Research Lab Rotation

June - July 2012 for students enrolled in April 2012
October - November 2012 for students enrolled in September 2012

HBP students engaged in a research lab rotation as part of "Basic Experiments in Human Biology" for a month and a half from 1 October 2012.

HBP Required Course:

Basic Experiments in Human Biology
Course Outline: The students learn the outline of each research and basic experimental methods/research concepts and perform elementary experiments/simulation at research laboratories headed by program professors.

Faculty member in charge: Kyoukuse Nagata (Professor, HBP)

Why is working outside your own laboratory so important?

- University is a treasure chest

You can often find a fascinating research world even in the laboratories you work every day. We know that moving forward as soon as possible is a habit of all human beings. However, in our program, we encourage our students to make a side trip and get exposed to the world they never knew by offering the course, "Basic Experiments in Human Biology". In this course, the first-year students work in the four different laboratories for one week each.

Experimental practice using cultured cells
Experimental practice of isolation of bioactive natural organic compounds
Experimental practice using stem cells

While someone who is fully occupied by bacteriology may find a new aspect of biology from mathematical approach, another one living in the computer-oriented world might be dissecting mice at laboratory. Such startling experiences can open a door to the new world. Knowing something different can be an incentive to establish individual. The university is a treasure chest. You may find a key to self-actualization in the world you have never been interested in.

Professor Mitsuyasu Kato
Chief of HBP Academic Affairs

Students' Comment on Lab Rotation

I observed cellular responses to growth factor stimuli through a fluorescence microscope and entire biological responses of genetically modified nematodes to temperature stress. From this experience, I became more interested in the issues concerning the relations between life and environment. I believe that I can apply the new aspects and approaches I learnt to my own research. (J. Shao)

I was able to spend a valuable time while engaging in the laboratories of a variety of fields. I was able to gain knowledge and techniques outside of my field and get to know faculty members who worked together in the laboratories. (Y. Miura)

I was able to deepen my interest and insight through the experimental studies in which I engaged using other model organisms than mice that I normally use in my laboratory, such as yeast and nematodes. These experiments in different fields enabled me to penetrate insight to my research from different angles. (T. Kikuchi)

I have expanded my academic perspective through learning immunology, yeast research, bioinformatics, and embryology from the basic to the experimental level from the faculty members in a short period of time. I found it exciting that all the techniques being used conventionally in other research fields can be applied to my research. (M. Hashimoto)

Laboratories used for Lab Rotation:

- Kyoukuse Nagata: Doctor of Pharmacology: Virology, Molecular Biology
- Yasunori KANASHI: Doctor of Pharmacology: Physiological Chemistry, Cell Biology
- Mitsuyasu KATO: Doctor of Medicine: Pathology
- Satoru TAKASHI: Doctor of Medicine: Developmental Engineering/Molecular Biology
- Kenji IRIE: Doctor of Science: Molecular Cell Biology
- Osamu OHNEDA: Doctor of Medicine: Regenerative Medicine/Transplantation Biology
- Akira SHIBUYA: Doctor of Medicine: Immunology
- Tadashi BARA: Doctor of Agriculture: Mammalian and Cellular Biology
- Akiyoshi FUKAMIZU: Doctor of Agriculture: Biochemistry/Molecular Biology
- Jun YANAGISAWA: Doctor of Pharmacy: Molecular Biology
- Tomoki CHIBA: Doctor of Medicine: Molecular Cell Biology
- Tetsuya KURAI: Doctor of Engineering: Numerical Analysis
- Shoji MAKINO: Doctor of Engineering: Media & Information Science
- Kazuhiko KAWAMURA: Doctor of Science: Systems Science/Combinatorial Optimization
- Masaki KITA: Doctor of Science: Bioorganic Chemistry/Natural Products Chemistry

Ph.D. Program in Human Biology