

Hematopathology Fellowship

Dept. Pathology, McGill University

Faculty of Medicine, Postgraduate Medical Education

Name of Institution: McGill University and McGill University Health Centre

Location: Department of Pathology, McGill University Health Centre, principally Glen site

Type of Fellowship: Hematopathology

Program Information

- Number of fellowship positions requested: One

- Academic affiliation: McGill University

- Name of hospitals involved in training:

- o McGill University Health Centre, Glen site

- Background: The fellowship will be principally based at the McGill University Health Centre, Glen site, with possible rotations at the Jewish General or St Mary's hospital.

The service responsibilities will focus on diagnostic Hematopathology involving the review of anatomic pathology material, specifically lymph nodes, spleen and other hematopoietic and extranodal sites with reactive or malignant lymphoid and related disorders. In addition, this will include the review of bone marrow core biopsies.

There will also be exposure to Molecular pathology as it relates to diagnosis in Hematopathology, and to Flow Cytometry as it relates to diagnosis on lymph nodes and related extra-nodal sites, as these are interpreted by the Hematopathologists. The fellowship does not include direct and specific exposure to other aspects of "clinical hematology" such as bone marrow aspirates and smears, blood morphology, nor will it include flow cytometry of blood or bone marrow. However, the fellow is expected to be able to interpret these data and include them in the work-up of the pathology cases he is responsible for, and integrate them into the Hematopathology consultation report.

Although cytogenetics is performed on some of the hematopathology material, this is not included as part of the training program. However as for the item above, the fellow will be expected to interpret the cytogenetics findings and integrate them into the Hematopathology consultation report.

- Research activity and publications: The fellow will be expected to participate in at least one major research project involving, at minimum, a review of a series of cases (i.e., not simply a case report) with a view to publication in a peer-reviewed journal (i.e. not only presentation at a meeting). In addition, other research projects may be carried out, including case reports.

- **Mission and objectives:** The general mission of the fellowship is to provide training in the interpretation of lymph node and related lymphoid and extranodal sites with a view to learn the entire spectrum of reactive and malignant hematopoietic and related entities.

The fellow will integrate light microscopy, immunohistochemistry, flow cytometry, molecular studies and cytogenetics to arrive at a precise diagnosis. The fellow will interact with secretarial and laboratory personnel, other colleagues and residents, as well as clinical staff in order to develop skills that will enable them to practice at a high level in an academic or non-academic setting. The specific objectives to attain these goals are as follows:

1. Be available and working on hematopathology-related material on a consistent basis, daily.
2. Be available to respond to the Surgical Pathology laboratory to assist and make diagnoses on operating room consultations on any hematopathology-related material, e.g., in being responsible for the “Lymphoma Protocol” when a specimen requires this.
3. Participate in grossing of all hematopathology-related larger specimens.
4. Be responsible for “first look” at all hematopathology cases on the day, to write a microscopic description, a tentative diagnosis and differential diagnosis and comments and request a list of comprehensive immunohistochemical stains required to make a diagnosis. The fellow will enter the preliminary reports in the laboratory information system.
5. Correlate the macroscopic, light microscopic and immunohistochemical features of cases along with results of flow cytometry, molecular diagnostics and cytogenetics to arrive at a final diagnosis.
6. Attend Surgical Pathology rounds on a regular basis, since hematopathology material is routinely presented.
7. Attend “Lymphoma Rounds” or “Hematology Tumor Board” rounds in conjunction with the Hematology Division of the Department of Medicine every two weeks. Be prepared to present at some of these rounds and participate in clinico-pathological discussions and correlations.

- How intended fellowship will enhance residency training: The fellow will participate in the teaching to both Pathology and Hematology residents doing rotations in hematopathology. The fellow will teach them the basics of normal histology of hematopoietic organs, and features of reactive and malignant disorders. They will also serve as a resource person for the residents in these rotations, along with the responsible staff member.

Name of Fellowship Program Director: Dr. René P. Michel

Names of the Teaching Faculty

Dr. R.P. Michel, McGill University Hospital Centre

Dr. D. Haegert, McGill University Hospital Centre

Dr. O. Ajise, McGill University Hospital Centre

- Roles: These staff members will participate in the teaching as per their rotations on the Hematopathology service.
- Summary of clinical practice: At the MUHC, the staff rotate on a regular basis on the hematopathology service. Dr. R. Michel does approximately one-half of the hematopathology at the MUHC and Drs. D. Haegert and O. Ajise approximately split the balance.
- Major Strengths: The staff participating in teaching hematopathology are all very experienced in the diagnosis of this class of disorders. They have either had fellowships in hematopathology or have extensive experience in the diagnosis and handling of these specimens. The material available for review is varied and covers the entire spectrum of non-neoplastic and neoplastic hematological disorders on lymph nodes, other lymphoid organs as well as extra-nodal sites. In addition, a large number of difficult cases are sent to the MUHC from hospitals and hospital centers across the province by Pathologist for consultation and these are frequently very challenging and give the fellow the opportunity to expand and sharpen his or her skills.
- There are opportunities for teaching and research in Hematopathology.

Updated March, 2015

Academic Facilities

- Facilities for clinical and academic pursuit: These are available, as of April 2015 in the new Glen site of the McGill University Health Centre. All appropriate facilities and ancillary studies in the form of immunohistochemistry, flow cytometry, molecular diagnostics and cytogenetics are available for diagnosis of hematolymphoid disorders.
- Dr. Michel has accumulated a sizable teaching collection of original material in Hematopathology that includes H&E-stained slides and immunohistochemistry that is available for review by the residents and fellows in Hematopathology.
- Library access, materials relevant to fellowship training: Books related to hematopathology are available in the rooms where residents and fellows work. In addition, McGill University has access to a wide variety of journals on the web and has a very comprehensive library for reading and research.

Fellow Duties and Responsibilities: See also objectives above.

- Call responsibilities to cover service: These will occur during the daytime to cover the Surgical Pathology laboratory to view and aid in processing all hematology-related material.
- The fellow will assist in teaching the Pathology residents and Hematology residents rotating in Hematopathology.

- The fellow will also participate, as do Pathology residents, in medical student small group teaching of Pathology in first and second year medicine.
- Proposed meetings to be attended by the fellow: See above objectives.
- Research productivity and publications expected by the fellow: See above objectives.
- Participate in at least one Quality Assurance activity with production of a report that is sent to the Hospital Quality assurance committee of the department of Pathology as well as of the MUHC.

Curriculum

- Intended case load: There are approximately 10-15 core bone marrow biopsies per week and a variable but significant number of biopsies of lymph nodes, spleens and extranodal sites. A variety of techniques are used to obtain these tissues, including core biopsies, incisional and excisional biopsies as well as resections of large organs. In addition, there will be opportunity to review fine needle aspirates from lymphoid lesions. The work-up of all the hematopathology cases, along with the teaching and research, will occupy the fellow on a full-time basis.
- Regular reading materials provided: The resident will have access to the books referred to above, as well as be required to carry out regular literature searches on cases found with a view to arrive at a specific diagnosis and rule out other differential diagnoses.
- Conference weekly schedules: See above objectives.

Document revised January 25, 2018, by Dr. René P. MICHEL.