

## University of Minnesota Lab Medicine and Pathology

### Clinical Informatics Elective Rotation

**Location:** D217 Mayo  
**Duration:** One month; additional training available as research elective  
**Rotation Director:** Joseph Rudolf, M.D.  
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#### **Other Faculty:**

#### **General Description:**

The informatics rotation is a one-month pathology advanced elective. The rotation affords the interested resident with a focused informatics experience that builds upon the foundation provided in the introductory didactic lectures delivered as a component of the core resident curriculum. Rotation activities include self-study in informatics topics defined by the resident in collaboration with the rotation director, regular scheduled discussions with the rotation director, participation in selected informatics and operations meetings, and completion of an informatics project.

The principal output of the rotation is the completion of a focused informatics project identified by the resident in conjunction with the rotation director. The resident project provides the framework around which the readings and discussion are developed. The project is tailored to the interests of the resident and can take many forms (e.g. clinical process improvement, decision support and utilization management activities, reporting and analytics development, etc.). The resident will have the opportunity to work with additional clinical faculty and members of the Laboratory Information System team as relevant to the focus of the project. An ideal project will have both utility for the clinical laboratories and provide academic opportunities for the resident (presentation and/or publication of work).

#### **Goals and Objectives:**

Upon completion of this rotation, the resident will gain:

- A deeper knowledge of clinical informatics and its applications in the practice of pathology and laboratory medicine.
- An appreciation for the work of the Laboratory Information System team and increased ability to work effectively with this group.
- The skillset to identify clinical problems and apply technical solutions to improve patient care.

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).

- Complete independent readings and study in informatics topics. (MK)
- Demonstrate acquired informatics knowledge through regular discussion of informatics topics with rotation director. (MK, CS, SBP)
- Participate in selected informatics and operations meetings. (CS, Prof)
- Develop inter-professional working relationships with IT and clinical staff, and model professional behavior in these interactions. (CS, Prof)
- Identify and evaluate opportunities to improve pathology practice or enhance patient care via application of healthcare IT solutions. (PBLI, SBP, PC)
- Collect and analyze data using appropriate tools as needed for rotation work. (PBLI)
- Plan, execute, and document a focused informatics project. (PBLI, SBP, PC)
- Attend regularly scheduled clinical conferences. (Prof)

**Assigned Reading:**

- Assigned readings will be identified and tailored to the interests of the resident. Readings may include selections from standard informatics texts (Biomedical Informatics: Computer Applications in Health Care and Biomedicine, Pathology Informatics: Theory and Practice) as well as selected journal articles relevant to the resident's chosen project. Readings are discussed with the rotation director on a scheduled basis.

**Optional Reading:**

- Additional optional readings will be made available to the resident based on the specific interests of the trainee 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:**

- The resident will be expected to create a short portfolio document (1-2 pages) summarizing their experience (readings completed, project work undertaken, skills developed).

**Assessment methods:**

Resident performance on this rotation will be assessed by:

- Formative feedback provided by attending physician(s)
- Performance evaluation completed by attending physician(s) at the end of the rotation