

## **Department of Pathology, Seoul National University Hospital**

### **1. Introduction**

#### **A. Surgical Pathology and Cytopathology**

The primary goal of surgical pathology and cytopathology is to make an accurate diagnosis from patient tissues or cytology specimens, to determine the stage of disease and to predict disease progression. At present, we have 17 full-time pathology faculty, 6 fellows and 10 residents who are dedicated to diagnosis, research and education in general surgical pathology and specialized areas of pathology, signing out more than 100,000 cases per year. Special stains, immunohistochemistry, electron microscopy, immunofluorescence and molecular pathology are also extensively performed as adjunctive tests to ensure a rapid and accurate diagnosis. In addition, we are hosting or participating in over 30 intra- and interdepartmental multidisciplinary conferences to provide the best possible medical information.

#### **B. Molecular Pathology**

The importance of molecular pathology is unprecedentedly increasing due to the development of new targeted anti-cancer therapies and biomarkers. Since its establishment in 2008, the Molecular and Immuno-pathology Laboratory has become an essential part of the department, and the average number of tests has been increasing by more than 20% each year. The SNUH-Molecular Pathology center, now a leading molecular diagnostic center in Korea, fulfills its mission to diagnose infectious diseases or cancers accurately, predict the prognosis and therapeutic responses of patients by analyzing the genetic changes related to cancer. Due to the high reliability and accuracy of our tests, we also receive consultations from outside institutions, and the molecular laboratory has acquired certificates from the Korean Institute of Genetic Testing Evaluation (KIGTE) and International Organization for Standardization (ISO). Furthermore, we are participating in various clinical trials in collaboration with clinical oncologists, and execute cutting-edge tests including target-sequencing projects for cancer gene profiles based on next generation sequencing platforms. The ultimate goal of the Molecular Pathology center is to become a global leader to contribute to the cure of cancer patients and the improvement of quality of life.

### **2. The International Fellowship Program at the SNUH Department of Pathology**

The Department of Pathology at Seoul National University Hospital offers short-term international fellowship and observership programs for young qualified international candidates who have trained in pathology in their home countries. The length of the program

is from a minimum of 1 month to a maximum of 6 months, depending on the goal of the candidate. The entire period may be spent in surgical pathology, or in more focused areas listed below, according to the candidate's needs and areas of interest.

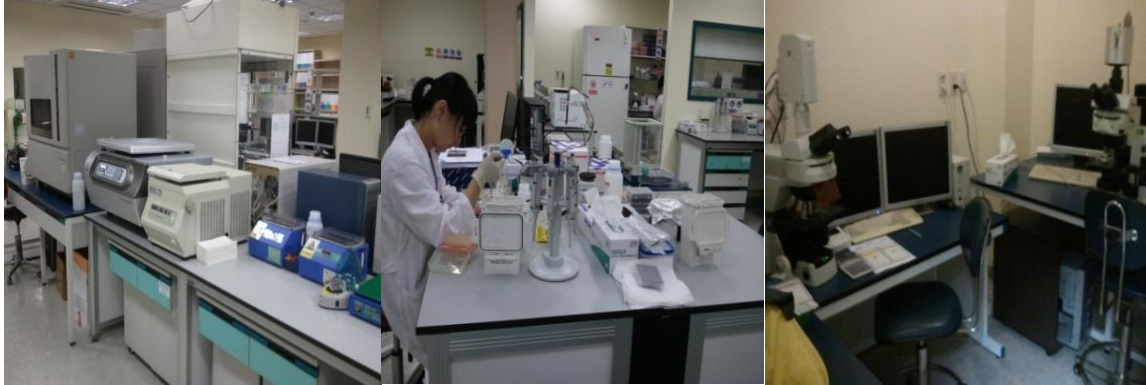
[Areas]

- ✓ General surgical pathology
- ✓ Molecular pathology: next-generation sequencing, real-time PCR, FISH, microsatellite instability, infectious diseases (HPV, tuberculosis, non-tuberculous mycobacteria etc), immunohistochemistry
- ✓ Gastrointestinal pathology
- ✓ Neuropathology
- ✓ Breast pathology
- ✓ Endocrine pathology
- ✓ Pulmonary pathology
- ✓ Male genital tract and urinary pathology
- ✓ Renal pathology
- ✓ Bone and soft tissue pathology
- ✓ Hematopathology
- ✓ Liver and pancreaticobiliary pathology
- ✓ Female genital tract pathology
- ✓ Dermatopathology
- ✓ Pediatric pathology



