**RESEARCH ENVIRONMENT & FACILITIES**

**University of Wisconsin-Madison**

The research environment at the University of Wisconsin-Madison (UW-Madison), including the School of Medicine and Public Health (UW-SMPH), is exceptional. There are expert scientists in many areas, as well as state-of-the-art core facilities. The ability to easily access expertise within any area of the campus provides an incredible setting for faculty and staff.

The UW-Madison campus encompasses 936 acres with an additional 1,607 acres of off-campus properties and has approximately 3.4 million square feet of building space dedicated towards research. The campus also has 1.7 million square feet towards academic support (this includes support staff for the research mission).

UW-Madison has long been recognized as an institution that excels in research. In fiscal year 2018 (July 2017-June 2018), nearly $973 million in extramural research dollars were awarded to the university, of which over $577 million were federally funded. In the last ten years, UW-Madison has consistently been in the top six institutions in terms of total NIH research support. Twenty Nobel Prizes and 38 Pulitzer Prizes have been awarded to UW-Madison faculty or alumni.

**School of Medicine and Public Health**

The UW-SMPH has the largest research commitment of any school or college on the UW-Madison campus, receiving over $383 million in extramural support in fiscal year 2018. More than 1,200 faculty members work in 27 departments and 21 centers and institutes, and have active research programs covering virtually every aspect of basic, clinical, and public health research. Existing internationally recognized centers include the UW Paul P. Carbone Comprehensive Cancer Center, the UW Institute for Clinical and Translational Research (a CTSA program), the McArdle Laboratory for Cancer Research, the UW Stem Cell and Regenerative Medicine Center, and the Waisman Center. New facilities, such as the Wisconsin Institutes for Medical Research and the UW Cardiovascular Research Center, ensure that UW-Madison will remain at the forefront of basic, clinical, and translational research, ultimately improving the health of the residents of Wisconsin and beyond.

**Department of Pediatrics**

The SMPH Department of Pediatrics received over $34.1 million in research grants in FY18, of which over $24.5 million was federally funded. This is the largest annual award amount since Dr. Ellen Wald’s appointment as Department Chair in 2006 and is reflective of her strong commitment to research and the success of pediatric investigators.

The Department of Pediatrics has extensive resources at its disposal to support basic, translational and clinical research. It has dedicated over 39,000 ft2 to research. Core laboratory facilities are described in detail below. The laboratory facilities are primarily located on the main campus in space within or adjacent to the Department of Pediatrics Faculty Office and Administrative Support home base. A subset of investigators whose research is cancer-related is located within the WIMR (Wisconsin Institute for Medical Research) facility, connected to the University of Wisconsin Hospital and Clinic.

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**Clinical Facilities**

[**American Family Children’s Hospital (AFCH)**](http://www.uwhealthkids.org/)

The state-of-the-art, $100 million AFCH at 1675 Highland Avenue replaced the existing UW Children's Hospital in August 2007. With inpatient rooms approximately double in size of the old UW Children's Hospital, the 87-bed AFCH provides patients and families from throughout Wisconsin and beyond a place to heal in a soothing, child-friendly environment.

A second phase of fundraising enabled the hospital to open a new Pediatric Surgical Pavilion in September 2008. The 37,000 square foot facility includes 6 operating rooms and two procedure rooms. With a Lake Michigan motif, the pavilion is the latest in operating room design and technology. Funding from operations and philanthropic giving supported a dedicated pediatric imaging unit and a hybrid catheterization lab that opened in 2013.

Our world-class team of doctors, nurses and other health care professionals provide everything from preventive health care to highly specialized programs. These include a pediatric intensive care unit, an internationally recognized transplant surgery program, a children's cancer center, a world-renowned pediatric asthma and allergy center and many others. With the growing need for increased space and services, a 14-bed NICU and 12 bed Universal Unit were added in 2014. These units will focus on supporting new directions in cardiothoracic surgery in infants and children, expanding pediatric surgery and its subspecialties to include neonates, and the creation of a Neuro-NICU facility. In 2019-2020, our hospital was ranked by the US News and World Report among the top 50 children’s hospital in the United States in 4 medical and surgical specialties.

[**UW Health (formerly, University of Wisconsin Hospitals and Clinics)**](http://www.uwhealth.org/)

UW Health ranks among the finest academic medical centers in the United States. The 505-bed hospital has more than 1,500 physicians and 16,500 staff at 6 hospitals and 80 outpatient sites that serve more than 600,000 patients annually in the Upper Midwest. The graduate medical education program rests on a solid foundation anchored by opportunities in more than 66 accredited specialty and subspecialty programs. UW Health has long been recognized as a national leader in many specialized fields of medicine, including radiology, cancer treatment, nephrology, pediatrics, surgical specialties (ophthalmology, otolaryngology and urology) and organ transplantation. The hospital is frequently cited in publications rating the nation's best medical facilities. For the first time in the history of U.S. News & World Report's "Best Hospitals" rankings, University of Wisconsin Hospitals are listed on the Honor Roll - the 20 most highly ranked hospitals in the nation. The designation, which includes both University Hospital and UW Health at The American Center, puts the hospitals at no. 17 among the more than 4,500 analyzed. In addition, UW Hospitals ranked among the top 50 of the nation's teaching hospitals in 13 adult specialties and 4 pediatric specialties, according to the 2019-2020 edition of U.S. News and World Report's list of Top 50 US Hospitals.

