp  
Molecular Biology

### ***Cellular Biology Section***

We are engaged in molecular and cellular biology research of primates oriented primarily to evolutionary mechanisms, conservation schemes and model organism development.

#### **Professors**

Dr. Akihiko KOGA : koga.akihiko.5n@kyoto-u.ac.jp  
Rearrangement of genomes.  
Dr. Munehiro OKAMOTO : okamoto.munehiro.6w@kyoto-u.ac.jp  
1. Molecular parasitology 2. Molecular phylogeny

## Center for Human Evolution Modeling Research

The center, derived from the Laboratory Primate Center in April 1999, is a multi-disciplinary research facility newly dedicated to the innovative development of non-human primate models for applied primatological and human evolutionary research. The center is composed of three research sections; 1) Section of Breeding and Raising, 2) Section of Comparative Immunology and Microbiology, and 3) Section of Ethics and Animal Welfare. The center's main function for conducting basic research in these areas is to promote broader applications for primatology in the Laboratory-animal sciences. It is also the center's duty to oversee management and breeding of non-human primates. Five veterinarians, seven technicians and 26 helpers carry out the work of the center including daily care, breeding supervision, medical treatment, clinical and bacteriological examination and supply other support for the researchers for experimental use at the Institute.

The total number of animals kept at the center is approximately 1,100, representing 16 species including prosimians, macaques and several other Old World monkeys, New World monkeys and chimpanzees. More than 80 offspring are born every year, maintaining the needs of the Institute without introducing primates from the wild.

The center also plays a main role to run the Research Resource Station (RRS), which was opened in 2007 as a major research field of the institute. The RRS includes a facility to conduct various researches and breeding of monkeys under semi-natural circumstances, and to supply Japanese monkeys to National Bio-Resource project of the government.

### **Professor**

Dr. Hirofumi AKARI : akari.hirofumi.5z@kyoto-u.ac.jp

Molecular and cellular virology and comparative immunology

### **Associate Professors**

Dr. Juri SUZUKI : suzuki.juri.4u@kyoto-u.ac.jp

Physiology of primate stress response; 2. Physical and hormonal analysis of primate growth.

### **Assistant Professors**

\*Dr. Takako MIYABE : miyabe.takako.2s@kyoto-u.ac.jp

1. Anesthesia of non-human primates; 2. Primate veterinary clinics.

\*Dr. Hiroyuki TANAKA : tanaka.hiroyuki.6c@kyoto-u.ac.jp

1.Genetic study on monkey breeding populations, 2.Molecular phylogenetics and biogeography of bees.



# Wildlife Research Center

<http://www.wrc.kyoto-u.ac.jp/en/index.html>

The Wildlife Research Center (WRC) of Kyoto University was founded in April 2008 and aims to promote scientific research on and education about wild animals, and to contribute to the peaceful coexistence of living organisms on our planet. The WRC mission has three components. First, the center should carry out basic research on endangered and threatened species of wild animals to promote their conservation in their natural habitat, to improve their health and welfare in captivity, and to encourage the fusion of scientific approaches to advance our understanding of human nature. Second, the center should integrate different areas of science to create new disciplines applicable to field settings and to encourage international collaboration for the symbiosis of humans and other living organisms. Third, in collaboration with zoos, sanctuaries, aquariums, and museums, etc., the center should promote environmental awareness among young people by offering them unique experiences with nonhuman animals, and provide the younger generation with a deep insight into nature and an understanding of where we as humans stand within it.

## Director

Dr. Shiro KOSHIMA : [kohshima.shiro.2s@kyoto-u.ac.jp](mailto:kohshima.shiro.2s@kyoto-u.ac.jp)

## Professors

Dr. Gen'ichi IDANI : [idani.genichi.8x@kyoto-u.ac.jp](mailto:idani.genichi.8x@kyoto-u.ac.jp)

1. Ecology and sociology of African great apes; 2. Zoological science.

Dr. Shiro KOSHIMA : [kohshima.shiro.2s@kyoto-u.ac.jp](mailto:kohshima.shiro.2s@kyoto-u.ac.jp)

1. Ecology and ethology; 2. Glacier biology

Dr. Miho MURAYAMA : [murayama.miho.5n@kyoto-u.ac.jp](mailto:murayama.miho.5n@kyoto-u.ac.jp)

1. Animal genetics; 2. Polymorphism; 3. Personality

Dr. Satoshi Hirata : [hirata.satoshi.8z@kyoto-u.ac.jp](mailto:hirata.satoshi.8z@kyoto-u.ac.jp)

1. Comparative cognition in primates; 2. Social intelligence in great apes

## Associate Professors

Dr. Hideki SUGIURA : [sugiura.hideki.7s@kyoto-u.ac.jp](mailto:sugiura.hideki.7s@kyoto-u.ac.jp)

Ecology and social behavior.

## Assistant Professor

\*Dr. Kodzue Kinoshita : [kinoshita.kodzue.8v@kyoto-u.ac.jp](mailto:kinoshita.kodzue.8v@kyoto-u.ac.jp)

Reproductive endocrinology for conservation of endangered species

