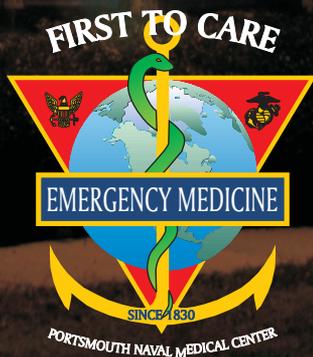
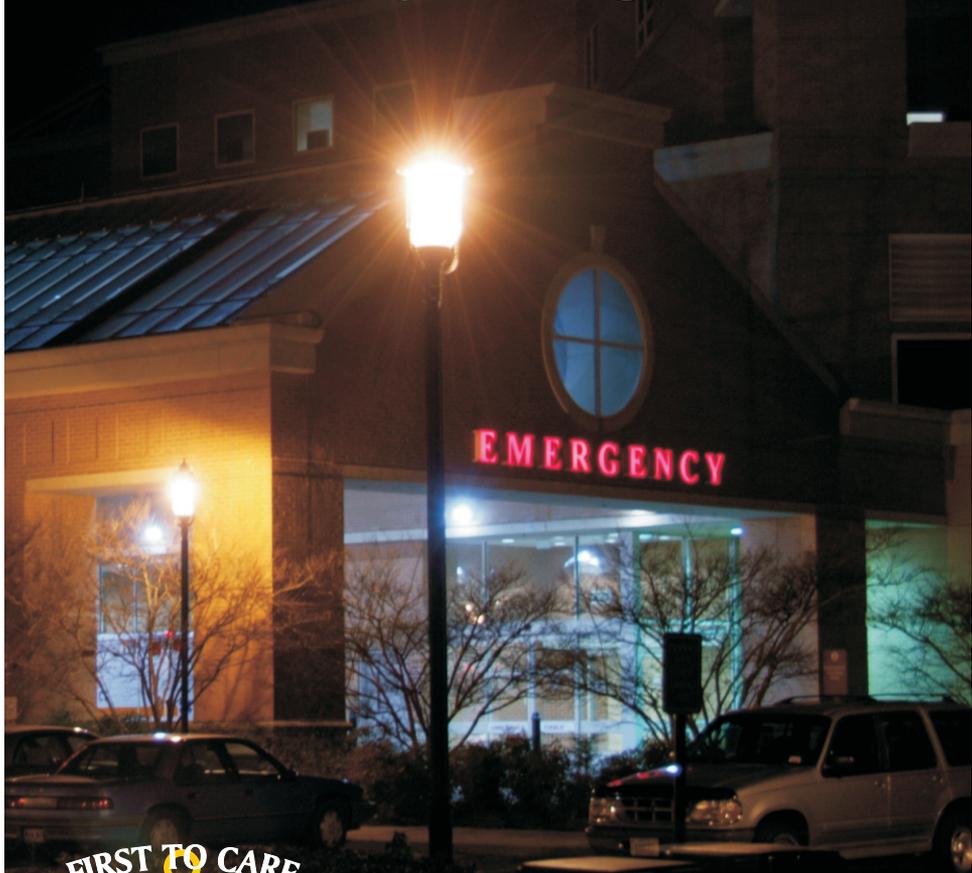


Naval Medical Center Portsmouth Emergency Medicine Residency Program



Naval Medical Center Portsmouth

The Naval Medical Center Portsmouth Department of Emergency Medicine boasts a steadily increasing annual patient census of 80,000 + patient visits per year, approximately 30% pediatric. The department contains 38 beds including three Observation Unit beds and 10 fast track beds staffed by Physician's Assistants. The Emergency Medicine Department is an independent department in the Medical Directorate. At the current time, the Emergency Medicine Department is responsible for the operations of the emergency treatment area, and the Fast Track treatment area. Forty nurse corps officers, over 50 corpsmen, and over 15 civilian workers are members of the department.

The Emergency Medicine Residency Program at the Naval Medical Center, Portsmouth, Virginia, is a three-year (PGY 2-4) program with eight residents per year group. In 1995, the program became the first Emergency Medicine residency program ever to receive 5 year accreditation on the first review. Full accreditation has been awarded in every subsequent review.

