# Educational Purpose of the Rotation

This rotation allows the sub-specialty resident the opportunity to gain increased exposure to individuals undergoing evaluation, management and treatment for cardiac transplantation. By completing this rotation, the sub-specialty residents are provided with the tools required to appropriately assess patients for transplantation as well as post-surgical management of the transplantation patient. This rotation is usually assigned to the second or third year fellow and is a mandatory rotation.

### **Rotation Attending**

This rotation is now provided under the direction of Dr. Michael Dickenson MD at Spectrum Health System or Celeste Williams MD at Henry Ford Health System. Both Dr. Dickenson and Dr. Williams are highly qualified physician in heart failure and transplantation and provides sub-specialty residents with in-patient as well as outpatient experiences for this rotation. Additional heart failure experience is gained during rotations Sparrow/TCI on the Clinical Service and heart failure rotations with Dr. Sonali Arora.

#### Resources

Both Spectrum and Henry Ford Health System provides modem facilities for the assessment and treatment of cardiac transplantation and heart failure patients. In addition, Sparrow Health System provides the resources required for the evaluation and management of transplant and heart failure patients. Spectrum health system further provides experience of CCU and managing mechanical support in critically sick patients.

### Goals of the Rotation

The primary goal of this rotation is to learn the clinical skills applicable in managing patients with complex, advanced or refractory endstage heart disease, including but not limited to:

- 1. Diagnostic evaluation for etiology of end-stage heart disease.
- 2. Identification of patients at high risk for early death.
- 3. Use of lifestyle modification to improve patient well-being.
- 4. Proper use of established pharmacological modalities.
- 5. Use of adrenergic blockade and stimulation
- 6. Selection of candidates for mechanical cardiac support, including intra-aortic balloon counter pulsation and left ventricular assist device implementation.
- 7. Management of arrhythmias and avoidance of sudden cardiac death.
- 8. Indications for, and interpretation of, metabolic exercise testing.
- 9. Selection of candidates for experimental therapy.
- 10. Management of the social, emotional and spiritual needs of patients with end-stage heart disease.
- 11. Understand the indications for transplantation including contraindications, timing of transplantation and transplant outcomes.
- 12. Exposure to pre-, peri- and post-transplant care in order to familiarize the subspecialty resident with the daily routine of heart transplant recipients and heart transplant cardiologists.

# Responsibilities

All sub-specialty residents participating in this rotation are expected to:

- 1. Participate in the evaluation of new and return patients including outpatient and inpatient services.
- 2. Attend weekly endomyocardial biopsy interpretation sessions with a senior pathologist and transplant cardiologist.
- 3. Attend the multidisciplinary transplant team meeting and other conferences as appropriate.
- 4. Attend at least one (1) or preferably more heart transplant surgeries as able.
- 5. Attend at the metabolic exercise-testing laboratory for at least 1/2 day or for two metabolic exercise tests.
- 6. Attend the endomyocardial biopsy session.
- 7. Participation in new or ongoing clinical or basic research.

# Instructional Methods

Attending physicians participating in this rotation will:

- 1. Supervise and instruct the sub-specialty residents in accordance with the supervision Policy.
- 2. Provide an atmosphere allowing for responsible patient care while encouraging subspecialty residents to assume more primary responsibility as their skills progress.
- 3. Provide sub-specialty residents with ongoing feedback regarding the progression of skills.
- 4. Provide structured teaching opportunities including appropriate literature references/citations for review and discussion.

# **Evaluation Process**

At the conclusion of each rotation:

- 1. Attending physicians will summarize and accurately describe the sub-specialty resident's performance on the provided evaluation form. The attending physician will review this evaluation with the sub-specialty resident and both will sign their acknowledgment and return the form to the Program Office for review by the Program Director and inclusion in the file.
- 2. The sub-specialty resident will summarize both the faculty performance as well as the relative value of the rotation on the provided form and return it the Program Office. In order to insure anonymity, these comments are entered into a database program and the original forms are destroyed.

**Readings:** Please see reading list in orientation package

Schedule: Please refer to the Sub-Specialty Resident Master Schedule.

**Competency Level:** Completion of the Cardiac Transplantation and Heart Failure rotation would permit the Sub- Specialty Resident to qualify for Level I competency under the COCATS 4 Guidelines. A log must be kept on all cardiac transplant and heart failure procedures.