

Circle of HOPE

Fall 2011

\$5 Million Gift Boosts Melanoma Research



John Gray

Longtime Oregon business leader and philanthropist John Gray has made a \$5 million philanthropic investment that will advance melanoma research and clinical care at the OHSU Knight Cancer Institute. By supporting the institute's search for new molecularly targeted melanoma therapies, the commitment reinforces OHSU's pioneering role and ongoing leadership in the arena of personalized cancer medicine. Melanoma is regarded as the most dangerous form of skin cancer because of its ability to spread to other parts of the body.

"Oregonians can be proud of the caliber of the research taking place at the OHSU Knight Cancer Institute. I'm confident that this gift will bring them closer to bringing melanoma under control once and for all," Gray said.

Gray's gift will establish the John Gray Endowed Chair of Cancer Research, support a long-term expansion of OHSU's registry of medical and biological data from melanoma patients, and fund melanoma-focused research projects.

"Oregon has one of the highest incidences of melanoma in the country, and the rates continue to rise at an alarming rate. John Gray's generosity will provide OHSU and the Knight with critical resources needed to ensure that new basic and clinical melanoma discoveries benefit patients more profoundly and quickly," said melanoma expert John Vetto, M.D., professor of surgery in the Division of Surgical Oncology.

OHSU will seek a physician-scientist of international stature to serve as the John Gray Chair, said Knight Cancer Institute Director Brian Druker, M.D. The chair will lead an interdisciplinary team of basic scientists, clinical researchers, genetics experts, physicians and surgeons focused on finding molecular defects that drive the growth of melanoma. Their goal is to advance the search for new therapies that target those abnormalities in the same way that the groundbreaking OHSU-developed drug Gleevec repairs the defects that cause chronic myeloid leukemia.

An expanded melanoma component within the Knight Cancer Institute's exclusive Personalized Cancer Medicine Registry will also serve as a powerful attractant

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Renowned Researcher Joins Knight

Lisa Coussens, Ph.D.

The OHSU Knight Cancer Institute has added another renowned researcher to its dream team. Lisa Coussens, Ph.D., a highly regarded breast cancer researcher and cancer biologist, will join OHSU's faculty this fall as chair of the Department of Cell & Developmental Biology in the OHSU School of Medicine and director of basic research in the OHSU Knight Cancer Institute.

Coussens is a pioneer in studying how cells that surround a tumor can fuel its growth. This year, she was one of only two researchers in the country awarded a \$6.5 million Komen for

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For More Information

The OHSU Knight Cancer Institute, a designated center of the National Cancer Institute, is dedicated to bringing new hope to cancer patients through compassionate care, groundbreaking research, and partnerships to catalyze better prevention, screening and treatment efforts.

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Director's Message

Ending Cancer As We Know It

In September, nearly 400 people gathered together at the OHSU Knight Cancer Institute's signature event, "Targeting Hope: Changing the Face of Cancer," to celebrate the extraordinary people and accomplishments that are bringing new hope to patients. We were honored to have Dave and Lynn Frohnmayer, ardent medical research advocates, serve as honorary co-chairs of this event.



Lynn and Dave Frohnmayer

As we highlighted that evening, the vital progress at the Knight Cancer Institute would not be possible without the contributions of many dedicated people – loyal supporters, patients, outstanding care providers and visionary scientists – whose committed efforts are fundamentally helping to alter what it means to have, treat and survive cancer. In this issue, we are pleased to share with you some of the ways these committed individuals are enabling the Knight to change the face of cancer through innovative partnerships, recruitment of outstanding faculty, groundbreaking research, and delivery of personalized care.

I am grateful to the people who champion our work and support our progress. On behalf of all of us at the OHSU Knight Cancer Institute, thank you.

Sincerely,

Brian Druker, M.D.
Director, OHSU Knight Cancer Institute
JELD-WEN Chair for Leukemia Research
Associate Dean for Oncology, OHSU School of Medicine

Thank you, Targeting Hope Sponsors!

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FEI, OHSU Partner to Create a "Living Lab for Cell Biology"

FEI, a scientific instruments company, and OHSU have announced a partnership to create the OHSU/FEI Living Lab for Cell Biology that will provide researchers with several state-of-the-art electron microscopes to advance the understanding and treatment of cancer and other complex diseases.

Joe Gray, Ph.D., a renowned cancer and genomic researcher recently recruited to OHSU from Lawrence Berkeley National Laboratory, will run the lab. Gray is well-known for breakthroughs that have changed clinical practices for cancer patients and the development of widely used tests that map the genetic materials in breast cancer patients' cells. He co-leads Stand Up To Cancer's Breast Cancer Dream Team and is spearheading the use of computer models to predict how cancer cells grow so that targeted therapies can be developed to shut these cells down.

