



Naval Medical Center Portsmouth

Pediatric Residency
Training Program
2007-2008





General Information

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Residency:

- Founded in 1949 with 231 graduates as of July 2006.
- Fully accredited by the Pediatric Residency Review (RRC) Committee in March 2007 through March 2011.
- 97% board pass rate over 22 years. 28/29 (97%) over the past four years (2003- 2007) places program in top 5% of US/Canada. Scores well above national average.
- RRC-approved for 8 residents per year. Resident complement for 2007 is 9/9/7 (PL1/2/3).
- Currently training 8 AF/ 17 Navy Pediatric Residents.
- Authorized Airforce training spots for AY 08/09 TBD

Demographics:

- Largest eligible Department of Defense (DoD) dependent population in the world - 135,000 in the market service area
- Approximately 70% Navy, 20% Air Force, and 10% Army
- Largest enrolled pediatric population in DoD - 89,609

Clinical Services:

- Busiest pediatric clinical services in DoD - 288,591 total encounters in 2005.
 - Highest delivery rate 350-400 newborns per month
 - Busiest emergency department - 73,664 visits per year
 - Busiest pediatric subspecialty service - 19,686 visits per year.
 - Average daily NICU census of 21. Highest number of < 1500 gram premies per year 79
 - Average ward daily census of 9
 - Busiest PICU - 330 admissions/year. - Average PICU census of 3.0
- Most Children's Oncology Group protocol enrollments in DoD - 24 in 2004
- New and comprehensive neurodevelopmental disabilities program with an Autism Diagnostic Center
- Cystic Fibrosis Center
- All required rotations available at Naval Medical Center Portsmouth (NMCP) except pediatric emergency medicine and one PICU month provided at Children's Hospital of the King's Daughters (CHKD)

Facility and BRAC



Newest, largest and most historic major medical center in the DoD

- Original building constructed in 1830 was newly renovated (2004) and serves as a national historic landmark (Building One).
- New one million square-foot state-of-the-art clinical center opened in 1999 (Building Two).
- Newly renovated (2005) previous clinical center now home to
 - Clinical and administrative spaces
 - State-of-the-art educational classrooms and computer learning centers
 - State-of-the-art gym
 - Exchange, barber and food court



- New dedicated resident workspaces, locker rooms, computers and Graduate Medical Education Center in Building Three
- New simulation center (2005)
- Federal Small Library of the Year (2003)
- No parking problems!

Base Realignment and Closure (BRAC) 2005

- Minor BRAC changes in Hampton Roads will primarily affect Army
 - Realigning Fort Eustis (no inpatient)
 - Closure of Fort Monroe
- NMCP will lose the Naval School of Health Sciences (400+ enlisted)
- Navy and Air Force populations in the region increase
- Net effect is zero on the region's beneficiary population
- No other plans for NMCP facility closures or realignments
- No effect on pediatric residency education
- Combined AirForce/Navy training.

Facility and BRAC



Quality of Life

Quality of Life

NMCP is located in southeast Virginia on the banks of the Elizabeth River. The historic battleship Wisconsin is in view from the Medical Center, homeported across the river in Norfolk. Several cruise lines have recently begun sailing from this site. Virginia Beach is just a short drive to the east. The region, known as Hampton Roads or Tidewater, is one of the most popular vacation spots on the East Coast.



The history buff can enjoy Williamsburg, Yorktown, and Jamestown, all within a 1-hour drive. Busch Gardens and Water Country USA are both favorite warm weather destinations near Williamsburg. For sports fans,

Hampton Roads boasts minor league baseball and hockey teams, as well as excellent college-level sports. The fine arts are well represented with a symphony, an opera company, multiple theater groups, and a multitude of museums. The area allows for a wide variety of outdoor activities for all seasons. In the summer, enjoy



world-famous beaches or sail on the Chesapeake Bay. In the fall, take a short drive to the Shenandoah Valley to view the changing foliage. In the winter, snow skiing is only 3 hours away by car. In the spring, visit the Norfolk Botanical Gardens.

