ST. LUKE’S-ROOSEVELT HOSPITAL CENTER
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NEW YORK, NY 10019

CLINICAL PATHOLOGY TRAINING PROGRAM
HEMATOPATHOLOGY ROTATION

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COURSE OUTLINE

I. Objective:

To understand basic concepts in hematopathology including Immunopathology, flow cytometry, molecular testing for hematopoietic disease and urinalysis/medical microscopy.

II. During the rotation the resident will be involved with:

1. Interpretation of bone marrow biopsy, aspirations and smears, peripheral blood smears, and body fluids smears.

2. Interpretation of lymph nodes or lymphoid neoplasm of other organs

3. Integration of the results of histochemistry, immunohistochemistry, flow cytometry, with bone marrow and lymph node histopathology.

4. Interpretation of CBC data, routine and specialized hematology and coagulation tests, hemoglobin electrophoresis, serum and urine electrophoresis (pertaining to hematologic disorders) and immunofixation.

5. Triage fresh tissue specimens to assure proper specimen work-up.

6. Perform clinical consultations on patients with bleeding disorders or direct test selection to evaluate patients with thrombosis or bleeding.

7. Quality assurance projects

8. Journal club /lymphoma conference presentations

III. After completion of the rotation, the resident should:

1. Understand basic concepts in hematopathology

2. Be able to interpret bone marrow, lymph node morphology, immunohistochemical result, flow cytometry and molecular testing result.

3. Be able to interpret CBC data, routine and specialized hematology and coagulation tests, hemoglobin electrophoresis, serum and urine electrophoresis (pertaining to hematologic disorders) and immunofixation.
4. Be able to interpret body fluid, urinalysis etc result

IV. Competency-Based Goals and Objectives by Education Level

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<th>Competency</th>
<th>Developmental Milestones</th>
<th>Approximate Time Frame</th>
<th>Assessment Methods/Tools</th>
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| Medical Knowledge        | 1. Knowledge of morphology and immunophenotype of normal lymph node, spleen, bone marrow and peripheral blood.  
2. Knowledge of basic clinical hematology including coagulation.  
3. Knowledge basic principles of fluid and urinalysis interpretations.  
Know criteria and specific approach used to diagnose major neoplastic and non-neoplastic hematopathologic entities. | 1-2 month of rotation (PGY-2) | 1. direct supervision and observation  
2. 360-degree evaluation process  
3. ASCP CheckPath Examination  
3. Biannual evaluation  
4. ASCP In-Service Examination |
| Patient Care             | 1. Preview hematopathology cases with direct faculty guidance, formulate differential diagnosis.  
2. Gross specimens for lymphoma work-up  
1. Preview hematopathology cases semi-independently, formulate more complete differential diagnosis.  
2. Know what immunohistochemical stains, cytochemical stains, flow antibody combinations, molecular tests to order to resolve differential diagnosis.  
3. Review data from ancillary studies  
1. Write the preliminary reports for most routine cases.  
2. Independently order ancillary studies for most routine cases. | 1-2 month of rotation (PGY-2) | 1. direct supervision and observation  
2. 360-degree evaluation process  
3. ASCP CheckPath Examination  
3. Biannual evaluation  
4. ASCP In-Service Examination |
| Practice based Learning  | Become familiar with basic hematopathology educational resources.  
Demonstrates ability to use textbooks and medical literature to construct a differential diagnosis for most cases and decide what ancillary testing would be useful.  
Understand specific test methodology and instrumentation, quality control | 1-3 month of rotation (PGY-2-3) | 1. direct supervision and observation  
2. 360-degree evaluation process |
|                          |                                                                                                       | 4-6 month of rotation (PGY-3-4) |                                                                                                           |
program, proficiency testing, laboratory accreditation requirements etc.

| Interpersonal and Communication Skills | 1. Present with clarity in conference settings  
2. Works well with technologists and support staff  
3. Convey straightforward information to clinicians. | 1-3 month of rotation  
(PGY-2-3) | 1. direct supervision and observation  
2. 360-degree evaluation process |
|----------------------------------------|-----------------------------------------------------------------|-------------------------|--------------------------------------------------|
|                                        | 1. Able to educate technologists  
2. Able to answer questions from clinicians about diagnoses or work-up. | 4-6 month of rotation  
(PGY-3-4) |                                                   |
| Professionalism                        | Adhere to basic ethical principles, dress and behave appropriately, maintain appropriate professional relationships with Staff, document and report clinical information truthfully | 1-3 month of rotation  
(PGY-2-3) | 1. direct supervision and observation  
2. 360-degree evaluation process |
|                                        | 1. Serve as a professional role model for more junior colleagues  
2. Recognize the need to assist colleagues | 4-6 month of rotation  
(PGY-3-4) |                                                   |
| System based practice                  | 1. Demonstrate an understanding of how the hematology laboratory services impact on the delivery of patient care within the complex health care system  
2. Utilize hospital and laboratory information system and other information technology (OVID, Medline) | 1-3 month of rotation  
(PGY-2-3) | 1. direct supervision and observation  
2. 360-degree evaluation process |
|                                        | 1. Learn regulatory agencies and organizations.  
2. Participate in laboratory management including review of quality control, quality assurance, data analysis, correction and action throughout the CAP checklist and participate in inspections | 4-6 month of rotation  
(PGY-3-4) |                                                   |

V. Available reading material:


3. Bone Marrow Pathology, Third Edition, Kathryn Foucar, Kaaren Reichard, David Czuchlewski


9. Hematology: clinical Principles and Applications. 3nd. ed. W.B.Saunders Co,

