

Defining a New Era in Intensive Care Medicine

at the nation's children's hospital



Children's National
Medical Center

Critical Care Medicine

The Division of Critical Care Medicine at Children's National is a leader in the care of critically ill and injured infants and children. The division's clinical outcomes and safety measures are among the best in the country.

Children's National treats more than 2,400 children each year in the intensive care units. Staff members provide around the clock physician coverage of patients in the pediatric, neuro, and cardiac intensive care units. The ICUs are currently expanding to 60 beds and Children's National is committed to adding 20 more in the near future. In 2009, both the PICU and CICU earned the prestigious **Beacon Award**, highlighting the team's commitment to high-quality critical care, and dedication to the exceptional care of patients and their families. Children's National is the first hospital in the nation to have two pediatric units receive the award simultaneously. The hospital also achieved **Magnet Status** in 2010.

Children's board-certified critical care physicians are experts in life-support technologies for respiratory, neurological, and cardiac intensive care, including Extracorporeal Membrane Oxygenation (ECMO) therapy. They also are national and international authorities in their fields, conducting research on topics

ranging from brain injury to novel applications of the electronic medical record. Our faculty serve more than just the patients at Children's National — they also care for patients at Walter Reed Army Medical Center, as well as the premier research institution in the world, the National Institutes of Health.

Children's National is a founding member and one of seven U.S. pediatric intensive care units that are part of the NIH-sponsored **Pediatric Critical Care Research Network**. This network investigates the safety and efficacy of treatment and management strategies of critically ill children and studies the pathophysiological bases of critical illness and injury in childhood.

Children's National received an historic gift of \$150 million from the Government of Abu Dhabi to create the **Sheikh Zayed Institute for Pediatric Surgical Innovation**, which brings together physicians and researchers to make surgery more precise, less invasive, and pain-free for children around the world. Children's

intensivists will be involved in the translational research and contribute to this groundbreaking Institute.

Innovative technology augments the team's expertise in improving outcomes. Children's was one of the first pediatric hospitals to use the **CereTom Portable CT Scanner**, which delivers high-resolution images that help diagnose head and neck injuries and can be used at the patient's bedside without having to move the child. In addition, in the center of the ICU is the **Baier Media Room**, which has a large-format screen that permits seamless, simultaneous display of real time and stored images from multiple sources—improving care and increasing our telemedicine capabilities.

Children's ICU care emphasizes compassion and comfort for families during a stressful time. In **Children's East Inpatient Tower**, the ICUs have large rooms with private restrooms, windows, and sleep spaces for parents. To improve care, the ICU beds can sit in the middle of the room, allowing physician and nurse access around the bed



with mobile medical booms. The ICUs are administratively integrated into a single division of critical care medicine, with critical care physicians, nurses, pharmacists, respiratory therapists, case managers, and other personnel.

PEDIATRIC INTENSIVE CARE UNIT

Children's PICU was among the first to care for patients with critical illness and their families. Going beyond state-of-the-art care to cutting-edge therapies for cardiac, pulmonary, and neurologic injury, the PICU's multidisciplinary approach includes comprehensive care of children with a wide variety of diseases, including cardiac disease, trauma, infection, genetic



and metabolic disorders, pulmonary disease, and multiple organ failure.

CARDIAC INTENSIVE CARE UNIT

Children's CICU is staffed with a team of expert cardiac intensivists and pediatric nurses to treat and aid in the recovery of children with cardiac diseases and those who have had heart surgery. While most of our patients are those who are admitted to the hospital after cardiac surgery, the CICU also cares for patients with non-surgical conditions, such as heart failure and myocarditis, and children with heart disease undergoing non-cardiac surgery. The Cardiac ICU is led by physicians who are dually certified in pediatric cardiology and pediatric critical care medicine, but it embraces multiple physicians from varied backgrounds and training.

NEURO INTENSIVE CARE UNIT

Children's Gregory Mark Taubin Neuro Intensive Care Unit is the only dedicated pediatric Neuro ICU in the region. Children's Neuro ICU has a dedicated team of critical care physicians, neurologists, neurosurgeons, and physical therapists. Specialized monitoring and uniquely qualified neurointensivists offer cutting edge research and treatment.



David L. Wessel, MD

*IKARIA Distinguished Professor
of Critical Care Medicine*

*Senior Vice President,
Hospital-Based Specialties*

Educated and trained in medicine at Oxford, Yale and Harvard, David L. Wessel, MD, joined Children's National Medical Center in July 2007. He is board certified in anesthesiology, pediatrics, pediatric cardiology, and pediatric critical care medicine.

An experienced scientist and clinical researcher with more than 100 peer-reviewed publications, Dr. Wessel has designed and executed seminal studies in cardiac critical care and pulmonary hypertension; developed new therapies for perioperative care of the newborn with congenital heart disease and novel treatments of pulmonary hypertension; and studied neurologic outcomes relevant to perioperative care of newborns with congenital heart disease. He leads an expanding team of intensivists who have witnessed growth that has more than doubled ICU space and beds in four years.

The Division of Critical Care Medicine at Children's National remains committed to leading care, advocacy, research, and education initiatives to advance specialized pediatric critical care medicine world-wide.

OUR VISION:

- Recruiting outside talent and growing selected internal candidates to develop a solid core of world-class intensivists who are viewed as international authorities on topics most pertinent to the current and future challenges of pediatric critical care medicine. In the next year we plan to increase our team from 12 to 18 intensivists.
- Identifying obstacles and offering solutions to the roadblocks that hinder our nation's achievements in critical care excellence for children. We will develop new treatments and help find cures for the vast number of illnesses that can contribute to multi-organ system failure in a child, or produce longer term sequelae of the child's acute illness.
- Leveraging our stature in the nation's capital by advocating for change on Capitol Hill, at the Food and Drug Administration, and with other administrative bodies through the Child Health Advocacy Institute. We serve as the voice for the most vulnerable among us—our critically ill children—by advocating on their behalf.
- Developing a research strategy that includes conducting clinical trials and partnering with federal funding agencies and industry to bring new drugs to the market, and improving outcomes through advanced technologies. We plan to double our clinical and basic critical care research funding in the next 5 years to meet today's challenges in pediatric care.
- Preparing the nation's future leaders in pediatric critical care medicine. We are creating and refining specialization within critical care that extends fellowship training to a fourth year for cardiac, neuro, and other subspecialty fields within critical care.



Contact Us: 202-476-2130

www.ChildrensNational.org