Knight Cancer Institute at Oregon Health & Science University Overview

The Knight Cancer Institute at Oregon Health & Science University is an international leader in cancer research and personalized treatment. The institute's director, Brian Druker, M.D., helped usher in the era of personalized cancer medicine with his discovery that cancer cells could be shut down by disabling the molecules that drive their growth without harming healthy cells. The drug that resulted from that research, Gleevec®, revolutionized the way cancer is treated and inspired a new wave of exploration into molecularly targeted therapies that zero in on cancer-causing molecules.

The OHSU Knight Cancer Institute continues to build upon its scientific and clinical leadership. Both public support and private philanthropy – including a transformative $100 million gift from Nike Chairman Phil Knight and his wife Penny in 2008 – have provided crucial resources to advance its progress. With this support, it is able to provide a range of services along with supporting a team of scientists focused on cancer research. These services include in-patient and out-patient cancer treatment including medical, surgical and radiation oncology. The Knight is also engaged in running clinical trials that bring new treatments to patients, organizing outreach programs focused on cancer prevention and collaborating with a variety of organizations to share its resources and expertise.

The OHSU Knight Cancer Institute is also attracting powerful research collaborations with technology leaders such as Intel Corporation and FEI, who want to be part of the Knight’s mission to end cancer as we know it.

These investments and collaborations have enabled the OHSU Knight Cancer Institute to recruit and retain some of the world’s top scientists and clinicians.

With these resources, the OHSU Knight Cancer Institute is also pursuing a comprehensive strategy in making a difference for patients and their families. Among other things, that strategy involves:

- Expanding the Knight Diagnostic Laboratories to provide oncologists nationwide with specialized tests that can determine the specific mutations enabling certain cancers to grow. With information about mutations, oncologists are better equipped to find the most appropriate individualized, or targeted, therapy for a patient.
- Building a world class cancer research team to continue to explore, among other things, the cellular pathways through which cancer grows. By figuring out how cancer cells function and why they grow out of control, researchers will have the knowledge they require to develop the drugs to stop it.
- Establishing a comprehensive tumor and tissue repository, the OHSU Knight BioLibrary, to advance research and the practice of personalized cancer medicine.
• Fostering research and development collaborations with technology leaders such as Intel Corporation, FEI, Organovo and Cepheid.

• Aligning with other regional health care providers, such as Legacy Health, to expand the Knight Cancer Institute’s ability to deliver care in communities where patients live.

• And, refining patient care to tailor treatment plans for each individual’s tumor biology.

The OHSU Knight Cancer Institute is the only National Cancer Institute (NCI)-designated Cancer Center between Sacramento and Seattle — an honor earned only by the nation's top cancer centers. It employs hundreds of researchers of which about 170 have formal membership within the cancer institute. In 2012, it supported more than 400 clinical research studies that were open for enrollment. It is the headquarters for the NCI’s SWOG collaborative, a cancer research cooperative group that designs and conducts multidisciplinary clinical trials to improve the practice of medicine in preventing, detecting, and treating cancer, and to enhance the quality of life for cancer survivors.

Among the OHSU Knight Cancer Institute’s clinical distinctions are:

• Pioneering work in developing a cancer program tailored for adolescents and young adults that now serves as a national model;

• One of the largest bone marrow transplant programs in the region;

• A multi-disciplinary, in-patient unit for medical and surgical oncology;

• And, multi-disciplinary clinics for patients with lung, breast, prostate and pancreatic cancers as well as sarcoma in which all the specialists collaborating to provide care meet with the patient on the same day. Following the patient appointments, these specialists collaborate to ensure the patient receives the most appropriate, individualized treatment program.

Where to go to learn more about the Knight Cancer Institute:
Smithsonian on Brian Druker, M.D., director of the Knight Cancer Institute
New York Times on Brian Druker’s stance on cancer drug prices
New England Journal of Medicine documentary on Brian Druker’s impact on cancer research and treatment
Wall Street Journal review of book that chronicles the history of Brian Druker’s cancer research breakthrough
Wall Street Journal on Beat AML collaboration
Wall Street Journal on program for young adults with cancer
Portland Monthly on the Knight Cancer Institute’s cancer research vision
Intel Corporation’s president’s speech including segment on OHSU-Intel collaboration in cancer research
CBS affiliate documentary: Personalized Medicine: Ending Cancer as We Know It
The Oregonian on prostate cancer Dream Team
The Oregonian on breast cancer researcher Lisa Coussens
New York Times and Joe Gray
The Oregonian on the Knight Cancer Institute’s strategic vision
The Oregonian on the Knight Diagnostic Laboratories
Healthy Body, Healthy Mind on PBS, Treatment of Chronic Myeloid Leukemia
Healthy Body, Healthy Mind on PBS, Treatment of Gastrointestinal Stromal Tumor