With the creation of the Living Lab, Gray and other OHSU scientists will be able to visualize cell structure at an unprecedented level of detail, enabling them to explore how cancer cells function differently as they spread from the site of origin to other parts of the body. The collaboration will help FEI learn more about how its electron microscopes can better aid scientists and develop next generation research tools.

The microscopes in the OHSU/FEI Living Lab, which will have several locations, will be accessible to scientists throughout the Oregon University System (OUS). One of the locations will be in the future OUS-OHSU Collaborative Life Sciences Building.

"The Living Lab and the Life Sciences Building are evidence of what is possible when there is a close working relationship between business, OHSU and the other OUS institutions," said OHSU President Joe Robertson, M.D., M.B.A. "Working together, with the support of philanthropy, will ultimately improve Oregonians' health and the economic vitality of our community."

"FEI's goal for the Living Lab is to increase research productivity by providing directly interpretable information from its electron microscopy solutions so that scientists can more rapidly gain the knowledge necessary to advance medicine and save lives," said Dominique Hubert, vice president and general manager of FEI's Life Science Division.



OHSU's Joe Gray, Ph.D., and FEI's Dominique Hubert, Ph.D.

New Knight Labs Make DNA Tests Available to Patients

Later this year, the OHSU Knight Cancer Institute plans to launch the Knight Diagnostic Laboratories, which will make some of the world's most sophisticated DNA tests for cancerous tumors available to patients nationwide.

The Laboratories' tests can detect more than 600 DNA mutations that play a role in enabling cancerous cells to grow. These tests are crucial in making personalized cancer medicine a reality for more patients. Physicians need to be able to profile the abnormalities in each patient's tumor tissue to determine the best course of treatment to stop their particular form of the disease. This information is also important in matching patients to clinical trials and advancing research to develop targeted therapies, such as Gleevec, that shut down gene mutations while sparing healthy cells.

The Knight has made a significant investment in equipment and expertise to be able to offer these tests, which was possible in large part because of the \$100 million gift from Phil and Penny Knight. The funding has helped the Institute gain momentum in an area where it already had a significant scientific lead.

"The Knight developed expertise in using new technologies to do comprehensive DNA profiling of tumors about three years ago, which put the Knight significantly ahead of most cancer centers in offering patients these tests," said OHSU Knight Diagnostic Laboratories Chief Medical Officer Christopher Corless, M.D., Ph.D., who is also vice chair for research in the Department of Pathology. "The Knight's vision is that someday soon every patient with cancer will be able to get a genetic profile of their tumor and, in turn, will be matched to a treatment that stops their disease."

Knight Physician/Researcher Receives Kuni Award



Joshi Alumkal, M.D.

Joshi Alumkal, M.D., an OHSU Knight Cancer Institute oncologist and researcher, is one of three cancer researchers in the Pacific Northwest to receive the first-ever Kuni Scholar Award. The \$200,000 research award will provide Alumkal with funding to conduct research focused on developing therapies to overcome treatment resistance in prostate cancer patients.

The Kuni Scholars Program was created in 2011 to further the careers of talented young investigators in the field of clinical cancer research. The awards are made possible by the Wayne D. Kuni and Joan E. Kuni Foundation and the 3725 Fund of The Oregon Community Foundation. Other scientists receiving awards are Dr. Marka Crittenden of the Providence Cancer Center in Portland and Dr. Maria Corinna Palanca-Wessels of the Fred Hutchinson Cancer Research Center in Seattle.

Alumkal says the Kuni Scholar Award will give him the freedom to ask some “outside the box” questions that he believes have great relevance to prostate cancer patients.

“If we think about prostate cancer as a car, the androgen receptor (AR) protein is the engine. The belief in the field for the

past 70 years has been that this engine of prostate cancer cells only runs if male hormones (fuel) are plentiful in these cells,” Alumkal said. “Our work demonstrates that the AR protein is more like a hybrid engine and that prostate cancer cells can grow and thrive without fuel. In our prior work, we determined that specific genes turned on by this hybrid engine account for prostate cancer growth and aggressiveness. In the proposal we will determine how these genes work, and we will develop new therapies to ‘take out’ the engine block in prostate cancer.”

Alumkal said this award will help generate data to make his team’s submission for a grant from the National Institutes of Health as competitive as possible.

