UNIVERSITY OF OKLAHOMA
INTERVENTIONAL CARDIOLOGY FELLOWSHIP

CURRICULUM

Curricular Components:

The components of curriculum are:

1. Cardiac Catheterization Laboratory:
   a. Competencies: Patient Care, Medical Knowledge, Practice-Based Learning and Improvement, Interpersonal & Communication Skills
   b. Teaching Methods: Experiential Learning, Mentoring, Reading, Literature Review, Performance Feedback
2. Outpatient Post Intervention Clinic:
   a. Competencies: Patient Care, Medical Knowledge, Interpersonal & Communications Skills, Professionalism, System-Based Practice
   b. Teaching Methods: Experiential Learning
3. Didactic Lectures and Conferences:
   a. Competencies: Medical Knowledge, Interpersonal & Communications Skills
   b. Teaching Methods: Literature Review, Didactic Teaching, Guided Discussion
4. Research:
   a. Competencies: Patient Care, Medical Knowledge, Practice-based Learning & Improvement
   b. Teaching Methods: Experiential Learning, Mentoring

I. Cardiac Catheterization Laboratory:

1. Technical skills expected to be acquired during cath lab experience include performance of and interpretation of:
   - Vascular Access and Closure (Femoral and Radial)
   - Coronary Arteriography
   - Cerebral Angiography
   - Visceral angiography
   - Peripheral Angiography
   - Ventriculography
   - Hemodynamic measurements
   - Intravascular Ultrasound
   - Optical Coherence Tomography
   - Infrared Spectroscopy
   - Coronary Flow and Pressure Measurements
   - Intraaortic Balloon Counterpulsation
   - Percutaneous Left Ventricular Assist Devices
   - Angioplasty – peripheral and coronary
- Stent implantation – cerebral, peripheral and coronary
- Atherectomy-Rotational, Directional, Extraction
- ASD/PFO Closure
- Venous Interventions
- Pulmonary Embolism interventions
- IVC Filter insertion and removal
- AAA and Thoracic endograft insertion with CTS surgery

2. Knowledge base includes evaluation and treatment of patients with:
- Chronic and acute ischemic syndromes
- Valvular heart disease.
- Adult congenital heart disease
- Cerebrovascular Disease
- Renovascular Disease
- Peripheral Arterial Disease including ALI and CLI
- Venous Disease and Pulmonary Embolism
- Appreciation and Management of Mechanical, Thrombotic, and Physiologic Complications of PCI including:
  - Dissection
  - Acute and Subacute Thrombosis
  - Coronary spasm
  - Perforation
  - Slow and “No-Reflow” Phenomenon
  - Cardiogenic Shock
  - Left main dissection/closure
  - Tamponade
  - Peripheral vascular complications including dissection, pseudoaneurysm, AV fistula, hemorrhage, thrombosis…etc

Pharmacology:
- Thrombolytics
- Heparin(s) and other thrombin inhibitors
- GP IIb/IIIa Inhibitors
- Antiplatelet Therapies
- Hemorrhage: assess the risk for, diagnostic evaluation of, and management of hemorrhage associated with the above agents and percutaneous procedures.

Clinical Decision Making:
- Role of randomized trials and registries in decision making
- Understanding acute and chronic outcomes of percutaneous, medical, and surgical treatment of ischemia
- Understanding the acute and long-term outcomes of percutaneous therapy for ischemia
- Understanding the benefits and risks of direct and facilitated PCI vs. thrombolytic therapy for acute MI
II. Outpatient Post-Intervention Clinic:

The Interventional Cardiology fellows will attend a post intervention clinic weekly either at the OUMC or DVAMC depending on their assigned rotation. The Fellow will assess the progress of the patients post intervention, including development of complications and plan for the ongoing care with the referring physician, cardiology clinic or primary care clinic. The clinic at OUMC will ensure there is exposure to women with heart disease and provide familiarity with problems of dealing with the uninsured and medicaid patients as well as those with health insurance. At the DVAMC the fellow will work closely with a physician associate in this clinic. It will enable the fellow to become familiar with practice in a large, government-run clinic.

Competencies Addressed:
- Patient Care
- Medical Knowledge
- Interpersonal & Communication Skills
- Professionalism
- System-Based Practice

III. Conferences and Didactic Teaching:

The Interventional Cardiology Fellows will be expected to attend these conferences, to participate in the clinical discussions and to present some of the didactic lectures.

Didactic Conferences:

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<tr>
<td>Monday</td>
<td>7:30-8:30</td>
<td>(2nd Monday each month) Mortality/Morbidity Conference</td>
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<tr>
<td>Tuesday</td>
<td>7:30-8:00</td>
<td>Cath Conference - case presentations</td>
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<td>8:00-8:30</td>
<td>Cath Conference - core lecture</td>
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<tr>
<td>Wednesday</td>
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<td>(1st) CICU Conference</td>
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<td>7:30-8:30</td>
<td>(3rd) Research Conference</td>
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<td>(4th) Journal Club</td>
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<tr>
<td>Friday</td>
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<td>Cardiology Grand Rounds</td>
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Goals of the sessions include instruction in basic sciences, clinical medicine, evidence based cardiology and recent clinical trials information.

**Competencies Addressed:**
- Medical Knowledge
- Interpersonal and Communication Skills
IV. Research

Interventional fellow will participate in research under the mentorship of the faculty. Fellow will present the findings of his/her research at local and/or national scientific meeting and publish the findings.

**Competencies Addressed:**
- Patient Care
- Medical Knowledge
- Practice-Based Learning & Improvement

### SUMMARY OF INTERVENTIONAL CARDIOLOGY FELLOWSHIP CURRICULUM

#### COMPETENCIES AND EVALUATIONS

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