

CONNECTICUT CHILDREN'S EAR, NOSE AND THROAT EXPERT SPEARHEADING BREAKTHROUGH RESEARCH ON PEDIATRIC EAR INFECTIONS

HARTFORD, Conn. – Dr. Tulio A. Valdez of Connecticut Children's Medical Center's Division of Otolaryngology has been published in the Proceedings of the National Academy of Sciences for his research pertaining to the use of specialized equipment in treating pediatric middle ear infections.

In "Using the shortwave infrared to image middle ear pathologies," Dr. Valdez is joined by co-authors Jessica Ann Carr, Oliver Thomas Burns and Mounji G. Bawendi of the Massachusetts Institute of Technology in highlighting a new prototype of the otoscope, a non-invasive tool used for inspecting the ear. This particular otoscope creates images of underlying middle ear anatomy and enhances the contrast of middle ear fluid, which is necessary for diagnosing otitis media (ear infections). That precision is revolutionizing the way common ear infections are diagnosed and treated.

The new device is expected to look and function very much like existing otoscopes that most doctors currently use to diagnose ear infections. But unlike these conventional devices, which use visible light and can only see a few millimeters into the tissues of the ear, the new device uses shortwave infrared light, which can penetrate much deeper; allowing for more accurate diagnosis and treatment.

Through Connecticut Children's research collaboration with MIT, Dr. Tulio Valdez is providing the knowledge to enable physicians to recommend the best course of treatment for an individual patient, and ultimately reduce the over-prescription of antibiotics of one of the most common infections in children.

To read the full journal article and news report, now available online, please visit

<http://www.pnas.org/content/early/2016/08/16/1610529113> and
<http://news.mit.edu/2016/shortwave-infrared-instrument-ear-infection-0822>

About Connecticut Children's Medical Center

Connecticut Children's Medical Center is a nationally recognized, 187-bed not-for-profit children's hospital serving as the primary teaching hospital for the Department of Pediatrics at the University of Connecticut School of Medicine. Connecticut Children's is the only free-standing children's hospital in Connecticut that offers comprehensive, world-class health care to children. Our pediatric services are available at Connecticut Children's Medical Center in Hartford and at Saint Mary's Hospital in Waterbury, with neonatal intensive care units at Hartford Hospital and the University of Connecticut Health Center, along with a state-of-the-art ambulatory surgery center, five specialty care centers and 11 other locations across the state. Connecticut Children's has a medical staff of nearly 1,100 practicing in more than 20 specialties.

For more information, visit WWW.CONNECTICUTCHILDRENS.ORG

Teresa Riccio

Communications Specialist
Connecticut Children's Medical Center
860.837.6375
www.connecticutchildrens.org www.connecticutchildrensblog.com