Like many families that are touched by this disease, the Kuni Foundation and Kuni family want to offer hope through the support of promising cancer researchers, says Carolyn W. Miller, president of the Kuni Foundation. She noted that the scholars program grew out of the Kuni Automotive business model of investing in the future by finding and encouraging talented early career professionals.

“Our Board and the Kuni family want to encourage and nurture ‘the rising stars’ in the field of cancer research. We foresee today’s young scientists contributing to medical breakthroughs that will benefit cancer patients for generations to come,” said Miller.



Joyce N. Furman

Furman Gift Creates Endowment for Head and Neck Cancer

OHSU recently received a gift of \$200,000 from the Joyce N. Furman Memorial Trust to establish a new endowment to advance head and neck oncology

research and care and provide Oregon and the region with a growing resource devoted to improving life for individuals and families affected by cancers of the head, face and neck.

The Joyce N. Furman Memorial Fund for Head and Neck Oncology celebrates the memory of community leader and philanthropist Joyce Furman. This gift will support the work of Peter Andersen, M.D., director of Head and Neck Oncology, and his colleagues.

Cancers of the head and neck, collectively, can be some of the most dangerous, debilitating and difficult-to-treat malignancies that exist, says Anderson. Having an endowed fund will provide important resources to advance head and neck cancer research, outreach activities, and support programs that help patients with speech and swallowing rehabilitation, physical therapy, nutrition, and social work specific to head and neck cancer and tailored to a patient’s age and stage of life.

The Head and Neck Cancer division is part of the OHSU Department of Otolaryngology/Head and Neck Surgery.

Knight Welcomes Patient and Family Services Leader



Susan Hedlund, M.S.W., L.C.S.W.

Susan Hedlund, M.S.W., L.C.S.W. has joined the OHSU Knight Cancer Institute as manager of Patient and Family Support Services. This position was created to enhance and manage all aspects of outpatient and family support services including oversight of the adult oncology social work team; wellness, art therapy and survivorship programs;

and supportive services that integrate with psychiatry, pastoral care, palliative care, rehabilitation, nutrition and volunteer services, among others. Hedlund will also help the Knight develop a long-term plan for extended patient and family lodging.

Hedlund has worked as a social worker in the health care field for 30 years and has extensive experience working with individuals and families facing life threatening illness and loss. She is an adjunct instructor in the Department of Family Medicine for the OHSU School of Medicine and the Graduate School of Social Work at Portland State University. She most recently served as the director of Social Services for Hospice and Palliative Care of Washington County. Previously she was director of counseling at Cancer Care Resources and clinical manager of social work at OHSU. Hedlund is a past president of the National Association of Oncology Social Work and in 2009 received the American Cancer Society's Quality Life Award. She speaks nationally and internationally, served on the Oregon State Task Force to Improve the Care of Terminally Ill Oregonians, and is a Senior Scholar for the OHSU Center for Ethics.

One of the Knight's top priorities is to expand its offering of patient- and family-centered services. The generosity of grateful patients, clinic staff and other donors makes many of these programs possible. Gifts fund wellness programs, such as yoga and mindfulness based stress reduction; massage therapy; art therapy classes; patient assistance programs; patient programming; and complementary care services. A range of giving and naming opportunities are available to support patient and family support services initiatives. To learn more, contact Caitlin Wilson at 503 494-1891 or email wilsocai@ohsu.edu.

Kennedy's Gift Benefits Patients

The Knight Cancer Institute is grateful for the visionary generosity of Mary "Maggie" Kennedy, who made a gift through her estate plans to benefit yoga and other programs for cancer patients. Having greatly enjoyed her participation in the Knight's Gentle Yoga for Women Healing from Cancer class, Kennedy wanted to make sure other patients would benefit from similar opportunities. She designated the OHSU Knight Cancer Institute through the OHSU Foundation as the beneficiary of her IRA account. When she passed away last spring, the proceeds from her IRA benefited the Knight's Patient and Family Support Services program.

Kennedy, who obtained masters degrees in journalism and business from the University of Oregon, began working at OHSU in 1981 as a system project manager going on to hold various administrative directorships. From 1989 to 1995, she served as associate vice president of University Material Management. Kennedy first retired from OHSU in 2003, then worked part-time, fully retiring in 2010.



Changing the Face of Cancer: Patients Share Their Stories

Stephanie Anderson

Stephanie was just 23 when she was diagnosed with nodular sclerositis Hodgkin's lymphoma. She shares her story to encourage others to pay attention to changes in their bodies that don't go away. Stephanie, her husband and their daughter are living life to the fullest in Gresham, Oregon.