Cost of Living



Despite all Hampton Roads has to offer, it is surprisingly affordable. A Cost of living analysis comparing the Washington, DC/Southern Maryland area, San Diego, California, and Hampton Roads shows that, hands down, this is the place to live!

Cost of Living Indexes	National Average	Washington DC	Hampton Roads (SE Virginia)	San Diego
Overall (lower = better)	100.0	133	104.9	147.1
Housing (% of overall cost of Living) (28%)	100.0	189	114.1	230.4
Food and groceries (13%)	100.0	109	98.2	116.7
Transportation (10%)	100.0	114	100.2	113.3
Utilities (10%)	100.0	123	116.1	98.2
Health (4%)	100.0	110	100.8	119.4
Miscellaneous (35%)	100.0	108	98.7	118.5

Housing	National Average	Washington DC	Hampton Roads (SE Virginia)	San Diego
House Purchase Cost (median values)	\$	\$573,581	\$338,238	\$712,092
Average Rent	\$	\$1,492	\$908	\$1,595

Affordable homes with an abundance of good school options are within close driving distance of the hospital. The average commute to work for staff and residents is 20 minutes.

Cost of Living Indexes
 Source: ACCRA (2004, Q2)
www.coli.org , April 23 2007



Cost of Living



Affiliations

Affiliations

Children's Hospital of the King's Daughters (CHKD)

- Sponsored by Eastern Virginia Medical School
- Resident electives in all pediatric subspecialties. Most NMCP pediatric residents do about 3-4 electives at CHKD during their residency
- Combined rotations in pediatric infectious diseases and adolescent medicine in place
- Required pediatric emergency department rotation for PL1 and PL2 years for NMCP pediatric residents
- Required PICU rotation PL3 year



Uniformed University of the Health Sciences, AFHPSP Medical Students

- NMCP Pediatrics provides pediatric clerkships to 3rd and 4th year medical students from USUHS, and the AFHPSP program.
- Many faculty members have teaching faculty appointments at USUHS.

Affiliations



Within Naval Medical Center Portsmouth

- Residents in our institutional obstetrics and gynecology program perform clinical rotations in our NICU.
- NMCP Emergency department residents rotate in our PICU
- Transitional and internal medicine interns and osteopathic interns in other specialties do clinical rotations in the General Pediatric Clinic.

Langley Air Force Base - 1st Medical Group (30 miles north of NMCP)

- PL2 outpatient rotation for residents in place
- Very strong collaboration between the two medical facilities with the potential and strong desire for joint residency training





Academics and Research

Academics

Residents at NMCP are fortunate to be exposed to such a large and diverse patient population. Our residents are extremely well-prepared for their challenging future assignments because they have “seen it, done it, and taught it” many times during their residency.

However, we also recognize the need for dedicated time to cover the pediatric subject matter in a systematic fashion. These learning experiences are described below:

- Morning report from 0730-0800 all weekdays except Thursday. Interactive case-based discussions about recent admissions. Mandatory attendance.
- Academic Morning every Thursday from 0800-1200. The pediatric core curriculum is presented in a variety of formats (lecture, case discussions, jeopardy, sample board questions, experiential learning, small group discussions). Curriculum derived from Pediatric Review and Education Program (PREP) on an 18-month rotating schedule. Pre-reading of review articles provided for each module. Faculty cover the clinical services. Mandatory attendance.
- Continuity Clinic Curriculum once weekly 30 minutes prior to continuity clinic session. 50 sessions over the year covering the body of general pediatrics. Pre-reading of review articles provided.



- Research is available, but not required, for interested residents. Two faculty members have formal research training (MPH). See list below for projects and recent publications.