Residents spend about one quarter of the year at various affiliated training sites located within 20-40 minutes from Naval Medical Center Portsmouth. The training in these emergency departments provides a comprehensive experience in multiple critical patient encounters and life saving procedures in an assortment of practice settings.



Program Director's Welcome Message



Our goal is to prepare physicians to excel in any hospital or environment in the world, including the battlefield and other harsh conditions. A strong focus on officer and leadership development sets our program apart from our civilian counterparts. Although this focus makes our program more challenging, our graduates are over-represented in leadership and academic positions, both in and out of the Navy, due to the team focus and core values our program inspires. We provide and encourage participation in a smorgasbord of professional, academic, and leadership opportunities which will prepare you for success and rapid promotion. That said,

we want our physicians to continue to have a life outside of medicine. Our curriculum is challenging but is deliberately free from “busywork” activities and is flexible enough to allow indulgence of personal interests. Our faculty is fantastic, composed of over 20 exceptional teachers and mentors. We win competitive awards routinely, including national teaching awards, national academic awards, and national research awards. Our current faculty are the best we've ever had. Faculty-to-resident ratio is almost 1:1, and all faculty members have protected academic time. Our Chairman, Directorate of Professional Education, and Chain of Command have been consistently supportive of our program. The ground here is fertile and the opportunities are endless.

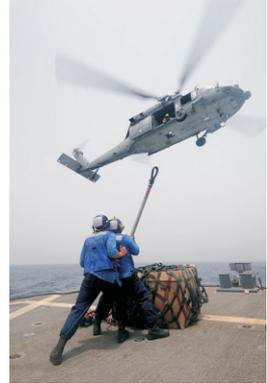
I also believe that excitement with training and work is directly proportional to working with fun people. We deliberately select self starting, motivated residents and faculty that are enjoyable to work with.

Our graduates work and excel anywhere and everywhere: from Riverside Regional to international missions on US Naval Hospital ships and Marine Expeditionary Units: from Cook County to the rugged terrains of Afghanistan and Iraq. Our staff and residents are deeply involved in operational medicine through training and temporary deployments. Many ultimately volunteer and serve in high-tempo specialized operational billets. It is not a coincidence that a recent Surgeon General and current Chief of the Medical Corps are Emergency Physicians. When you graduate from this program, you're ready to practice and lead anywhere. Completing an EM residency at NMCP unleashes unlimited clinical, operational and leadership opportunities.

We look forward to meeting with you. If you have any questions or want to schedule an interview, contact us on email at james.barry@med.navy.mil or maureen.sciandra@med.navy.mil, or by phone at 757 953 1407.

The Uniqueness of Military Emergency Medicine

No job in clinical medicine today is more challenging than emergency medicine, encompassing all fields of medicine. The hallmark of our specialty is the ability to evaluate a patient in distress with an undifferentiated complaint and quickly stabilize, treat, and disposition. Accomplishing this in an environment with multiple competing interests, completing multiple tasks in parallel, makes for an exciting, challenging, and rewarding career. Military emergency physicians take this one step further. Not only are we required to know how to treat civilian emergent conditions, but we must have the capability to shift from treating low velocity pistol wounds and motor vehicle crashes in the realm of civilian trauma, to treating high velocity rifle wounds, severe blast injuries, and other unique combat injuries that may occur in a host of extreme environments far removed from the ability to conduct standard resuscitation protocols. This is an enormous task, and it is simultaneously what attracts most of us to the specialty – always practicing good medicine, but sometimes in unconventional environments. It requires the ability to think on one's feet, improvise, adapt, and overcome.

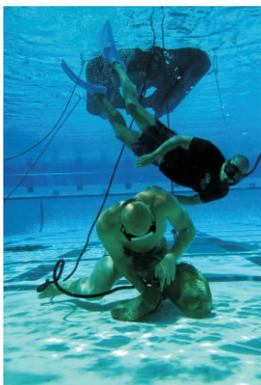


The challenge of military emergency medicine is not the only reason to consider remaining on active duty for residency training. For most physicians who have completed an operational tour, annual income is three times the amount of civilian counterparts, and nearly double that for those that accept training immediately after internship. Leadership opportunities are more numerous for the military resident, with the ability to serve on hospital committees, become involved in legislative advocacy, and to become a resident representative for various subchapters of professional organizations.





