

THE UW DIABETES INSTITUTE

Addressing a Growing Pandemic

Diabetes: Bringing Together UW Medicine's Research Centers

Researchers at the UWDI — formerly the Diabetes and Obesity Center of Excellence — work on disease pathogenesis, biomarkers, new diagnostic tools, stem cell medicine and more.

In their new building, they will be joined by researchers from:

The Diabetes Research Center. Approximately 95 investigators in various specialties who focus on the etiology, prevention, treatment and complications of diabetes.

The Nutrition Obesity Research Center. Funded by the National Institutes of Health. Focuses on nutrition and obesity and supports research activities from bench to bedside.

APPROXIMATELY 29.1 MILLION PEOPLE IN THE U.S. have diabetes, a common and deadly disease that, in addition to disrupting the body's metabolism, attacks the heart, eyes, nerves and kidneys. The disease is becoming a pandemic; over the past several decades, the number of people with diabetes has doubled, and it will likely continue to increase. Unfortunately, diabetes treatments are often not as effective as we would wish. In fact, many patients receiving treatment continue to have elevated blood sugar levels and the serious health problems that accompany diabetes.

There is a pressing need for comprehensive care and effective new strategies to treat and prevent diabetes. The new **UW Diabetes Institute (UWDI)** is poised to achieve both of these goals by uniting world-class diabetes care specialists with leading-edge diabetes researchers. We request your support in this important work.

An Ongoing Crisis

Diabetes is among the most common — and costly — diseases in the U.S. and around the world. In China, for example, diabetes affects about 10 percent of the population (114 million adults); in India, 9 percent of the population is estimated to have diabetes (more than 100 million cases). Every year in the U.S., the number of emergency-room visits due to diabetes and its complications continues to rise, putting a serious strain on our healthcare system.

Over time, the elevated blood sugar levels caused by diabetes have devastating consequences. Indeed, diabetes is the leading cause of blindness, kidney failure and amputation among adults in the U.S., and it markedly increases a person's risk of heart disease, vascular disease and stroke.

Our Vision: Collaborating Under One Roof

Because diabetes affects nearly every part of the body, a multidisciplinary approach to the disease will be the most effective in developing treatments and cures. That is why we are creating the UW Diabetes Institute.

The UWDI will build upon UW Medicine's extensive foundation of diabetes research expertise, detailed in the sidebar, as well as our providers' superb work with patients at the Diabetes Care Center (DCC), now located at UW Medical Center's Roosevelt Clinic. Today, researchers and doctors work together, so that patients benefit from state-of-the-art research, and researchers benefit from meeting and understanding the needs of patients and families.

That said, we are capable of even more. With the UWDI, we will take this synergistic interaction to a new level — by bringing research and patient care together in one facility.

Our Approach

The UWDI is based on a bench-to-bedside approach — taking discoveries made at the laboratory bench and turning them into medications and therapies for patients. This means we aim to:

- Clarify the mechanistic underpinnings of diabetes and its complications;
- Translate this information into new targets for diabetes treatment and prevention;
- Provide superb, multidisciplinary care for complex, multifaceted problems;
- Optimize diabetes care from adolescence to geriatrics; and
- Expand our outreach to improve the lives of patients with diabetes in the Northwest and beyond.

Over the years, one of our greatest obstacles to advancing research has been the considerable physical distance between our diabetes clinic and our research program. The new UW Diabetes Institute will overcome these challenges with the creation of a new building, slated for completion in 2018, at UW Medicine's campus at South Lake Union. Once opened, the building will house not only the DCC, but also three floors of hi-tech diabetes research space.

By uniting world-class diabetes researchers and clinicians under one roof, the new institute will combine comprehensive, basic and clinically relevant research with superb patient care. Additionally, this vibrant, collaborative environment will be ideal for training the next generation of diabetes specialists and scientists.

The Institute's Priorities

The UW Diabetes Institute envisions a world in which everyone with diabetes has access to state-of-the-art care, and treatments are both widely available and highly effective. We are committed to bringing this world into being.

Below are major priorities in patient care, research and education that would benefit from philanthropic investment.

Patient-care Priorities

The institute will provide the best, most comprehensive patient care possible with a team that includes experts in diabetes management and in diabetes-associated complications (cardiologists, nephrologists, ophthalmologists). We also intend to:

Manage the transition to adult diabetes care. In partnership with Seattle Children's, we are creating a new clinic for adolescents with diabetes who are transitioning into adult care. The first of its kind in the Northwest, this clinic will provide seamless, uninterrupted support of patients' medical and psychosocial needs.