Academics and Research



Active Protocols by Current Faculty:

- Bloom D, Buryk M, Steinberg A, Shope T. A randomized trial of frenotomy for neonatal ankyloglossia. Randomized controlled trial
- Chartrand M, Frank D, Shope T. The Effect of Parental Deployment on the Behavior and Healthcare Utilization of Young Dependent Children in Active Duty Military Families. Observational Trial
- Dierks ME, Gavril AE, Hearn S, Wright LS, Roberts TA. "Secondary Sexual Characteristics in Boys Seen in Office Practice (SSCIB)", Multicenter epidemiologic study directed by Pediatric Research in Office-Based Settings (PROS) network.
- Freier G, Lee RL. "Evaluation of Early Literacy Intervention in a Military Pediatric Population." Uncontrolled Intervention Trial
- Lee RL, Cleary J. "Cystic Fibrosis Patient Registry", Observational Trial
- Lee RL, Cleary J. "Genetic Modifiers of Cystic Fibrosis", Multicenter Observational Trial
- Lee RL, Cleary J. "CP-AI-007, A Phase 3, Double-Blind, Multicenter, Multinational, Randomized, Placebo-Controlled Trial Evaluating Aztreonam Lysinate for Inhalation in Cystic Fibrosis Patients with Pulmonary P. aeruginosa (AIR-CF1)", Multicenter Randomized Controlled Trial
- Lee RL, Cleary J. "CP-AI-006 (version 4): A Phase 3, Open-label, Follow-on Study of Multiple Courses of Aztreonam Lysinate for Inhalation (AI) in Cystic Fibrosis Patients (AIR CF3)", Multicenter Open-label trial
- Lee RL. "Pharmacokinetics of lipoic acid in cystic fibrosis patients." Pharmacokinetic Study.
- Lee RL, Cleary J. "A Multi-Center, Double-Blind, Placebo-Controlled Randomized, Efficacy and Safety Study of Denufosol Tetrasodium (INS37217) Inhalation Solution in Patients with Mild Cystic Fibrosis Lung Disease", Multicenter Placebo Controlled Trial
- Miller JR, "Safety And Tolerability Of The Japanese Encephalitis Vaccine IC51. Double Blind, Randomized, Placebo Controlled Phase 3 Study"
- Miller JR, "Long Term Immunogenicity Of The Japanese Encephalitis Vaccine IC51. An Open Uncontrolled Phase 3 Follow-Up Study"
- Podraza CJ, Gavril AE, Roberts TA. "Pediatric Obesity in the Military Dependent Population" Chart Review
- Shope T, Podraza J, Rieg T. A randomized trial of hand mitts to reduce corneal abrasions in infants one- to twelve-weeks of age. Randomized controlled trial.
- Sutton JF. Principal Investigator on over 45 active Children's Oncology Group Protocols.
- Thompson JA. "A Prospective Trial of Methadone for Prevention of Withdrawal in Fentanyl-Tolerant Pediatric ICU Patients", Controlled Randomized Trial

Research



Academics and Research

Books and Chapters:

- Fleenor JT. Atrial Septal Defects. In: 5 Minute Pediatric Consult, 4th edition, Philadelphia: Lipponcott, Williams and Wilkins, 2005.
- Lee RL. Non-obstructive sleep patterns in children. In: Pediatric Sleep Disorders. M Richardson and N. Friedman, eds., Marcel Dekker, Inc., New York, NY, in publication, 2007.
- Lee RL, White CW. Bronchiolitis obliterans. In: Pediatric Respiratory Medicine. L Taussig, L Landau, eds. Mosby, St. Louis, MO, in publication, 2007.
- Meyer GA. Fragile X Syndrome and X-Linked Mental Retardation Syndromes. In: Children with Disabilities, 6th Edition. Batshaw, Mark L. Ed. Paul Brooks Publishing, 2007
- Scouten WT, Francis, GL. Thyroid Cancer And The Immune System: A Model For Effective Immune Surveillance. In: Expert Review Of Endocrinology And Metabolism, 2006.
- Shope TR, Aronson SS, eds. Managing Infectious Diseases in Child Care and School: A Quick Reference Guide. American Academy of Pediatrics. October, 2004.

