

Department of Clinical Laboratory

1. Staffs

General Manager (Junior Associate Professor) Naoko Tojo
Associate Manager (Associate Professor) Shuji Tohda
Assistant Professor Naomi Murakami Tadashi Kanouchi
Ryoko Azuma

2. Purpose of Education

Main purpose of education of the department is to provide opportunities for students to study the clinical laboratory medicine and medical technology. The staffs lecture on clinical laboratory medicine and give technical training of clinical laboratory tests to not only the medical students and medical technologist students in the faculty of medicine of the university but also students in the another vocational schools for medical technologists.

Besides the students, four residents of the university hospital of medicine had a general training for clinical laboratory medicine, including ultrasonography. A few hands-on seminars of Gram staining and abdominal ultrasonography have been held for some young doctors in the hospital. Four medical technologists in another hospital also had an opportunity in our department to train the hematological examination.

3. Research Subjects

- 1) Evidence based laboratory medicine
- 2) Standardization of respiratory function tests.
- 3) Development of molecular diagnostic tests for hematological diseases.
- 4) Development of electrophysiological diagnostic tests for peripheral neuropathies.
- 5) Development of diagnostic tests using transcranial magnetic stimulation for neurological diseases.

4. Clinical Services

Speedy, high quality and advanced laboratory tests are being done in the clinical laboratory all day all the time. In the night time, the tests for blood transfusion are also done and appropriate blood products are provided from the laboratory in cooperation with blood transfusion service of the hospital. Items of the emergency laboratory test have been in increase, including smear test for tubercle bacillus and cell counting of the cerebrospinal fluid. The results of clinical physiological examinations are online reported quickly and correctly. The information on sensitivity to antibiotics of the pathogens in each ward is also provided online.

5. Publications

Original Article

1. Kawahara T, Kawaguchi-Ihara N, Okuhashi Y, Itoh M, Nara N, Tohda S. Cyclopamine and quercetin suppress the growth of leukemia and lymphoma cells. *Anticancer Res.* 2009;29:4629-4632.
2. Fu L, Katsube K, Tohda S. Transition of cleaved Notch1 and gene expression changes in myeloblastic leukemia cells stimulated with notch ligands. *Anticancer Res.* 2009;29:3967-3970.
3. Nara N, Beppu M, Tohda S, Suzuki T. The introduction and effectiveness of simulation-based learning in medical education. *Intern Med.* 2009;48:1515-1519.
4. Itoh M, Fu L, Tohda S. NF-kappaB activation induced by Notch ligand stimulation in acute myeloid leukemia cells. *Oncol Rep.* 2009;22:631-634.