From Idea to Impact

How Friends of Doernbecher Grants Help Shape the Future of Pediatric Medicine

As part of Oregon's only academic health center, OHSU Doernbecher Children's Hospital is our region's leader in pediatric research. Every day, researchers at Doernbecher work together in pursuit of breakthroughs that will translate to new treatments and life-changing care, giving families new hope. In recent years, our researchers have attracted national and international attention for their work across many areas of pediatric medicine, including neonatology, oncology, neurology, mental health, gastroenterology, child global health and stem cell research.

While Doernbecher has one of the strongest pediatric research programs in our region, faculty often run into challenges securing funding for their work. National research grants are highly competitive and favor projects that are already established, making it difficult for researchers to get new ideas off the ground. Recognizing this as a challenge, the Friends of Doernbecher, an all-volunteer fundraising organization, established a grant program in 2003 that is funded through their community-based fundraising efforts and other generous donors. The Friends of Doernbecher (FoD) Grant Program is now one of the only pediatric grant opportunities in the region that occurs annually, providing early-stage funding for new and unproven ideas. Each year, dozens of faculty and staff from across Doernbecher submit proposals for consideration to the grant program.

The FoD Grant Program has awarded 95 grants in the years since it was established, each year creating incredible opportunities to advance new and exciting ideas at Doernbecher. Included below are the stories of five past awardees who leveraged the initial investments made by the FoD Grant Program into groundbreaking discoveries, creating a lasting impact in their field and building a foundation for future exploration.



Oregon Health & Science University FOUNDATION



Doernbecher is involved in over 100 clinical trials and databases and is a key partner in collaborative efforts funded by the National Institutes of Health including the Oregon Clinical and Translational Research Institute.

Annual Friends of Doernbecher Grant Cycle

December	Request for Proposals (RFP) opens
February	Proposals due and review process begins
February - April	A selection committee comprised of Friends of Doernbecher volunteers and Doernbecher Philanthropy Board members, supported by Doernbecher faculty, review dozens of submitted proposals
May	The selection committee meets to discuss proposals with Doernbecher faculty and determine finalists
June	The selection committee meets for a second time, hears presentations from finalists and votes to determine the winners

Fueling Breakthroughs in Preterm Infant Lung Development

Cindy McEvoy, M.D., MCR Credit Unions for Kids Professor of Pediatric Research Professor of Pediatrics, School of Medicine, OHSU

Premature birth is directly linked to poor lung development in infants, which can lead to respiratory tract infections, hospitalizations and even death. In 2014, Dr. McEvoy submitted a proposal to the FoD Grant Program to explore if extending Continuous Positive Airway Pressure (CPAP) treatment for preterm infants beyond the standard time period could grow and improve lung function, an idea that had not been studied in a clinical setting before. With the \$44,308 grant she received, Dr. McEvoy's team conducted a study in the Doernbecher NICU that found infants who received two extra weeks of CPAP treatment had significantly larger lungs by the time of discharge. These exciting findings hinted at the massive potential of utilizing CPAP, a common and easily available therapy, to encourage lung growth and potentially lead to much better outcomes for preterm babies.

As a result of this study, Dr. McEvoy was able to secure \$7 million in additional funding, including two prestigious R01 awards from the National Institutes of Health (NIH). Her ongoing research has supported her initial findings, and a recent study even showed that preterm infants who received the longer CPAP treatment had larger lungs at 6 months of age and showed significantly higher airway function.

With the initial investment from the FoD grant program, Dr. McEvoy's groundbreaking research is already changing patient care approaches in the NICU, and is now in a position to potentially transform the long-term respiratory health of preterm infants and revolutionize care for these patients around the world.



"As a past awardee and now the Faculty Liaison for the Friends of Doernbecher Grant Program, I have witnessed firsthand the transformative impact these grants have on advancing early-stage and foundational

medical research. These funds not only provide crucial financial support, but the freedom to explore innovative ideas and approaches to scientific challenges that may otherwise go unexplored."

- Cindy McEvoy, M.D., MCR, 2014 FoD Grant Recipient and FoD Program Faculty Liaison

Leading the Way in Pediatric Pain Management

Anna Wilson, Ph.D. Professor of Pediatrics, School of Medicine, OHSU

While Dr. Wilson was caring for patients experiencing chronic pain at the Doernbecher Pediatric Pain Management Clinic, she was struck by how many patients and families reported feeling isolated and alone. When looking for opportunities to offer more support, she became interested in a program developed by a colleague at Boston Children's Hospital – the Comfort Ability Program, which helps provide evidence-based strategies for managing chronic pain while bringing together families facing similar challenging experiences. Dr. Wilson wanted to test whether a program of this nature could be implemented at Doernbecher, track patient outcomes and explore how to ensure its sustainability in the long term. Thanks to the \$39,649 FoD grant Dr. Wilson received in 2015, Doernbecher became the first children's hospital outside of Boston to offer the Comfort Ability Program, placing us at the forefront of pediatric pain management. Today, the program serves 27 U.S. children's hospitals and 8 international hospitals.

Dr. Wilson's FoD grant was one of her first sources of funding and the opportunity helped her build critical skills managing a research team. Dr. Wilson went on to obtain more than \$3 million in additional funding for her research, including multiple R-level National Institutes of Health (NIH) grants focused on preventing chronic pain and related issues in children and adolescents.