Unique opportunities for duty stations are plentiful, with some residents serving overseas in Spain, Italy, Guam, Okinawa, and Japan. Primary EM billets in the United States include Portsmouth VA, Jacksonville FL, Jacksonville NC, Bremerton, WA, San Diego, CA, 29 Palms, and Camp Pendleton, CA.



As you will see in the remainder of this brochure, the Emergency Medicine Residency at Naval Medical Center Portsmouth is arguably the nation's premiere military emergency medicine residency training program. The program is exceedingly strong in academics with an excellent pass rate on written and oral boards, and resident scores on the national in-service exam that rank near the top in the nation. Our state-of-the-art simulation center allows realistic training on advanced and difficult-to-manage resuscitations, improving patient outcomes when faced with similar real-life scenarios. A mature ultrasound program allows

the resident to interface with patients being evaluated in the department as well as learning from board certified emergency



physicians and radiologists specialized in ultrasound, and the technologists that conduct the formal exam. Graduating residents are fully credentialed in Emergency Ultrasound. Clinical and Operational research is strong with studies winning multiple research awards annually and hemostatic agent studies translating immediately into

battlefield utilization. Our curriculum is always improving with new rotations and innovative clinical advancements to enhance the learning experience. Whatever your interest in emergency medicine, we will help you build an exciting and rewarding career.

Residency Program Curriculum

Overview

The Residency Program is a 36 month (PGY 2 - 4) experiential curriculum with the following broad overlay:

Emergency Dept	18.5 months; 14 at NMCP, 4 at associated civilian sites
Trauma	4 months; 2 at Norfolk General Burn Trauma, 2 at Riverside
Resus/Trauma	1 month (University of Florida - Shands, Jacksonville)
Pediatrics	1 month CHKD, 1 month Pediatric ICU, NCMP
Critical Care	1 month CCU, 1 month ICU
Electives	2 months
One month is spent in the following rotations: Anesthesia, Orthopaedics, Ultrasound, EMS, Toxicology, Administration/Teaching	
Obstetrics	2 weeks
Oral Maxillo-Facial	2 weeks

Required Academic Texts:

- Rosen's Emergency Medicine: Concepts and Clinical Practice, 7th ed.
- Roberts and Hedges: Clinical Procedures in Emergency Medicine, 5th ed.
- Tintinalli: Emergency Medicine: A Comprehensive Study Guide, 6th ed.

Weekly and Monthly Activities

Academic Conference occurs from 0730 – 1230 on each Wednesday, except holidays. A weekly quiz on required reading is administered the first 30 minutes and the remaining time is spent in didactics that include case presentations and lectures by residents and staff. Guest lecturers and combined lectures with other programs and specialties are featured each month. At least one out of four conference sessions are arranged in an unconventional format, including simulation, small-group discussion, and oral board format. Highlighted conferences, including Morbidity and Mortality Conference, Military Unique Curriculum Conference, Combined Specialty Conference, and Visiting Professor Conference, occur monthly. Assigned reading is from Rosen's Emergency Medicine: Concepts and Clinical Practice, 7th edition, Tintinalli's EM Comprehensive Study Guide, 6th ed, selected landmark articles, and other important cutting edge literature, depending on the year-group. Graduating residents will have read each of these definitive texts in emergency medicine in their entirety prior to graduation.

Journal Club is held at the residence of a faculty member on the fourth Thursday of each month. It is a relaxed atmosphere where residents and staff interact outside the department. The main purpose is to learn to read and critically appraise the literature, utilize evidence-based medicine in practice, and develop knowledge about how to design and implement clinical studies.

Monthly **simulation training** is conducted at the NMCP Simulation Center; a state-of-the-art facility utilizing several adult and pediatric computerized simulation manikins. Residents are assigned to educational exercises conducted in the lab on a monthly basis. The lab is used to challenge a resident's ability to manage complex resuscitation scenarios. A total of 12 clinical scenarios are conducted, 4 for each year of residency, with escalating levels of complexity and medical decision making. Each year involves at least one pediatric case, one trauma case, and two medical cases.