Letters and Review Articles:

- Biswas AK, Summerauer JF. Heart rate variability and brain death. Journal of Neurosurgical Anesthesiology. 2004;16(1):62.
- Miller JR, Emmons WE. Morganelle Infections. eMedicine Journal, Jan 2007. <http://www.emedicine.com/med/topic1502.htm>
- Shope TR, Aronson SS. Improving the Health and Safety of Children in Non-Parental Early Education and Child Care. Pediatrics in Review. 2005;26:86-94.

Publications in Peer Reviewed Journals By Residents and Staff (2004-2007) :

Bird DN, Sato AK, Knee DS, Uyehara CF, Person DA, Claybaugh JR. Effects of prenatal ethanol exposure and gender on the arginine vasopressin response to hemorrhage in the rat. American Journal of Physiology Regul Integr Comp Physiol. 2006 Feb 9;(Epub ahead of print)

Biswas AK, Feldman BL, Davis DH, Zintz EA. Myocardial ischemia as a result of severe benzodiazepine and opioid withdrawal. Clinical Toxicology. 2005;43(3):207-9.

Caro ST, Fleenor JT. 4 yo presenting with Truncus Arteriosus:A case report. Pediatrics in Review. 2005; 26(3): 105 -111.

Carr MR, Kertesz NJ. Long-Term Outcome of Accelerated Ventricular Rhythm in Children. Pediatric Cardiology. 2005;26(4):514.

Carr MR, Neish SR, Leonard GT. Successful Coil Occlusion of a Right Patent Ductus Arteriosus in a Patient with an Aberrant Left Subclavian Artery. Texas Heart Inst J. 2006;33(3):365-367.

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Cerel J, Roberts TA, Nilsen WJ. Peer suicidal behavior and adolescent risk behavior. Journal of Nervous & Mental Disease. 2005;193(4):237-43.

Academics and Research



- Cerel J, Roberts TA. Suicidal behavior in the family and adolescent risk behavior. *Journal of Adolescent Health*. 2005;36(4):352.e9-16.
- Cleary JC, Karmazyn Y, Mogayzel P, Laube B. Chronic inhalation of nebulized levalbuterol does not increase mucociliary clearance in healthy subjects. *Pulmonary Pharmacology and Therapeutics*. 2007 Jan 25 (Epub ahead of print)
- Copeland K, Duggan AK, Shope TR. Knowledge and beliefs about guidelines for exclusion of ill children from child care. *Ambulatory Pediatrics*. 2005;5:365-71.
- Fleenor JT. Pediatric Dysrhythmias. *Pediatr Clin North Am*. 2006; 53(1):85-105.
- Freier G, Wright A, Nelson G, et al. Contact Investigation for Multi-Drug Resistant Tuberculosis in a Military Recruit Population. *Emerging Infectious Diseases*. 2006; 12(5): 760-2.
- Holston AM, Miller JR. Primary Lung Abscess Caused by Multidrug-nonsusceptible *Streptococcus pneumoniae* in a Child. *Pediatric Infectious Disease Journal*, 2006 Feb;25(2):182-3.
- Kearns WG, Sutton JF, Maciejewski JP, et al. Genomic instability in bone marrow failure syndromes. *American Journal of Hematology*. 2004;76(3):220-4.
- Knee DS, Sato AK, Uyehara CF, Claybaugh JR. Prenatal exposure to ethanol causes partial diabetes insipidus in adult rats. *American Journal of Physiology - Regulatory Integrative & Comparative Physiology*. 2004;287(2):R277-83.
- Knee DS, Christ MJ, Gries DM, Thompson MW. *Actinomyces* species and cerclage placement in neonatal sepsis: a case report. *Journal of Perinatology*. 2004;24(6):389-91.
- Lee RL, Rancourt RC, Del Val G, et al. Thioredoxin and dihydrolipoic acid inhibit elastase activity in cystic fibrosis sputum. *American Journal of Physiology*. 2005;289(5):L875-82.
- Mastropietro C, Morris M, Stanfield R, Stallworth JR, Caro ST, Fleenor JT. Case report: 4 yo presenting with Truncus Arteriosus. *Pediatrics in Review*. 2005;26(3).
- McGrath-Morrow S, Laube B, Cho C, Cleary J, Kimura H, Rose N, Caturegli P. IL-12 Over-expression in mice as a model for Sjogren's Disease. *American Journal of Physiology. Lung Cellular and Molecular Physiology*. 2006 Oct; 291(4):L837-46
- Patel A, Pluim T, Helms A, et al. Enzyme expression profiles suggest the novel tumor-activated fluoropyrimidine carbamate capecitabine (Xeloda) might be effective against papillary thyroid cancers of children and young adults. *Cancer Chemotherapy & Pharmacology*. 2004;53(5):409-14.
- Podraza, CJ, Lee RL. Subglottic hemangioma. *Pediatrics in Review*, 2007, accepted.
- Podraza C, Fleenor J, Grossfeld P. 11q Terminal Deletion Disorder and Tetralogy of Fallot. *American Journal of Medical Genetics*. 2007, accepted.
- Rancourt RC, Lee RL, O'Neill HO, White CW. Reduced thioredoxin increases pro-inflammatory cytokines and neutrophil influx in rat airways: modulation by airway mucus. *Free Radical Biology and Medicine*, 2007, accepted.