Nearly a decade after Dr. Wilson received her FoD grant, its greatest impact is still felt in the lives of patients and families who participate in the Comfort Ability Program at Doernbecher, learning better ways to manage their pain and feeling less alone in their experience.



"FoD grant funds were essential to bringing the Comfort Ability Program to Doernbecher, which now provides children in our community much needed support when they are struggling with chronic pain. The positive

impact we're seeing continues to grow, delivering lasting benefits to children and their families."

- Anna Wilson, Ph.D., 2015 FoD grant recipient

Unveiling the Connection Between Social Needs and Health Outcomes

Louise Vaz, M.D., M.P.H.

Director, outpatient antibiotic therapy program Associate Professor of Pediatrics, Division of Infectious Diseases, School of Medicine

Michael Harris, M.D.

Director, Novel Interventions for Children's Healthcare Professor of Pediatrics, School of Medicine

In 2017, Dr. Vaz and Dr. Harris received a \$20,334 FoD grant to launch the "Most Vulnerable Project" (MVP), an epidemiological survey assessing social needs among children hospitalized at Doernbecher. Throughout their years of clinical experience working with vulnerable populations at Doernbecher, Dr. Vaz and Dr. Harris observed a link between socioeconomic challenges — such as food insecurity, financial stress and psychosocial strain — and health outcomes. They wanted to better understand how those challenges impact health after discharge, with a focus on preemptively identifying pediatric patients at high risk of repeated emergency room visits or readmissions.

The MVP surveyed 265 patient families about their experiences at Doernbecher and what they found was staggering: 1 in 3 families at Doernbecher were unable to afford basic needs — such as food, housing or utilities — at the time of their child's hospitalization. Focus groups that followed the survey showed parents overwhelmingly identified hunger as their greatest challenge.

Those findings resulted in the creation of Nourish, Doernbecher's food security program that provides vital nutritional support to patient families by offering healthy, ready-to-eat meals during their stay. Thanks to additional philanthropic support from partners like the Rite Aid Foundation, Nourish served nearly 3,000 patient families in 2024 and has plans to expand its reach even further in the future.

The FoD grant that launched the MVP was a crucial first step in what has grown into a lasting collaboration between Dr. Vaz, Dr. Harris and their teams to ensure the most vulnerable patients at Doernbecher are given the chance to heal and lead healthy, full lives into the future.

Novel Imaging Explores the Impact of Traumatic Brain Injuries

Juan Piantino, M.D., MCR

Associate Professor of Pediatrics, Division of Neurology, School of Medicine, OHSU Director, Inpatient Child Neurology

Dr. Piantino, a pediatric neurologist, applied for an FoD grant in 2019 to investigate the link between chronic headaches in youth with traumatic brain injury, and impairment of their glymphatic pathway, a brain network that clears waste. Headaches are the most common symptom reported by pediatric patients following a traumatic brain injury and can often lead to poor quality of life and development challenges due to missed school and social activities. The goal of Dr. Piantino's project was to better understand the mechanisms underlying the persistence of headaches seen in pediatric traumatic brain injury patients and how they are related to the glymphatic pathway.

The \$42,362 grant Dr. Piantino received allowed his team to develop a multi-modal neuroimaging protocol to measure various aspects of glymphatic function. In collaboration with the OHSU Advanced Neuroimaging Center and the University of Washington, they created MRI sequences to study glymphatic processes in patients aged 12 to 18. This protocol is now used in studies across different age groups and conditions, extending far beyond traumatic brain injury and pediatrics.



Thanks to the data generated from this project, Dr. Piantino received two significant grants from the National Institutes of Health to pursue similar studies in adults, as well as funding from the U.S. Department of Defense to examine glymphatic function in active-duty military personnel totaling \$1.5 million.

Friends of Doernbecher Grant Program Awardees by Pediatric Clinical Area

Audiology

Critical Care

Dermatology Fetal Medicine

Gastrointestinal Infectious Disease

Mental Health

Palliative Care

Rare Disease

Sleep Medicine

Physical Therapy

Nephrology

Autism

- Cancer and Blood Disorders
- Cardiology
- **General Pediatrics**
- Neonatal Care
- Neurology
- Non-medical Family Care
- Pulmonology
- Surgery
- Child Safety
- Craniofacial Disorders and Cleft Lip/Palate
- Education
- **Emergency Medicine**
- Endocrinology
- Eye Health
- Neuroscience



FoD Grant Program By the Numbers



Vital Role of Philanthropy

The Doernbecher Philanthropy Board adopted the FoD Grant Program as its fundraising focus for fiscal year 2025 to support vital seed-stage funding for pediatric research and programs at OHSU Doernbecher Children's Hospital. As the stories included here illustrate, the grant program can act as a launchpad for new ideas, allowing researchers to pursue innovations in care and treatment that are changing the lives of children in our community and around the world.

We invite you to join our efforts to ensure the grant program can continue its critical investment in early-stage pediatric research by making a gift today. Learn more about how you can support this effort or get involved by contacting Sarah Larson at 503-552-0692 or larsosar@ohsu.edu.

FOR MORE INFORMATION:

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