Vivarium/Life Support lab is where emergency medicine procedures are discussed, demonstrated, and performed. This lab adds the advantage of conducting infrequently performed, yet critical procedures (transvenous pacemaker insertion, thoracotomy, pericardiocentesis, hemostatic agent use, trephination, and DPL, among others) in a live tissue model.

Quarterly and Annual Activities

Mock oral boards are conducted quarterly in lieu of conference. This provides familiarization with the oral board format, which must be mastered in order to pass the formal oral board exam after graduation. This format can be quite different from day to day practice and conducting practice exams four times per year prepares the resident for confident success on the exam. The resident's management skills and thought process are evaluated in the format of single patient cases and in dealing with 3 patients simultaneously.

Cadaver Lab occurs four times per year and allows for the discussion, practice, and refinement of emergency procedures on a human model. Emphasis is on resuscitative procedures, but nearly any procedure that is performed in the ED can be practiced during this event.

Every year the EM-1 residents attend the **REBIL Course** (Research & Evidence Based Medicine Introduction Learning Course) usually held in May. This course is designed to introduce the EM-1 to the preparation and presentation of clinical research. With shift work and multiple rotations during the first year away from NMCP, it is sometimes difficult to get to know your classmates well. This is a great time to really get to know classmates in a more relaxed format and just have fun.

The senior class attends the **GSACEP JSS** (Government Services chapter of the American College of Emergency Physicians annual Joint Services Symposium) conference in March. This funded conference emphasizes cutting-edge battlefield Emergency Medicine and is unmatched anywhere.

Promotion Boards are conducted at the end of each academic year prior to advancing residents to the next level of training. This is a unique and beneficial assessment designed to coach the resident in meeting the emergency medicine core curriculum for each year group, including scholarly activity such as research and publications.

Program Curriculum by Year

EM-1 year (PGY-2)

Orientation 1 month dedicated EM orientation
General EMD 5 months (4 NMCP, 1 Leigh Memorial)
Pediatric EMD . . . 1 month (Children's Hospital of the King's Daughters)
Anesthesia 1 month (NMCP)
Orthopaedics 1 month (NMCP)
Trauma 1 month (Norfolk General Burn Trauma Unit)
OB 2 weeks
Cardiology 1 month (NMCP Cardiac Care Unit)
OMFS 2 weeks

EM-2 (PGY-3)

General EMD 6 months (4 NMCP, 1 Virginia Beach, 1 Leigh Memorial)
Trauma 1 month (Norfolk General BTU)
Pediatric ICU 1 month (NMCP)
Adult ICU 1 month (NMCP)
Ultrasound 1 month (NMCP)
Administration . . . 1 month (NMCP)
EMS 1 month (NMCP)

EM-3 (PGY-4)

General EMD 6 months (5 NMCP, 1 Virginia Beach)
EMD/Trauma 2 months (Riverside)
Resus/Trauma 1 month (U of Fl/SHANDS, Jacksonville, FL)
Toxicology 1 month (New York)
Elective 2 months

Leave:

Residents may take annual leave in the following maximum amounts:

EM-1: 14 days EM-2: 21 days EM-3: 21 days

Research:

The command structure at NMCP is very supportive of both clinical and operational related research. Each resident must engage in some form of scholarly activity, many residents choosing to work on a formal research project. Recent resident research projects have enjoyed publication in many peer-reviewed journals and our program has won the McDade award for excellence in resident research presented by the Virginia College of Emergency Physicians in two of the last four years. The Hemorrhagic Shock Research Group is a research arm of the Department of Emergency Medicine that is primarily run by EM residents and faculty interested in combat trauma. This group engages in resuscitation and hemostatic agent research on porcine models of combat trauma.

