Big Ideas Are Born Here

At Oregon Health & Science University, big ideas spark breakthroughs that are changing the world of medicine. Without exception, big ideas are advanced by collaborations among passionate physicians and scientists—and through powerful partnerships with private industry, government leaders, and donors of all types.

Nike co-founder Phil Knight and his wife Penny are helping OHSU change the future of medicine through transformational philanthropic investments. Now, they’ve pledged an additional $500 million to kick-start a $1 billion cancer research initiative at the Knight Cancer Institute.

Big ideas come in all shapes and sizes, but the biggest and best have one thing in common—they change the world for patients and families.

Here are a few big ideas that are igniting new hope at OHSU:

A Theory That Reveals the True Origins of Chronic Disease
Kent Thornburg, Ph.D., is leading OHSU’s Bob & Charlee Moore Institute for Nutrition & Wellness in leveraging the study of the fetal/developmental origins of chronic adult diseases into programs and public policies that will change the game against childhood obesity and its devastating complications.

A Genetic Key to New Autism Drugs
Gail Mandel, Ph.D., a National Academy of Sciences member and Vollum Institute senior scientist, showed that Rett Syndrome, a devastating autism-spectrum disorder that strikes young girls, is a complex disorder due to glia and neurons. She is exploring promising gene therapy approaches.

A Smarter Path to an AIDS Vaccine
Louis Picker, M.D., and colleagues at OHSU’s Vaccine and Gene Therapy Institute have developed an HIV/AIDS vaccine candidate that appears to have the ability to completely clear an AIDS-causing virus from the body.

A New Source of Stem Cells
OHSU’s Shoukhrat Mitalipov, Ph.D., was the first to convert human skin cells into embryonic stem cells, which are capable of changing into any cell type in the body. This work could lead to better experimental disease models in the lab, new cures for devastating human diseases, and an answer to the debate over embryonic stem cells.

A Scanner That Catches Hidden Heart Attacks
Cardiovascular imaging pioneer Sanjiv Kaul, M.D., spearheaded the development of microbubble-based myocardial echocardiography, an ultrasound imaging technique that can diagnose heart attacks other methods miss.

See the full list of OHSU’s big ideas at: www.ohsu.edu/bigideas