

Fellowship Opportunities in Emergency Medicine
Megan Boysen, MD
President, AAEM/RSA

Over the past several months, I've spent some time speaking with my program director, faculty and mentor about fellowships in emergency medicine. Our specialty is unique in the variety of training opportunities available to us after residency. For many of us, the decision of which, if any, fellowship to choose can be confusing.

Only a few EM fellowships are recognized by the American Board of Medical Specialties (ABMS) – sports medicine, pediatric EM, toxicology, hyperbaric and undersea medicine, and hospice and palliative medicine. Many other fellowships offer additional certification or degrees, for example, a master's degree in public health, business or epidemiology. Ultrasound fellows may become registered diagnostic medical sonographers (RDMS) – however, fellowship is not required to become RDMS certified.

While certification, accreditation and/or graduate degrees are not necessary parts to many EM fellowships, accreditation ensures that a program complies with strict guidelines set forth by the overseeing medical board. Additional degrees offer added experience and expertise which are attractive to many employers and programs. For those programs which are recognized by the American Board of Medical Specialties, fellows must graduate from an accredited program in order to sit for the respective board exam. The exception to this is hospice and palliative medicine, which allows physicians to be “grandfathered” in until 2010.

Here is a list of some of the most popular fellowships in emergency medicine:

Wilderness Medicine: Wilderness medicine is a relatively new fellowship within EM, with the first program established at Stanford in 2003. Physicians are trained to meet the unique challenges and emergencies that arise in environments isolated from formal medical care. Specific foci include hyperbaric and marine medicine, altitude-related illnesses, orthopedics and wound care, tropical and travel medicine, hypothermia, animal envenomations and animal-related infections. The fellowship is typically one year.

Ultrasound: During the one-year long ultrasound fellowship, fellows complete a minimum of 800 ultrasounds. The fellowship focuses on the applicability and the teaching of ultrasound in the emergency department, while exploring future facets of ultrasound in the ED. Typically, fellows become registered diagnostic medical sonographers during or shortly after their fellowship. There are many well-established programs across the country.

Trauma and/or Critical Care: A trauma and/or critical care fellowship is available to emergency medicine residents at a limited number of programs around the nation. While board certification in critical care medicine is not available to emergency medicine specialists (currently only anesthesia, internal medicine, surgery, obstetrics and gynecology and pediatrics have accredited fellowships), the fellowship is still possible. The fellowship ranges from one to two years, depending on research involvement and whether you decide to do a medical or surgical intensive care unit track.

Toxicology: Medical toxicology is a recognized subspecialty of the American Board of Medical Specialties, focusing on the diagnosis, management and prevention of poisoning. Medical toxicologists typically manage drug overdoses, envenomations, ingestions of plant and mushroom toxins, chemical exposures and drug withdrawal. Following fellowship, medical toxicologists may practice as consultants for the intensive care unit and emergency department, faculty members or poison control center directors. They may also pursue a career in the pharmaceutical industry. The fellowship is a minimum of 24 months.

Sports Medicine: A sports medicine fellowship is recognized by the ABMS and is available to graduates of emergency medicine, pediatrics, family medicine, physical medicine and rehabilitation and internal medicine. It focuses on the non-operative medical treatment of musculoskeletal injuries, performance of pre-participation evaluations and management of acute and chronic medical conditions in athletes. Sports medicine specialists may

practice in an office-based setting or in a community or academic emergency department. They are typically very active in the community, serving as team physicians, coaches or sporting event medical directors. Training is a minimum of one year.

Research: A fellowship in research is sometimes in conjunction with a Master's in clinical epidemiology or public health. Research fellowships range from one to three years. They are designed to provide training in research methodology, grant and manuscript writing and project design. This fellowship is designed for academic-bound emergency physicians.

Pediatric Emergency Medicine: Pediatric emergency specialists are in high demand in both the community and in academics. This is a two-year or three-year fellowship that focuses on caring for the acutely ill or injured child in the emergency department. After 2001, emergency physicians must have graduated from an accredited pediatric emergency medicine fellowship in order to be board-eligible.

Medical Education, Academics/Faculty Development and Simulation: These three fellowships are typically designed for EPs interested in pursuing a career in academic emergency medicine. Typically in academics/faculty development and medical education, applicants have the opportunity to pursue some of their own areas of interest within the scope of the fellowship. Simulation focuses on medical education in the context of simulation laboratories for residents, medical students and nursing staff. Fellowships are usually one year.

International Emergency Medicine: International emergency medicine is a one to two year fellowship which introduces or improves the emergency medical care provided abroad. Fellows and fellowship-trained emergency physicians work with local healthcare providers and governments to identify needs in the community for emergency medical services, disaster relief, rural medical clinics and the trauma system. Other topics explored include tropical disease, toxicology and ultrasound. Many programs encourage or require participation in a Master's in Public Health or Epidemiology. Some fellows have the opportunity to sit for the national exam of the American Society of Tropical Medicine and Hygiene.

Injury Prevention: An injury prevention fellowship is typically a two year long fellowship focusing on injury and violence prevention research and community outreach. Many programs have an integrated MPH program and a well-funded research program through national grants.

Hyperbaric and Undersea Medicine: Hyperbaric and undersea medicine specializes in the operation of hyperbaric chambers, the use of hyperbaric oxygen therapies and the medical aspects of deep sea diving. This fellowship is one year. This subspecialty is recognized by the American Board of Medical Specialties.

Hospice and Palliative Medicine (HPM) and Geriatrics: These two fellowships are relatively recent additions to emergency medicine. After approval in 2006, ABEM administered the first hospice and palliative care examination in October 2008; after 2010, all those eligible must complete a one-year formal fellowship in HPM. The focus of the specialty is to relieve suffering, and by doing so, improve the quality of life in patients with life-threatening illnesses, coordinating end of life care and understanding the emotional and spiritual needs of families. The first geriatrics fellowship was developed at New York Presbyterian/Weill Cornell in order to address the growing aging population in the United States. It focuses on emergency care in the elderly, particularly improving access to emergency services, while minimizing the morbidity experienced from injury and illness.

Emergency Medical Services (EMS) and Disaster Medicine: Because of the relationship between the disaster medicine and EMS, these two fellowships are sometimes combined as a joint program. There are many EMS fellowships across the country, while there are a limited number of disaster medicine fellowships. EMS fellowships focus on the local, state, national and international organization of the emergency medical services system, including

ground and air transportation. The disaster medicine fellowship trains an emergency physician to prepare for, respond to and manage national and international disasters. Many programs in EMS and/or disaster medicine include a master's in public health or a similar field.

Administration: An administrative fellowship is designed to train EPs for ED management and administration. Programs often combine a master's in business administration or a master's in medical management. Fellowships are usually one year.

Other fellowships include: Neurologic/neurovascular emergencies, cardiovascular emergencies, observation medicine, transport medicine, legal medicine, health policy, pharmacology, clinical forensic medicine, environmental health, informatics, occupational medicine, pain management and preventative health.

Things to consider when choosing a fellowship program are the amount of protected research time, the expectations for publications, salary, benefits, travel allowances, the amount of Clinical shifts required, the ability to moonlight, the experience and accreditation of faculty members, the reputation of the program and the need for particular fellowship training in the local and national job environment. For more information, you can visit the "Fellows" section of www.saem.org.