Give patients the high-tech tools they need. By educating patients on the effective use of new, emerging technologies, we help them to regulate their blood sugar in an optimal way, thereby minimizing their risk of complications.

Empower communities around the world. The institute will serve as a model for more effective patient care worldwide.

Research Priorities

Extensive new research space is an important part of the UWDI. This space will accommodate both basic research (the type that allows us to understand a disease) and clinical research (that allows us to improve outcomes for patients).

Basic science. Basic diabetes research at UW Medicine — such as better understanding the brain's role in controlling body weight and blood sugar — continues to move the field forward. The institute will allow us to pursue promising areas of research, including, but not limited to:

- Understanding the role played by HDL (good cholesterol) in protecting the heart in diabetes;

- Building on the discovery that the brain can normalize blood glucose levels through a mechanism unrelated to insulin;
- Developing the technology needed to transform stem cells into insulin-producing cells that can be implanted into patients; and
- Creating a pancreas-on-a-chip to analyze insulin-secreting cells outside of the body.

Clinical research. The institute will enhance life-changing research for patients and families, including, but not limited to:

- Improving diabetes technology (such as pumps, glucose sensors, an artificial pancreas and seamless communication among different technologies);
- Implanting new, encapsulated islet cells capable of making insulin for people with type 1 diabetes (whose original islet cells have stopped working);
- Determining how different medications affect blood glucose control and how swings in blood glucose may be dangerous for people with type 2 diabetes; and
- Learning more about how best to treat diabetes for those age 60 and older.

Educational Priorities

Training and mentoring the next generation of physicians and scientists is an important part of the institute's mission — we want to help ensure that there will be enough diabetes specialists to treat the growing number of people with this illness. One of our major priorities will be to support the teaching efforts of our faculty, allowing them to mentor junior fellows. We also seek two endowed fellowships to help us recruit and retain exceptional post-doctoral trainees.

Opportunities for Strategic Investment

Launching this world-class institute will require significant philanthropic investment. We ask that you consider making a gift to support one of the important priorities listed below.

Recruiting and Retaining Superb Leaders. Endowed professorships and chairs advance research, allow faculty to reserve precious time to focus on training and mentoring students, and create opportunities for collaboration worldwide. We seek to establish two endowed chairs, one to support research, the other for the director of the UWDI Adolescent Transition Clinic.

Advancing Patient Care. UW Medicine's clinician-teachers are at the forefront of care, research and teaching. They care for patients, and they also educate students and fellows within UW Medicine, as well as primary-care providers throughout the Pacific Northwest. We seek two endowed professorships to support their important work.

Educating the Next Generation of Post-doctoral Trainees. Training the next generation of top-quality diabetes leaders is no small charge. After completing a fellowship, trainees must define their own scientific niche, which requires dedicated research time. However, competitive research grants that fund career development — the transition from trainee to established investigator — are typically limited to salary support, leaving minimal, if any, funds for the actual scientific work that they do. We seek two endowed fellowships to support trainees during the career development period.

About Endowments

These invested funds provide stable, long-term resources for important priorities. Endowed chairs (\$2 million or more) and professorships (\$500,000 or more), with the resources and prestige they confer, are valuable faculty recruitment and retention tools.

Nurturing Innovative Research. In researching diabetes, we want to do more than improve treatments — we want to take major leaps forward in helping cure the disease. Philanthropy is enormously helpful in underwriting the novel, initial stages of research. With gifts, we will create a competitive, in-house research funding program to support new ideas and help scientists establish proof-of-concept data that will drive subsequent, larger requests to the National Institutes of Health and other funders.

Institute Priority	Description	Partnership Opportunity
Recruiting and Retaining Superb Leaders	Two endowed chairs at \$2 million each	\$4 million or more
Advancing Patient Care	Two endowed professorships at \$500,000 each	\$1 million or more
Educating the Next Generation of Post-doctoral Trainees	Two fellows at \$100,000 each or two funds (\$2.5 million each, with annual payouts of \$100,000 each)	\$200,000 per year or \$5 million endowed
Nurturing Innovative Research		\$100,000 per year or \$2.5 million endowed

Join Us

UW Medicine has the potential to change diabetes care in our community and around the world. By creating the UW Diabetes Institute, we will be able to fully integrate state-of-the-art diabetes care with deep expertise in clinical and basic science research.

We know the results will be lifesaving and life-changing, and we invite you to support the institute: to help the millions of people who have — or who are at risk of having — diabetes.

To learn more, please contact Kelly Oswald, senior director for philanthropy, at 206.685.5412 or at kyoswald@uw.edu. Thank you very much for your interest in our work.