Recent Academic Awards and Recognition:

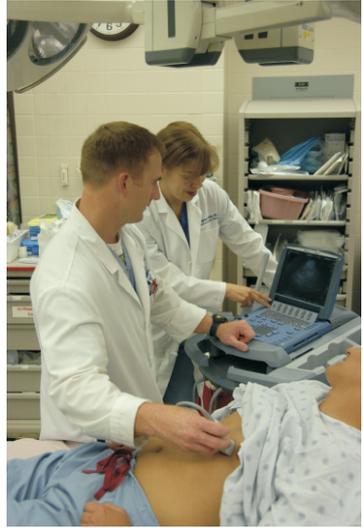
AMA Foundation Leadership Award - 2006
AAEM Young Educator Award - 2011
Best Innovation in EM Education, SAEM - 2008
CORD Faculty Development Scholarship - 2011
EMRA Robert J Doherty Scholarship - 2011
GSACEP Excellence in Military Medicine Award - 2011
GSACEP Leadership and Advocacy Scholarship winner - 2011, 2010
GSACEP Research Award - 2008, 2007, 2006, 2005
McDade Research award - 2005, 2007
National Faculty Teaching Award - 2006
National Resident Academic Achievement Award - 2008
NMCP Junior Medical Officer of the Year - 2010
NMCP Medical Corps Officer in Training of the Quarter - 2011 (1st Quarter), 2010 (2nd, 3rd, 4th Quarters)
SAEM Clinicopathologic Competition Final Winner - 2010
SAEM Clinicopathologic Competition Semi Final Winner - 2011, 2010, 2008, 2005
SAEM Young Investigator Award - 2011
Virginia Resident Jeopardy Competition winner - 2007
Multiple command research awards

Areas of Special Interest

Emergency Ultrasonography

Emergency ultrasound is a strength of the NMCP EM Residency. We offer the latest equipment, access to faculty credentialed in the full range of emergency ultrasound applications, and graduate residents who competently integrate these applications into their daily practice.

Emergency Ultrasound is paramount to the clinical, educational, and research goals of the NMCP EM Residency. Graduating residents are comfortable utilizing bedside ultrasound in all core emergency applications as defined in the 2008 American College of Emergency Physicians Emergency Ultrasound Guidelines including: Trauma, Intrauterine pregnancy, Abdominal aortic aneurysm, Cardiac, Biliary, Urinary tract, Deep venous thrombosis, Soft tissue/musculoskeletal, Thoracic, Ocular, and Procedural guidance.



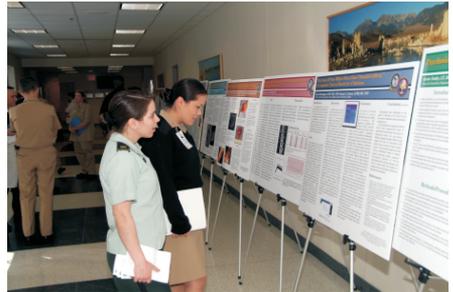
In addition, motivated residents can gain experience in advanced ultrasound applications: advanced echocardiography, bowel/appendix ultrasound, adnexal pathology, regional anesthesia, and testicular. Our program recognizes that emergency ultrasound has extremely important tactical military applications and is committed to ensuring that every emergency medicine resident graduates with these proficiencies.

The department currently has three of the latest Sonosite M-Turbo ultrasound machines. We remain committed to ensuring that the quality of machine we use is always up-to-date. Collectively, our residents perform more than 4,000 scans/year and that number increases annually. Our attending physicians are credentialed and a quality assurance program audits every ultrasound that is performed in the department.

International Medicine

NMCP EM maintains the most robust international medicine program in the DOD Physician Graduate Medical Education system. This program provides an excellent opportunity for residents to assist in broadening the scope of both military and emergency medicine and the international face of Navy Medicine. NMCP EM International Emergency Medicine is a 2-4 week elective that can be pursued in the EM-3 or EM-2 years. The rotation is self-paced with lectures, current literature, web resources, travel health, and Navy predeployment standards to review prior to leaving for an international rotation site. The elective can be tailored according to resident interest and expertise. Recent location sites include the Dominican Republic, Panama, Bhutan, Ghana and SouthCom sites. International Medicine includes systems development (EMS, EM program development, training programs), humanitarian and disaster assistance (assessing needs and providing care in complex disasters, displaced populations, etc) and integration with civilian organizations (NGOs, Red Cross, UNHCR). This program is rapidly maturing.

Affiliated with our residency program is an International Medicine Fellowship, partnered with the Navy and Marine Corps Public Health Command, and based at the Naval Medical Center Portsmouth.



