**University of Minnesota**  
**Lab Medicine and Pathology**  

**Laboratory Management**

**Location:** D175 Mayo  
**Duration:** One month  
**Rotation Director:** Anthony Killeen, MD, PhD. – phone: 612-624-5443  
**Other Faculty:** Claudia Cohn, MD, PhD, John Crosson MD, Amy Karger MD, PhD, Mahmoud Khalifa, MD, PhD, Klint Kjeldahl, Jo Norton

**General Description:**  
The format of this rotation is one month of lectures with reading required to be done prior to class. Class Times: Mon, Tue, Thurs, Fri: 8 am to 10 a.m.; Wed after Grad Rounds but TBD (one day only)

**Goals and Objectives:**  
Upon completion of this rotation, the resident will be able to understand the basics of laboratory management principles including financial management, personnel management, laboratory laws and regulation.

**Objectives:** At the end of the course, residents are expected to have a basic understanding of the following topics covered in lectures.

- Introduction to Management Principles
- Competencies & Interfaces with Involved Pathologist
- Ethics for Pathology and Laboratory Medicine
- Financial Management of the Pathology Practice
- Personnel Management
- Equipment, Supplies and Space
- Quality Management in Laboratory Medicine
- Quality Assurance in Anatomic Pathology
- Financial Management of the Laboratory
- Laboratory Operations
- Laboratory Laws and Regulations
- Communications and Emotional Intelligence
- The Pathology Position
- Legal Affairs for Pathologist

**Required Reading:**  
Assessment methods:
Resident performance on this rotation will be assessed by: Class participation and two (2) final essays. One will be on a topic in Laboratory Management and the second will focus on the recommendations of a selected Adopter from the CAP Resource Guide for Clinical Informatics.

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Clinical Informatics Core Rotation

**Location:** D175 Mayo  
**Duration:** One month  
**Rotation Director:** Joseph Rudolf, M.D.  
612-626-2607  
jrudolf@umn.edu  
**Other Faculty:** Guest faculty from the Department of Laboratory Medicine and Pathology & Fairview Health Services (2018 Guest Faculty: J. Crosson, J. Stewart, C. Drifka, A. AbuSalah, K. Saeger, S. Gardner, A. Nelson, J. Sheehy, M. Lougee, C. Martin)

**General Description:**

The informatics core rotation is a required one-month introductory curriculum delivered in conjunction with the Laboratory Management required course. The rotation consists of a lecture series of approximately 4 didactic presentations or interactive discussion sessions per week (M,T,R,F 9-10 AM) and assigned independent readings from the current literature. Sessions are delivered by the rotation director and guest faculty members from the department and the health system. The intent of the core rotation is to provide trainees with a basic understanding of clinical informatics concepts and their applications in the practice of pathology and laboratory medicine. Particular attention is paid to the role of the pathologist in informatics work and IT initiatives.

At the end of the core rotation, residents will have received sufficient exposure to clinical informatics to meet the ACGME informatics milestones (SBP7: Level 1 - 3) below and a necessary level of competence for program graduation.

1. Demonstrates familiarity with basic technical concepts of hardware, operating systems and software for general purpose applications
2. Understands lab specific software, key technical concepts and subsystems on interfaces, workflow, barcode application, automation systems (enterprise systems architecture)
3. Able to apply informatics skills as needed in project management

Residents seeking to achieve higher level informatics milestones may do so by enrolling in the advanced informatics pathology elective.

**Goals and Objectives:**

Upon completion of this rotation, the resident will gain:

- A basic knowledge of core clinical informatics concepts and their applications in the practice of pathology and laboratory medicine.
- An appreciation for the important role of the pathologist in informatics and IT initiatives.
- The vocabulary and confidence to work with other members of the IT team.
The learning objectives below reference the corresponding ACGME core competencies: Patient Care (PC), Medical Knowledge (MK), Professionalism (Prof), Communication Skills (CS), Practice Based Learning and Improvement (PBLI), and Systems-Based Practice (SBP).

- Describe the basics of lab specific hardware, software, and workflow relevant to the practice of clinical informatics. (MK)
- Explain the role of the pathologist in the multidisciplinary IT team. (MK)
- Identify opportunities to improve patient care using IT applications including clinical decision support, provider order entry, the test compendium, patient portals, integrated reporting (PC, SBP, PBLI)
- Develop a basic understanding of process improvement and project management tools (MK, SBP).
- Demonstrate acquired informatics knowledge through participation in interactive discussions. (MK, CS, SBP)
- Complete assigned readings in advance of class sessions. (MK, Prof)
- Attend informatics sessions as scheduled and other regularly scheduled clinical conferences (MK, Prof)

Assigned Reading:
- Readings will be assigned from current and relevant publicly available literature and textbooks accessible online via the UMN library. Details regarding individual readings will be provided ahead of class sessions. Trainees are expected to familiarize themselves with the reading ahead of each class. Readings will serve as a platform for further discussion and learning.

Optional Reading:
- Additional optional readings will be made available to the trainees wishing to review topics in greater detail, and may include subspecialty texts, journal articles, and popular scientific literature.

Call Duties:
- The resident has no call responsibilities during this rotation.

During the rotation, the trainee is expected to join the following Conferences:
- Clinical Pathology Conference: Tues 12:00-1:00 PM (weekly) – Mayo D175
- Resident Didactic Series: Wed 7:00-8:00 AM & 9:15-10:15 AM (weekly) – Mayo D175
- Lab Medicine/Pathology Grand Rounds: Wed 8:00-9:00 AM (weekly) – 450 MCRB

Other Requirements:
- None

Assessment methods:
Resident performance on this rotation will be assessed by:
- Informatics session attendance and participation
- Formative feedback provided by attending physician(s)
- Performance evaluation completed by attending physician(s) at the end of the rotation