[**UnityPoint Health–Meriter**](https://www.unitypoint.org/madison/default.aspx)

UnityPoint Health–Meriter is a 448-bed non-profit community hospital that provides comprehensive health services for residents of southern Wisconsin and areas of northwest Illinois. It is a major teaching affiliate of the University of Wisconsin and is ranked #7 in the US News and World Report’s Best Regional Hospitals in Wisconsin. With a combined staff of 3,500 employees, UnityPoint Health–Meriter offers adults primary and specialty care . It is the home of the UW Health birthing service (~4,600 births/year – the largest in the state) and a 44-bed, level III neonatal ICU. The hospital has been recognized three times as a 100 Top Hospitals by Truven Health Analytics and for the fifth consecutive year, was named “Most Wired” by Hospitals & Health Networks magazine. The associated UnityPoint Health – Meriter Foundation supports research and education activities that relate to the newborn infant.

[**Waisman Center**](https://www.waisman.wisc.edu/)

The Waisman Center is an internationally renowned center dedicated to research, service, outreach, and training, all to benefit people with developmental disabilities or neurodegenerative disorders and their families. The Department of Pediatrics Divisions of Genetics, Neurodevelopmental-Behavioral Pediatrics and Intensive Care Unit have lab space and/or clinic space within the Waisman Center. Opened in 1973, the center is named after Harry A. Waisman, a pediatrician, biochemist, and pioneer in research involving intellectual disabilities. The Center is a 251,773 square foot complex that encompasses an eight floor tower, one story annex, and a six story addition. The Waisman Center is one of 14 Eunice Kennedy Shriver Intellectual and Developmental Disabilities Research Centers, one of 67 University Centers for Excellence in Developmental Disabilities and 43 LEND programs in the U.S.

The Waisman Center receives support from the Developmental Disabilities Branch of the National Institute of Child Health and Development (NICHD) for the Wisconsin Mental Retardation Developmental Disabilities Research Center (MRDDRC). The core grant (U54 HD090256) supports an administrative core and the research infrastructure of the Waisman Center through Waisman Core Services (WCS). The WCS includes four research service cores: Clinical Translational Core, Brain Imaging Core, Rodent Models Core and Cellular and Molecular Neuroscience Core. These cores provide essential, high-quality services to biomedical, behavioral and social science research projects for principal investigators.

**Clinical and Translational Facilities**

[**University of Wisconsin Institute for Clinical and Translational Research (ICTR)**](https://ictr.wisc.edu/)

The ICTR transforms research into a continuum from investigation through discovery to translation into real-life community practice, thereby linking the most basic research to practical improvements in human health. The interdisciplinary nature of the ICTR changes the culture from “silos” to cooperation and collaboration. Funded by NIH, ICTR represents a novel partnership between UW-Madison (with the William S. Middleton [Madison] VA Medical Center) and the Marshfield Clinic to create an amalgamation of the strong and distinct resources of these institutions, with unique opportunities to enhance the clinical and translational research opportunities in Wisconsin. The UW-Madison area of ICTR is composed of the Schools of Engineering, Medicine & Public Health, Nursing, Pharmacy, and Veterinary Medicine that partner to achieve four aims:

* Aim 1. To develop an academic home for clinical and translational science with experienced leadership and resources conducive to the creation and support of creative and effective interdisciplinary research teams.
* Aim 2. To develop a cadre of multidisciplinary biomedical and behavioral scientists capable of accelerating translation of research findings into evidence-based policies and practices which will improve health.
* Aim 3. To create a coordinated infrastructure that makes critical resources available, including biomedical informatics, biostatistics, core technologies, and facilities for clinical and population based research.
* Aim 4. To develop the infrastructure necessary to investigate and establish the tools essential to transfer medical discoveries to the community and respond to the health care needs of the community.

The ICTR has made good on its promise; as of 2019, 182 grants totaling $9.2 million have been awarded to support clinical and Type 1 translational research and 116 grants totaling $8.8 million have been awarded to support community-engaged translational research. In addition to its research mission, the ICTR is a resource for education in clinical and translational research that will be used by our faculty and staff. The Department of Pediatrics has a strong tie to the ICTR, with Paul Sondel, MD, PhD serving in a leadership role as one of the Chairs of the Scientific Review Committee.

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