NMCP Annual Research Competition Poster Session

Held each year in mid to late March, drew over 100 participants, in three categories each year.

Affiliated Program Training Sites

Sentara Norfolk General Hospital: Trauma rotations are completed here, at the only area Level I Trauma Center. Residents receive in-depth and hands-on experience in performing and directing resuscitations in the multi-trauma patient, as well as how to effectively manage the trauma team.



Proficiency is also gained in the performance of central and arterial line placement, tube thoracostomy, FAST exams, diagnostic peritoneal lavage, and all other procedures necessary for the resuscitation and stabilization of the trauma patient.

Sentara Virginia Beach General, a 274-bed acute care hospital, provides residents with valuable experience working in the Emergency Department of a busy community hospital. A Level II Trauma Center, there is ample opportunity for residents to evaluate and manage critically ill and injured patients. Being only a few miles from the oceanfront, residents have the opportunity to gain expertise in evaluating environmental injuries, including dysbaric injury, marine envenomation and poisoning, submersion injury, hyperthermia, and hypothermia.



Sentara Leigh General Hospital is a 250-bed acute care facility serving Norfolk, Virginia Beach, and Chesapeake. The hospital is surrounded by various nursing homes and thus provides care to the elderly with multiple medical problems of moderate to high acuity. The hospital also houses a hyperbaric oxygen therapy chamber to help speed the recovery of patients with major wounds, decompression sickness and carbon monoxide poisoning.



Riverside Regional Medical Center is located in Newport News and is a level II trauma center. The emergency department sees 38,000 patients per year with a 25% admission rate. Residents are the first physician responder and team leader for all trauma patients



Children's Hospital of the King's Daughter is the only dedicated pediatric hospital in the entire Commonwealth of Virginia. The Emergency Department consists of 40 beds with an annual census of 35,000 patients. Residents work alongside pediatric emergency medicine fellows and pediatric residents during shifts that are supervised by board certified pediatric emergency medicine attendings. This rotation occurs during the first year of residency and provides the resident the opportunity to become comfortable and confident in recognizing the acutely ill child.



New York City Poison Control Center: Located in Manhattan, NY and affiliated with New York University Medical Center. This is a fully funded one month rotation with didactic teaching by nationally known toxicologists.

Shands at the University of Florida, Jacksonville, FL: Shands Jacksonville is home to the TraumaOne trauma program, the only state-approved adult and pediatric Level I Trauma Center in Northeast Florida and Southeast Georgia. The TraumaOne Trauma Center has five resuscitation beds. NMCP EM Residents work strictly in the Medical Resuscitation and Trauma Resuscitation bays of Shands/TraumaOne.



Access to the NMCP Network, Web Resources and Library Services

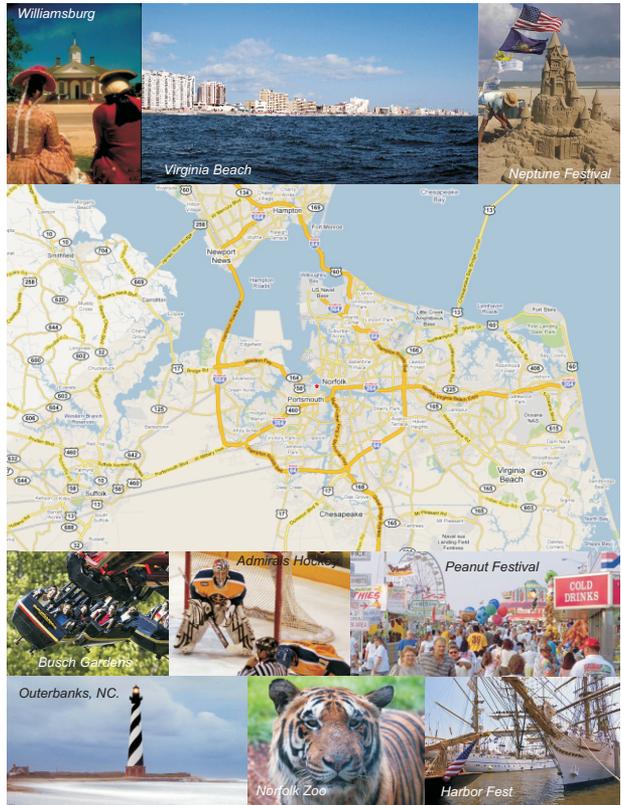
The Information Management Department offers the ability to log into the network from any computer with a web browser 24hrs a day, 365 days a year. This allows you to access any and all resources available at NMCP from the comfort of your home. This includes Outlook email, all Library resources, Radiology Department files, AHLTA, CHCS, and all your own personal hard drive applications and files.

