

Yale University PICU Fellowship Training Program Yearly Expectations for Fellows

GOALS OF THE PEDIATRIC CRITICAL CARE TRAINING PROGRAM:

1. To provide outstanding clinical training, including the acquisition of knowledge, technical skills and experience in managing the care of critically ill children.
2. To offer an educational experience in clinical and/or basic science research that can serve, if desired, as the basis of a career in academic medicine.
3. To cultivate in trainees the professional character and behavior necessary to be an excellent clinician, teacher and contributor to the pediatric critical care community.

The following expectations for each year of training have been developed with these goals in mind. They are divided into four categories: Knowledge, Clinical & Technical skills, Research and Professional development.

I. FIRST YEAR OF PEDIATRIC CRITICAL CARE TRAINING

A. Knowledge

1. Fellows should begin to expand their understanding of the physiology, pathophysiology and therapy of disorders, beyond the level of a resident. In the first year, it is expected that fellows will complete, by independent reading:
 - A. a pediatric critical care textbook and
 - B. a basic physiology textbook.
2. These sources will be supplemented by conferences and lectures. Attending at least 75% of the PICU conferences (Monday at 11:00 and Friday at 12:00) and Department of Pediatrics weekly fellows conferences is mandatory. A sign in sheet will be used to track attendance.
3. By the end of the year, fellows are expected to have a thorough grasp of the basic normal physiology of the body and the mechanisms organ systems use to cope with physiologic derangements and stress.
4. Fellows should be certified in PALS and ATLS. This will be arranged by the section as needed.
5. Fellows are expected to be adept at utilizing the medical literature. This includes the ability to use electronic resources such as PubMed to search for relevant topics, as well as the ability to critically appraise the merits and deficiencies of an article.

B. Clinical & Technical Skills

By the end of the first year, fellows are expected to:

1. Be skilled in physical examination and medical history taking as related to critical care medicine.

2. Understand the tools and instruments used for monitoring patients in the PICU and to be able to access and interpret the necessary data.
3. Be able to stabilize a critically ill patient during their initial presentation.
 - Establish a differential diagnosis, assessment and plan
 - Prioritize interventions appropriately
 - Act in a timely fashion as directed by the clinical situation.
4. Order and interpret diagnostic studies appropriately.
5. Learn to use consultants effectively.
6. Begin to develop an understanding of therapeutic options.
7. Be able to apply basic critical care physiology and pathophysiology to their patient's care.
8. Maintain appropriate documentation of patient care.
9. Effectively supervise residents and contribute to their medical education.

Fellows should receive training in, and become proficient in, the following procedures. They should understand the indications for as well as the risks and benefits of each procedure. Documentation of invasive procedures should be maintained.

1. Cardiopulmonary resuscitation
2. Conscious sedation
3. Noninvasive airway management
4. Endotracheal intubation
5. Tube thoracostomy and thoracentesis
6. Arterial line placement
7. Central venous catheter placement (jugular, subclavian and femoral)
8. PICC (peripherally inserted central catheter) placement

C. Research

By the fourth month of fellowship (typically October), fellows are expected to schedule a meeting with the program director to discuss plans for a research project. They should have an idea of whether they intend to pursue clinical or basic science research, and have some broad ideas of potential areas of interest. Over the subsequent 2-4 months, fellows, with the assistance of the program director as needed, should meet with prospective mentors to discuss possible research projects. At the end of 8 months (typically March 1), fellows should submit a brief, 1-page summary of a proposed research project, with emphasis on goals to be reached during the project's first year. The fellow, with advice from the program director, should also identify faculty members to serve on his/her Scholarship Oversight Committee, as mandated by the American Board of Pediatrics.

D. Professional Development

Training in professional development is an ongoing process. Much of this training will come from interaction with colleagues while working in the PICU. Fellows should make it a priority to attend family meetings. Some of these topics will also be discussed during the weekly Department of Pediatrics Fellow's

conferences (75% attendance is required) and periodically during PICU conferences. Fellows are also expected to attend the monthly PICU Policy meetings to gain an understanding of the administrative aspects of ICU management.

In their behavior, fellows should:

1. Show respect for patients, families and other health care professionals.
2. Develop a dedication to their patients well being.
3. Establish effective communication skills with other members of the health care team as well as patients and their families.
4. Respect a patient's privacy and confidentiality.
5. Demonstrate professional responsibility, time management skills and effective work habits.
6. Demonstrate high moral and ethical standards.
7. Develop the attitudes and skills necessary for lifelong learning.

II. SECOND YEAR OF PEDIATRIC CRITICAL CARE TRAINING

A. Knowledge

Subspecialty residents should continue to expand their basic knowledge of physiology and pediatric critical care medicine. They should begin to shift their focus from studying textbooks to appreciating current literature, particularly in regards to therapeutic modalities and understanding pathophysiologic mechanisms of disease. They should begin augmenting their knowledge by attending national meetings.

B. Clinical & Technical Skills

Fellows should:

1. Feel comfortable with longer term therapeutic options for critically ill patients, beyond initial stabilization.
2. Gain confidence with independent decision making.
3. Expand their ability to evaluate a treatment plan and make changes as necessary.
4. Apply advanced critical care physiology and pathophysiology to their patient's care.
5. Apply current literature to patient care.
6. Maintain proficiency and expertise in technical skills.
7. Take a prominent leadership role in daily rounds.

C. Research

Fellows should be devoting their off-service time (with the exception of appropriate clinical electives) to their research project. The fellow should plan to meet briefly with the program director every three months to discuss progress and ongoing plans. Formal supervision of research will be done through the fellow's Scholarship Oversight Committee.

D. Professional Development

1. Focus on professional behavior and character development should be maintained.
2. Communication skills should continue to improve, particularly in difficult situations, such as delivering bad news to families.
3. Understand how one's own beliefs and biases may affect patient care decisions.
4. The subspecialty resident should begin to identify personal strengths and weaknesses as related to a career in Critical Care Medicine.
5. Should be meeting critical care professionals at national meetings.
6. Fellows should be involved in administration by participation on at least one PICU organizational committee.

III. THIRD YEAR OF PEDIATRIC CRITICAL CARE TRAINING

A. Knowledge

Subspecialty residents should continue to expand their basic knowledge of pediatric critical care medicine. They should focus on reading and understanding current literature. They should be developing relationships with critical care professionals from around the country to further their knowledge and understanding.

B. Clinical & Technical Skills

Fellows should:

1. Consider knowledge of textbooks and current literature as related to patient care.
2. Obtain comfort with independent decision making for patient care.
3. Integrate information into cohesive short and long term goals for the patients.
4. Refine their understanding of the application of current literature to their patient's care.
5. Maintain proficiency and expertise in technical skills.
6. Take responsibility for teaching junior fellows and residents procedural techniques.

C. Research

Fellows should continue to meet with the program director every three months to review progress and set goals/plans. Fellows interested in pursuing further research training or career development should plan on writing and submitting grant applications in fall or winter of the third year. Formal supervision by the Scholarship Oversight Committee will continue. By the end of January of the third year, the fellow should be able to present to the program director a clear plan for the "work product" to be presented as evidence of scholarly accomplishment.

D. Professional Development

1. Focus on professional behavior and character development should be maintained.
2. The fellow should be able to direct morning work rounds, either independently or with minimal attending supervision.
3. The fellow should be comfortable with communicating with families, and should be in charge of family meetings as appropriate.
4. The fellow should learn to build on their personal strengths and overcome personal weaknesses as related to a career in Critical Care Medicine.
5. Continue to cultivate professional relationships with critical care physicians from around the country.