# **Division of Diagnostic Pathology**

## **Professor (Director)**

Masashi Fukayama, M.D., Ph.D.\*

## **Associate Professor (Deputy Director)**

Noriyoshi Fukushima, M.D., Ph.D.\*

### Lecturer

Hiroshi Uozaki, M.D., Ph.D., Satoshi Ohta, M.D., Ph.D.\*, Yutaka Takazawa, M.D., Ph.D.\*

# **Lecturer (Hospital)**

Junji Shibahara, M.D., Ph.D. Kenji Kashima, M.D., Ph.D. (visiting researcher, UK)

### **Associate**

Takashi Sakatani, M.D., Ph.D., Tetsuo Ushiku, M.D., Ph.D., Teppei Morikawa, M.D., Ph.D.
Shunpei Ishikawa, M.D., Ph.D.\*, Rumi Hino, M.D., Ph.D. \*, Yoshinao Kikuchi, D.D.S., Ph.D. \*
Takeo Nakaya, M.D., Ph.D.\* (Cancer Profession Training Program)

### **Clinical Fellow**

Kenya Sumitomo, M.D., Ph.D., Shigeki Morita, M.D.

# Homepage http://pathol.umin.ac.jp/

## **Introduction and Organization**

Department of Pathology and Diagnostic Pathology (\*) and Division of Diagnostic Pathology of University Hospital have been united to function as a unit. "Diagnostic Pathology" has been officially admitted in the fiscal year 2009 as the name of clinical department that can be shown to the patients, and the independent chapter has been set up for the pathological examination fee as 13<sup>th</sup> category, apart from the 3<sup>rd</sup> category (laboratory examination) in the medical fee schedule of Health Insurance

System. These are a great delight for us pathologists as indicating a general acceptance of the importance of pathology diagnosis.

The proper staffs in the Division of Diagnostic Pathology were one lecturer, two lecturers (hospital), two associates, and two clinical staffs.

# Clinical activities (diagnostic pathology and autopsy)

Annual statistics of the pathologic practice in 2008

fiscal year indicate 13,583 cases of histological examination, 16,535 cases of cytology, 664 of frozen histology, 537 of intra-operative cytology and 104 of autopsy (23% as autopsy rates).

As "Diagnostic Pathology" has been officially admitted, we are now planning the set-up of an out-patient clinic, "Understanding Clinic of Pathology Diagnosis" to explain the detail of pathology diagnosis directly to the patients. In order to search such a need of the patients, Dr. Sakatani carried out trials of attending to the explanation process of surgeons for the breast cancer patients and explaining the pathology of their tumors by patients' request.

Clinico-pathological conferences (CPCs) for two autopsy cases are held every month in the hospital. Furthermore, surgical pathological conferences are regularly held with each clinical division. Both clinicians and pathologists discuss the cases of various tumors in the organs including thorax, brain, liver, pancreato-biliary tract, male genitourinary and female genital tracts, breast, and bone and soft tissues. Biopsy conferences are also held in the cases of liver, kidney and skin.

Our aim of the pathologic practice is to provide the correct diagnosis as soon as possible. We are addressing 'one-day pathology' using a newly-developed machine of rapid-histo-processing. Furthermore, a virtual slide scanner has been installed, which enabled us to save the consultation specimens as digital information. We are setting out a future providing system of pathologic images for clinical divisions. Lecturer Uozaki is mainly in charge of this project.

We continued to participate the autopsy assessment for "The Model Project for Inspection and Analysis of the Deaths Related to Medical Treatment (DRMT)" of Health, Labor and Welfare Ministry,.

# **Teaching activities**

The lectures and exercise course of systemic pathology are carried out for the 2<sup>nd</sup> grade–students. Bed-side learning (BSL) course of autopsy and surgical pathology are for the 4<sup>th</sup> grade students. Six

students of 3<sup>rd</sup> grade took the clinical clerkship course. One student of Kyoto University attended for two weeks as his elective exercise course.

We instructed all interns to submit one report of a CPC case as an obligatory requirement for their medical training. The Division of Diagnostic Pathology received five interns in 2008 for the second year program of their internship.

## Research activities

We have started the two-year project, "Feasibility of Post-Mortem Imaging as a Method Assisting the Autopsy Assessment of DRMT" (Grants-in-Aid from Ministry of Health, labor and Welfare). The report 2008 is now open to the public and available the website of the at study group (http:://humanp.umin.jp/). In the cases of Tokyo University Hospital, we successfully carried out investigation using a mobile CT for four weeks in cooperation with clinical departments in 2008. Next fiscal year, we will move the used CT-apparatus next door to the autopsy room, which is helpful for comparing the image and the autopsy finding for many autopsy cases. Lecturer Takazawa is in charge of this project.

We are developing the tumor specific antibodies in collaboration with Genome Science Division, Research Center for Advanced Science and Technology, the University of Tokyo. Based on the DNA array data of various human neoplasms, monoclonal antibodies against candidate gene products are generated. In addition, we are in the process of constructing the tissue array of neoplastic as well as non-neoplastic tissues in order to facilitate the screening process of immunohistochemistry. Lecturers Ota and Shibahara are engaged in the project.

#### References

See the corresponding section of Department of Pathology and Diagnostic Pathology