The NMCP Health Sciences Library is available for use every day of the year, 24hrs a day. There are numerous computer terminals and wireless internet available for personal use and academic research. Literature search services are available free of charge.

Outstanding resources such as UpToDate, eMedicine, MDCConsult and over 400 electronic journals are accessible 24hrs a day.

Quality of Life

Naval Medical Center Portsmouth is located on the banks of the Elizabeth River in the historic and diverse community of Hampton Roads. Portsmouth is centrally located between the resort city of Virginia Beach, the vibrant downtown of Norfolk, suburban life in Chesapeake, the more rural Suffolk, and the peninsula communities of Hampton and Newport News. All are located no more than 20-30 minutes from Portsmouth!



This region is one of the most popular vacation sites on the East Coast. Miles of beautiful beaches are minutes away in Virginia Beach. Outdoor and environmental enthusiasts will love the ecologically diverse Chesapeake Bay and its inland waterways that transect the entire region. The historic triangle of Williamsburg, Jamestown, and Yorktown boast some of the most significant historical attractions in the country. Busch Gardens Europe and Water Country USA are only 45 minutes away. The watersport paradise of North Carolina's Outer Banks is just an hour away. The eastern shore and its famous islands of Chincoteague and Assateague are only 90 minutes north. Skiing and mountain activities are only 3 hours away, as is Washington D.C and all it has to offer.

The Hampton Roads area boasts world-class theater, opera, Broadway shows, and a symphony. Museum enthusiasts will love Nauticus in downtown Norfolk with the Battleship Wisconsin alongside, the Virginia Air and Space museum (adjacent to the Langley NASA research center), the

Chrysler Museum of Art, the Norfolk Botanical Gardens, the Norfolk Zoo, as well as the Virginia Aquarium, one of the largest and top-rated Aquariums on the east coast. Sports are well represented by Triple-A baseball's Norfolk Tides (who play in Harbor Park, voted the best minor league baseball stadium in the country) and AHL Hockey's Norfolk Admirals. Runners and triathletes will enjoy the multitude of world class races in the area, including the Rock 'n Roll Half Marathon (held at the Oceanfront during the American Music Festival, which is the largest outdoor music festival on the east coast), as well as the St. Patrick's Day Shamrock Sportsfest. These events, along with multiple Division-I university athletic programs, give sports enthusiasts plenty to do.

Cost of Living Information with Comparisons

While Hampton Roads has an amazing array of things to do, the cost of living remains near the national average, and far below that of the other Military Medical Centers. See the chart below for cost of living comparisons, and you will see that there is no other Naval Medical Center in the country where you can get so much for so little!

Overall (A score of 100 is the national average, lower is better!)	100	107	133	133
Housing	100	110	184	186
Food/Grocery	100	104	103	112
Utilities	100	96	96	99
Transportation	100	98	115	103
Health	100	108	112	105
Miscellaneous	100	114	104	104
Owning/Renting	National Average	Hampton Roads-SE Virginia , VA	San Diego, CA	Washington D.C
Average Home Prices	\$183,450	\$202,360	\$337,190	\$340,360
Average Rent 2bdr, SFH	\$1029	\$904	\$1418	\$1288

Bottom Line:
 World class activities, short commutes, and a low cost of living make the NMC Portsmouth Emergency Medicine Residency the easy choice!

Web Links and How to Apply:

Naval Medical Center Portsmouth EM Residency website:
<http://www-nmcp.mar.med.navy.mil/EmerMed/index.asp>

Naval Medical Center Portsmouth GME website:
<http://www-nmcp.mar.med.navy.mil/EduRes/AcademicAffairs/Contacts/index.asp>

- Follow the link “[Bumed \(GME\) 1524-1b](#)” to view the GME Instruction.