Observers will participate in all the routine services and academic activities of the department. The routine services include daily sign outs, gross examination, frozen section examination, and molecular pathology. Academic activities include intradepartmental weekly slide conferences, journal clubs, gross conferences, regular faculty lectures and interdisciplinary conferences. Candidates will also be welcome to participate in monthly slide conferences or meetings held by the Korean Society of Pathologists. In addition, research opportunities may

also be available.



### Goals and Objectives

Through this program, the trainee will be able to:

- ✓ Gain experience in the diagnosis of various neoplastic and non-neoplastic diseases.
- ✓ Examine and observe the whole process of surgical pathology, from specimen reception to diagnosis.
- ✓ Observe the slide manufacturing and specimen preparation processes in the surgical pathology laboratory.
- ✓ Observe frozen section diagnosis, electron microscopy, immunohistochemistry, and molecular pathology.
- ✓ Develop an appreciation of the multidisciplinary team approach for the treatment of patients with various cancers.
- ✓ Understand the Korean pathology education system, both for residents and for undergraduates, and enhance teaching skills through interaction with students, residents and fellows.

### 3. List of faculty members of the Department of Pathology, SNUH

**Dr. Sung-Hye Park:** Neuropathology, pediatric pathology, electron microscopy

**Dr. Gyeong Hoon Kang:** Gastrointestinal pathology, molecular pathology

**Dr. Doo Hyun Chung (Program director):** Pulmonary pathology, immunopathology

**Dr. Kyeong Cheon Jung:** Immunopathology, head & neck pathology, endocrine pathology

**Dr. Kyung Chul Moon:** Renal pathology, uropathology

**Dr. Hye Seung Lee:** Gastrointestinal pathology

**Dr. Yoon Kyung Jeon:** Hematopathology, pulmonary pathology, head & neck pathology, molecular pathology

**Dr. Haeryoung Kim (International fellowship program coordinator):** Liver &

pancreaticobiliary pathology, gynecologic pathology

**Dr. Kyoungbun Lee:** Liver & pancreaticobiliary pathology, renal pathology, bone & soft tissue pathology

**Dr. Jae-Kyung Won:** Molecular pathology, neuropathology, endocrine pathology

**Dr. Han Suk Ryu:** Breast pathology, uropathology

**Dr. Jung Ho Kim:** Gastrointestinal pathology, breast pathology, molecular pathology

**Dr. Cheol Lee:** Dermatopathology, gynecologic pathology, hematopathology

**Dr. Jeong Mo Bae:** Neuropathology, endocrine pathology, molecular pathology

**Dr. Yoonjin Kwak:** Gastrointestinal pathology, dermatopathology, bone & soft tissue pathology

**Dr. Jaemoon Koh:** Lung pathology, breast pathology, pediatric pathology

**Dr. Jiwon Koh:** Breast pathology, head & neck pathology, cardiovascular pathology

#### **4. Application information**

All applicants are requested to download the application materials from the SNUH website (<http://www.snuh.org/global/en/education/EN04001001.do>). The completed application materials are due no later than 2 months before the start date. Approval is at the discretion of the program director, and communication of acceptance or denial will be sent to the applicant by email.

For self-supported applicants who do not need financial support from SNUH, applications for this program are accepted all-year round. However, as only a limited number of visiting fellows can be accepted at a time, applicants are advised to contact Dr. Haeryoung Kim ([haeryoung.kim@snu.ac.kr](mailto:haeryoung.kim@snu.ac.kr)) for additional information about availability of the program.

A stipend is available for a limited number of international fellows; for more information, please contact Dr. Haeryoung Kim ([haeryoung.kim@snu.ac.kr](mailto:haeryoung.kim@snu.ac.kr)).

Accommodations are available on-site (dormitory) or outside the hospital premises. Please note that the applicant is responsible for his/her own accommodation.

#### **5. Program Contact**

Dr. Haeryoung Kim, M.D., Ph.D.

[haeryoung.kim@snu.ac.kr](mailto:haeryoung.kim@snu.ac.kr)

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