

CREATING THE CENTER FOR EMERGING CARDIOVASCULAR THERAPIES

At UW Medicine

CARDIOVASCULAR DISEASE, also called heart disease, is deadly: around the world, more than 17 million people of all ages, from children to the elderly, die each year. It poses a heavy health burden as well as a significant economic burden, as it is responsible for more physician visits and more hospitalizations than all cancers combined.

UW Medicine's heart team leads the region in the treatment of structural heart disease, and research in the field of cardiovascular engineering is particularly robust. For example, we are expert in the development of biomedical devices, advancing non-surgical, minimally invasive treatments. And we are working on the next generation of leading-edge molecular, biomechanical and nanotechnologies to treat patients with this deadly, costly disease.

Eventually, we hope to cure heart disease. To that end, and to strengthen our leadership role, UW Medicine aims to create a new center — the **Center for Emerging Cardiovascular Therapies (CECT)**.

We are in a unique position to create this center with our world-class faculty, facilities and unparalleled access to clinical trials and new commercial devices. Already our team of interventional cardiologists, cardiac surgeons and cardiac anesthesiologists provides evidence-based clinical care, publishes pre-clinical, clinical and outcomes research, and directs the education of the next generation of physicians and clinicians.

Such a center would accelerate research and education around medical device development and the latest advances in cardiac care — directly translating into accelerated treatments and cures for those with cardiovascular disease. We invite you to partner with us in this important work.

The Promise of the Center

At UW Medicine, we are at the forefront of research on how to diagnose and treat heart disease — and, we hope, to cure it. The creation of the Center for Emerging Cardiovascular Therapies (CECT) will allow us to take a major step forward in improving the lives of patients with this condition.

Increasingly, medicine advances because of the power of combined expertise: people from different fields coming together and sharing knowledge with each other, with patients and their families, and with colleagues around the world. At UW Medicine, our approach to cardiac care is seamless: gone are the days of independent specialties. Instead, we are interdependent, and the integration shows great promise.

The center will formally bring together experts and trainees from the Division of Cardiology, the Department of Surgery, the Department of Anesthesiology and Pain Medicine and the Department of Bioengineering. Together, they will develop and test devices, simulate

UW Medicine: Leading the World in Heart Valve Technology

TAVR. UW Medicine faculty were the first in six states — Washington, Wyoming, Alaska, Montana, Idaho and Oregon — to perform transcatheter aortic valve replacement (TAVR), a minimally invasive surgery to repair damaged heart valves in high-risk patients. We continue to innovate in testing and improving the technology.

Transcatheter Mitral Valve Repair. UW Medicine offers percutaneous mitral valve repair with the MitraClip, the world's first transcatheter mitral valve repair therapy, as well as leading-edge devices available only in clinical trials. We perform the most surgeries using MitraClip in the region, and are among the top three in the nation.

procedures to improve patient safety, conduct research, and provide comprehensive training to medical students — initiatives that are explained more fully in the paragraphs that follow.

In all this work, we remain committed to our patients and their families — and to excellence and leadership.

Making Progress in Research, Education and Care

The CECT intends to expand upon UW Medicine's already strong foundation in treating heart disease by:

Accelerating Research

Researchers and clinicians are publishing studies that emphasize preclinical refinement of medical devices. They are also researching complex therapies and early interventions for common cardiovascular disease such as atrial fibrillation, valvular heart disease and heart failure. This work will benefit enormously from the creation of the center.

Accelerating Care

At the CECT, researchers will translate their discoveries into new therapies and into seamless delivery of care for patients. Patients will have access to the latest promising technologies and approaches to cardiovascular care, including transcatheter aortic valve replacement (TAVR) and transcatheter mitral valve repair — two of the newest therapies available (see sidebar). UW Medicine leads in complex percutaneous coronary intervention (PCI), including chronic total occlusions. Each patient's medical needs will be coordinated by a multi-disciplinary team that is backed by research and delivered with compassion.

Accelerating Education

The CECT will train providers who diagnose and treat cardiovascular disease. The center will include an anatomical and imaging library for diagnosis and therapy development, and it will provide training on simulators and with cadavers. In addition, the center will provide progressive medical education that promotes mentoring among medical providers and encourages team-building across disciplines.

UW Medicine attracts some of the best **students and trainees** in the U.S., and we are committed to training the next generation of cardiovascular investigators and clinicians. The establishment of the CECT will strengthen our position as the institution of choice for cardiovascular trainees.

Join Us

We would welcome your partnership in creating the Center for Emerging Cardiovascular Therapies. If you would like to learn more about advancing cardiovascular technology and improving care for people who suffer from heart disease, please contact Anne C. Aumell, M.A., CFRE, director for philanthropy, at aaumell@uw.edu or 206.221.0832. Thank you for your interest in our work.