Transplant Surgery
Competency Based Goals and Objectives

The following objectives apply to R1 residents:

Medical Knowledge
1. Discuss the basic immunology for transplantation: cells involved, antibody of importance, Tissue typing.
2. Contrast importance of immunology in renal, pancreas and liver transplant.
3. Discuss drug mechanisms of commonly used drugs in transplantation and interactions with commonly used medications for transplant patients.
4. Discuss the rejection process, types of rejection and interventions.

Patient Care
1. Discuss the proper evaluation of a patient in need of acute and long term dialysis access.
2. Outline the common complications of dialysis access in the ESRD patient.
3. List the appropriate approach to a clotted or infected dialysis access fistula, PFTE or temporary access.
4. Discuss the proper evaluation and management of a patient with an elevated potassium in both a renal transplant patient and an ESRD patient.
5. List patient history or physical exam findings that would be contraindications to transplantation for a renal transplant.
6. Outline the approach to a post renal/pancreas transplant patient with low urinary output.
7. Discuss an approach to the post renal/pancreas transplant patient with a low blood pressure.
8. Outline a diagnostic algorithm for evaluating an increased serum creatinine level in a renal transplant patient.
10. List the basic considerations in a patient with liver failure including MELD score, diagnosis of basic problem and considerations for therapy.

Professionalism
1. Exhibit appropriate interaction with nurse coordinators, midlevel providers and other professionals on the transplant team.
2. Obtain consent for vascular access surgery.
3. List the components of consent for transplant surgery, both renal and pancreas.

Interpersonal and Communication Skills
2. Interact with members of the transplant team: nurses, midlevel providers, social workers, Pharm. D.

Systems-Based Practice
1. Describe the system by which deceased donor organs are allocated.
2. List the steps required for cadaveric donation.

Practice-based Learning and Improvement
1. Describe basic criteria for consideration of a patient for living donor consideration.
2. What are criteria for acceptance of a kidney for cadaveric donation.
The following objectives apply to R2 residents

**Medical Knowledge**

1. Outline the basic categories of rejection of a renal transplant
2. Describe the laboratory changes which occur in the rejection of a pancreas transplant
3. Outline the approach to a patient with rejection: diagnosis, drugs used and timing of treatment.
4. Describe the major infectious complications in transplant and describe the approach used to treat these complications.
5. Describe the complications of liver failure and the physiology behind this failure.

**Patient Care**

1. Outline the operative approach for a renal transplant.
2. Present an algorithm outlining when a patient should be reexplored for bleeding after a renal transplant.
3. Outline the operative approach for a natural fistula or gortex graft
4. Outline the operative approach for a clotted gortex graft.
5. Be able to first assist in a pancreas transplant.
6. Outline the approach to a patient with liver failure including: MELD score, approach to therapy and indications for TIPS.
7. Evaluate and outline a plan of action for a patient with a failed vascular access and be able to perform the procedure outlined.
8. Perform an initial evaluation for a patient who is being considered for a renal transplant and determine what is needed prior to listing the patient.

**Professionalism**

1. Exhibit appropriate interaction with nurse coordinators, midlevel providers and other professionals on the transplant team.
2. Lead the junior resident through rounds and guide the person in identifying critical issues in the care of the patient whether pre or post transplant.
3. Be able to lead a time out in the operating room.

**Interpersonal and Communication Skills**

1. Report daily progress of a transplant patient and update plans for therapy
2. Interact with members of the transplant team: nurses, midlevel providers, social workers, Pharm. D.

**Systems-based Learning**
1. List the criteria for acceptance of a kidney for potential transplant in a cadaveric recipient.
2. List the steps required from the initial contact with the donor center to transplant of an organ.

**Practice-Based Learning**

1. Be able to critique yourself after a case and list to the attending what you would do differently in the next case.
2. Demonstrate basic ability to read a transplant ultrasound.