Roberts TA. Auinger P. Klein JD. Predictors of Partner Abuse in a Nationally Representative Sample of Adolescents Involved in Heterosexual Dating Relationships. Violence and Victims. 2006;21(1):81-9.

Roberts TA. Auinger P. Klein JD. Intimate partner abuse and the reproductive health of sexually active female adolescents. Journal of Adolescent Health. 2005;36(5):380-5.

Roberts TA. Auinger P. Ryan SA. Body Piercing and High-Risk Behavior in Adolescents. Journal Adolescent Health. 2004;34:224-229.

Scouten WT. Patel A. Terrell R. et al. Cytoplasmic localization of the paired box gene, Pax-8, is found in pediatric thyroid cancer and may be associated with a greater risk of recurrence. Thyroid. 2004;14(12):1037-46.

Serwint JR. Thoma KA. Dabrow SM. Hunt LE. Barratt MS. Shope TR. Darden PM. Comparing Patients Seen in Pediatric Resident Continuity Clinics and the National Ambulatory Medical Care Survey (NAMCS): A Study from the CORNET Network. Pediatrics. 2006 In press

Shen Y, Leatherbury L, Rosenthal J, Yu Q, Pappas MA, Wessels A, Lucas J, Siegfried B, Chatterjee B, Svenson K, Lo CW. Cardiovascular phenotyping of fetal mice by noninvasive high-frequency ultrasound facilitates recovery of ENU-induced mutations causing congenital cardiac and extracardiac defects. Physiol Genomics. 2005;24(1):23-36.

Shields WW, Nayak KR, Chieng NP, Fleenor JT, Weis PJ, Linz PE. Adult presentation of Kawasaki's disease: A case report. Fed Pract. 2006;23(5):9-12, 31.

Sutton JF. Stacey M. Kearns WG. et al. Increased risk for aplastic anemia and myelodysplastic syndrome in individuals lacking glutathione S-transferase genes. Pediatric Blood & Cancer. 2004;42(2):122-6.

Waters ET. Oberman JP. Biswas AK. Pierre Robin sequence and double aortic arch: a case report. International Journal of Pediatric Otorhinolaryngology. 2005;69(1):105-10.

Winter LW. Giuseppetti M. Breuer CK. A case report of midgut atresia and spontaneous closure of gastroschisis. Pediatric Surgery International. 2005;21(5):415-6.

Yu Q, Shen Y, Chatterjee B, Siegfried BH, et al. ENU induced mutations causing congenital cardiovascular anomalies. Development. 2004;131(24):6211-23.



Annual Rafting Trip

Visit our website:

<http://www-nmcp.med.navy.mil/Pediatrics/residenc.asp>



Annual Softball Game and Picnic