

BLOOD BANK/TRANSFUSION MEDICINE: Rotation Director: Tisha C Irwin, MD, Clinical Assistant Professor

1. Description of the rotation: Residents are expected to complete at least two rotations over the course of their training. The first rotation is a “core” rotation which is focused on learning through lectures, reading, and observation of bench work in addition to discussion of cases with the attending. A day at the regional donor facility is arranged to deal with donor recruitment and eligibility, component processing and testing, and donor apheresis. The second and subsequent rotations are focused on consultation and problem solving. All consults for antibody identification, platelet antibody testing, transfusion reactions and extended phenotyping are first reviewed and interpreted by the resident and then discussed with the attending (ACGME competency: #4: Communication). All reviews for appropriateness of special orders (leukocyte reduced, CMV negative, etc) are handled first by the resident and then discussed with the attending. The resident will be called first to deal with problems or issues that arise during the day, obtaining information needed from appropriate sources and discussing solutions with the attending and blood bank staff (ACGME competency: #1: Pt.care). During the rotation residents will attend any administrative meetings which may be scheduled, including transfusion committee meetings if there is one. As appropriate to the individual case or consultation under review, the ethical, socioeconomic, medicolegal, and cost-containment issues are reviewed and discussed (ACGME competencies: #5: Professionalism; #6: Systems-Based Practice). Residents will also spend time in the stem cell laboratory and arrange with the hematology consult service to see therapeutic apheresis patients. Research design, statistics and critical review of the literature are discussed (ACGME competency: #3: Practice-Based Learning). Residents on their second rotation will complete a small literature review project. Residents on an elective third rotation will give an educational talk to the blood bank staff.

The following numbers of units were transfused in 2008: RBC: 25,200, Plt: 6,500, Plasma: 13,800. During 2008 there were 1,573 blood bank consults generated.

2. Goals of the rotation: The resident will be able to explain all blood bank procedures, to resolve ABO discrepancies, to understand the management of patients with autoimmune hemolytic anemia and hemolytic disease of the newborn, understand proper use of blood components, to understand the clinical implications of various red cell alloantibodies and platelet alloantibodies, to diagnose and manage platelet transfusion refractoriness, to provide transfusion support for bone marrow and organ transplantation, to understand and advise on proper use of blood products with special attributes which include leukocyte-depleted, washed, gamma irradiated and CMV negative products, to evaluate transfusion reactions, and to direct a hospital transfusion service. Management issues, medical/legal issues, and socioeconomic issues are emphasized.

3. Duration of the rotation: Two 4-week rotations. A third rotation can be completed as an elective.

4. Duties and responsibilities of residents: The resident interprets and provides consultative reports on red cell antibody identification, platelet antibody testing, and transfusion reaction work-ups; reviews and approves orders of blood components that appear excessive or inappropriate; reviews and approves issue of incompatible blood units; resolves conflicts regarding transfusion policy or procedure;

and provides consultation to physicians for complex transfusion needs of patients. Initially, the resident will be closely supervised by the attending blood bank medical director. By the end of the rotation, the resident should be sufficiently competent to resolve clinical transfusion therapy problems and assume responsibility for the transfusion service under proper supervision). In addition the residents should develop and apply interpersonal and communication skills that will allow them to function in the capacity of a laboratory director and consulting pathologist. Their professionalism and understanding of the place of Transfusion Medicine as part of the health care system is also part of the experience of this rotation and will be evaluated as such.

5. Teaching staff: Dr. Tisha C Irwin (medical director), Monique Huggins (manager), Linda Orsini (technical specialist), and technical staff of Blood Bank.

6. Resident Supervision: Reports are generated in concert with the attending faculty and signed out by the attending faculty. Calls are discussed and reviewed during call report.

7. Resident Evaluation: The evaluation at the end of the rotation is based on the ACGME core competencies.

Revised 6/8/2009