



David K. Wallace, MD

Pediatric Physician and Scientist

Unlike most new faculty members, David Wallace, MD, and his family won't pull up stakes, search for a new house, and check out schools for the children. That's because Wallace is joining the Eye Center's Pediatric and Adult Strabismus Service as an associate professor of ophthalmology after 10 years on the faculty of the Departments of Ophthalmology and Pediatrics at the UNC School of Medicine in Chapel Hill.

Duke and UNC may be bitter rivals on the basketball court, but the proximity of the two institutions helps foster professional relationships and collaborations. Wallace notes that since "pediatric ophthalmology is a pretty small world," he's gotten to know his future Duke colleagues Edward Buckley, MD, Laura Enyedi, MD, and Sharon Freedman, MD, over the years. "I really cherish the opportunity to work with them," Wallace adds. "We share a lot of research interests, and I know we will be able to collaborate effectively on many projects."

Wallace is moving to Duke with a prestigious five-year National Eye Institute (NEI) Mentored Career Development Award in patient-oriented research, which he received in August 2004. Paul Lee, MD, JD, will serve as his primary mentor at Duke. "Part of my

career development path involves earning a master's degree in public health and epidemiology at UNC," Wallace says. "I've enjoyed working on large clinical trials, but I want to learn the core concepts so I can design and execute clinical studies, analyze the data, and collaborate with the biostatisticians and epidemiologists. The MPH degree will give me the skills I need to become a principal investigator of large clinical trials that make a significant impact on how we practice pediatric ophthalmology."

One of his current research projects involves ways to predict the development of the potentially blinding condition called retinopathy of prematurity (ROP), the abnormal growth of leaky and fragile blood vessels within the retina and vitreous that occurs primarily in low-birth-weight premature infants. In advanced stages, ROP can lead to scar tissue on the retina, vitreous bleeding, and retinal detachment. Some of these babies also develop Plus disease, which means the blood vessels have become enlarged and twisted. Ophthalmologists believe that detecting Plus disease in its early stages—so-called Pre-Plus disease—helps predict which babies are at risk of developing full-blown ROP and should therefore be followed more closely. But it hasn't been proven with a prospective study, Wallace points out.

He plans to continue the project at Duke under the guidance of his career development award mentor, Graham Quinn, MD, director of research in the Division of Ophthalmology at The Children's Hospital of Philadelphia.

Wallace also conducts clinical research studies as a member of the NEI-sponsored Pediatric Eye Disease Investigator Group (PEDIG), which includes physicians at more than 100 sites throughout the U.S. Wallace recently participated in a study of children with amblyopia—a disorder often referred to as "lazy eye" and is caused by the brain not fully acknowledging the images seen by the amblyopic eye. The researchers found that using eye drops, which temporarily blur the child's "good eye," work as well as an eye patch as a treatment for amblyopia. "Many families found that the eye drops were much easier to use, since children often take off an eye patch, peek around it, or feel self-conscious wearing it," Wallace says.

"I have long been a big fan of this rising star in pediatric ophthalmology since I tried to recruit him as a fellow, a few years ago," says Edward Buckley, MD, chief, Pediatric and Strabismus Service. "He is a class act both professionally and personally. When we began thinking about expanding the pediatric service, he was the first person we thought of to complement our group. His interest in clinical research will greatly expand our capabilities and firmly establish our program as one of the very best in the country. His only fault is the 'light blue' (UNC) world he has been living in for the last several years. Hopefully we can break him of that habit."

Wallace was a competitive junior golfer but, with a busy career and a family, only occasionally has the time to hit the links. He and his wife Allison have two sons, Eric, 10, and Daniel, 8, and he notes his primary hobby right now is "enjoying time with my family—traveling, shooting hoops, and playing board games. Kids are young for such a short time, so we want to spend our free time with them."

"Duke has an outstanding academic environment that will be extremely supportive of my research efforts," Wallace says. "Duke has an outstanding ophthalmology department, and I'm looking forward to being a member of it."