A surgical critical care residency program should provide a meaningful education that prepares the resident upon graduation to demonstrate the following competencies:

**Patient Care**
- Provide emergency care for stabilization and initial treatment of emergency patients.
- Utilize appropriate studies to appropriately diagnose and manage common medical and surgical diseases.
- Understand and utilize appropriate pharmacologic interventions.
- Perform essential medical procedures competently.
- Make informed diagnostic and therapeutic decisions.
- Diagnose and manage diabetes.
- Diagnose and manage hematology and oncology cases.
- Diagnose and manage thyroid disorders.
- Diagnose and manage disorders of the nervous system.
- Diagnose and manage infectious diseases.
- Develop and implement patient management plans.
- Diagnose and manage pulmonary diseases.
- Diagnose and manage diseases of the gastrointestinal system.
- Diagnose and manage medical disorders of the kidney.

**Medical Knowledge**
- Know and apply the basic and clinically supportive sciences appropriate for the patient care.
- Demonstrate an investigatory and analytic approach to each emergent situation.
- Diagnose and manage diabetes.
- Diagnose and manage hematology and oncology cases.
- Diagnose and manage thyroid disorders.
- Diagnose and manage disorders of the nervous system.
- Diagnose and manage infectious diseases.
- Understand the variety of management strategies for cardiac disease.
- Recognize symptoms of cardiac disease.
- Understand cardiac effects of pulmonary disease.
- Understand cardiac manifestations of systemic diseases.
- Understand the indications for surgery, where applicable.
- Perform preoperative cardiac assessment.
- Demonstrate skill in Swan Ganz monitoring.
- Understand the indications for surgery in gastrointestinal disease.
- Demonstrate the ability to develop a comprehensive plan of care for any critically ill patient, integrating the services of multidisciplinary team, including specialists and subspecialists and directing the scope of their involvement to assure high quality of care for the patient without unnecessary duplication of services.
• Demonstrate the ability to apply knowledge and understanding of each consultative specialty to provide competent patient care.

Practice-Based Learning and Improvement
• Reflect learning comprehension from previous experiences by applying this knowledge to patient care.

Interpersonal and Communication Skills
• Recognize the importance of problem-solving and conflict resolution among medical staff, resident staff, nursing staff, ancillary staff, and patients and their families.
• Demonstrate effective interpersonal and communication skills.
• Demonstrate effectiveness in developing appropriate doctor-patient relationships.
• Exhibit effective listening, written and oral communication skills in professional interactions with patients, families and other health professionals.
• Adhere to ethical principles in the practice of medicine.
• Demonstrate awareness and proper attention to issues of culture, religion, age, gender, sexual orientation, and mental and physical disabilities.
• Counseling skills – Demonstrate the rationale for test and treatment; obtain patient’s consent; and educate/counsel patient regarding management.

Professionalism
• Demonstrate professional attitude, behavior, and interpersonal skills essential in relation to the patients, their families, and other health care professionals.
• Gather accurate, essential information for all sources, including medical interviews, physical examinations, medical records, and diagnostic/therapeutic plans and treatments.
• Validate competency in the performance of diagnosis, treatment and procedures appropriate to the medical specialty.
• Demonstrate the ability to treat the patient and family as beings and not just a disease entity.
• Demonstrate an appreciation for the psychosocial aspects of critical surgical illness to prepare the resident to deal with the multifactorial impact of the illness on both the patient and the family.
• Demonstrate the ability to initiate or withdraw physiologic support while understanding the needs and concerns of diverse cultures and traditions relating to death and to medical care.
• Act as an educational resource for the institution and community.
• Assume the role of educator as preparation for a career-long obligation as a surgical educator.
• Publication of clinical or basic science research in recognized journals and periodicals is strongly encouraged.
• Upon successful completion of the program, the graduate should be prepared to meet certification requirements of the AOA through the American Osteopathic Board of Surgery (AOBS).

System-Based Practices
• Advocate for quality patient care and assist patients in dealing with system complexities.
• Demonstrate the ability to partner with health care managers and providers to assess, coordinate, and improve health care; and understand how these activities can affect outcomes.
OMM
- Diagnose tissue texture changes and OMM manifestations of disease.
- Demonstrate an understanding of the anatomical and functional relationships of the body.
- Exhibit appropriate OMM techniques.

Cognitive
- Integrate the sciences applicable to Burn with clinical experiences in a progressive manner.
- Develop critical thinking skills which result in making effective decisions for patient management.
- Understand the relevance of research to the practice of Burn.
- Read, interpret, and participate in clinical research as appropriate.

Psychomotor and technical skills
- Integrate osteopathic principles and practices throughout the course of training, when indicated.
- Demonstrate appropriate technical skills in surgical critical care.
- Provide competent physiologic management of the critically ill surgical patient in the intensive care and intermediate care units.

Practice management
- Demonstrate the ability to manage a surgical critical care unit.
- Demonstrate the ability to cooperate with other healthcare professionals from a wide variety of different medical specialties in a multidisciplinary team. The role may be either team manager or team member based upon need to deliver quality care.
- Demonstrate the ability to allocate scarce resources to include triage decisions both for admission and discharges as a provider and as the unit director.