Learning I had cancer was a surreal, out-of-body experience. I went from thinking I had a food allergy to learning I had a tumor. And not a small one. I will always remember coming up the stairs to see my husband, wondering what to say to him. How to tell him it was much, much worse than we thought.

When you're 23, you don't think of cancer as a possibility. I had developed a strange cough, but explained it away as allergies. Eight months later, I was still telling myself it was nothing – ignoring how tired I felt and the weight I was losing. My husband had recently lost his job and we had no health insurance, which made me reluctant to see a doctor.

When I ultimately got a chest X-ray, the mass was obvious. It looked like something huge was clogging my lungs. After a CAT scan, my doctor referred me to the OHSU Knight Cancer Institute clinic in Gresham, just minutes from my house.

At my first appointment with Dr. Seligman, who ordered a biopsy, he put his hand on my shoulder and asked me how I was doing. I told him I felt like I was on a roller coaster. He said, "You know the good thing about roller

coasters? They end." He said my cancer had a good chance of being cured.

Dr. Seligman and the nurse practitioner, Lisa Radcliff, R.N., were so encouraging and explained everything to me: over the next six months, I was going to have 12 treatments of chemotherapy, and then three weeks of radiation.

Within a week of my first chemotherapy treatment, my cough was gone. After four treatments I had a PET scan that showed the tumor was shrinking. Lisa Radcliff told me to hang in there: "We want to make sure we get rid of this the first time," she said, and after three weeks of radiation, another PET scan showed no new activity and an even smaller tumor.

The incredible support of my family and the social workers at the Knight Cancer Institute helped me stay strong and positive. Andrea Lehman connected me with the local chapter of the Leukemia & Lymphoma Society, where I was able to apply for and receive a stipend for extra expenses during my treatment. I also applied for financial aid through OHSU. The process was easy, and the help we got meant so much. I can't imagine how my family and I would have handled the finances on our own.

My family and I are so grateful to the OHSU Knight Cancer Institute for the wonderful care and support they gave us. From the kind, talented staff in convenient locations to the financial support we received, we were given the best of everything.



John Gragg

John Gragg is a two-time cancer survivor. After recovering from surgery for prostate cancer in January of 1999, at the age of 57, John was diagnosed with pancreatic cancer the following June. He says he's fortunate to be able to share his story, and credits his doctors, nurses, and solid family support for his success at beating cancer twice. John and his companion, Susanne, enjoy traveling when they're not

working at home on seven acres just north of Vancouver, Washington.

I was just recovering from my prostate cancer surgery when I noticed my energy level drop. My partner Susanne was moving to Vancouver from Arizona, and I felt bad that I didn't have the energy to help her. She told me I was turning yellow. I didn't want to see anything unusual in the mirror.

"You are jaundiced, and you will call a doctor," she announced.

I saw Don Girard, M.D., who lined me up with gastroenterologist Brian Fennerty, M.D. Tests showed I had pancreatic cancer. Back in 1998 when I learned I had prostate cancer, it was a shock. But nothing compared to hearing Brian say "pancreatic cancer." It was pretty scary. I knew the odds. I was in denial. Susanne did all the work: she got on the internet, listened closely when my doctors spoke, asked lots of questions.

The question was whether I was a good candidate for surgery. Turned out I was. Brett Sheppard, M.D., told me I had the choice of having surgery or not. To me, it was a no-brainer; I wanted to do everything I could to live. The surgery was performed in August 1999.

Dr. Sheppard and his team were great. He is a masterful surgeon, but he also has the keen ability to relate to people in a warm, reassuring way. My surgery went very well. I recovered at OHSU for ten days. The entire experience was so positive that one of my doctors told me I looked as though I was on vacation. Chemo and radiation treatments were next. My medical oncologist, Charles Blanke, M.D., guided my recovery. The nurses in the infusion clinic were so kind – I almost looked forward to my chemo because of them. And John Holland, M.D., and his team in radiation medicine were just wonderful.

Susanne helped me stay focused on what I could do, which was to pretty much take care of myself: rest, exercise, show up for treatments and just concentrate on getting well. My son Chris and daughter Sarah were also helpful, joining me on long walks, etc. My management and coworkers at Tektronix in Beaverton were also just great, covering for me while I was gone, letting me have the time to recover and welcoming me back when I was well enough to return.

Slowly, I got better. In six months, Susanne and I were on a real vacation in Hawaii, so grateful for the gift of life and the doctors who saved me.

To read more stories about how the OHSU Knight Cancer Institute has made a difference in the lives of patients, visit: www.ohsu.edu/cancer.

"It's comforting to know that not only do I have access to cutting edge care through clinical trials, but my experience may help someone in the future. It's a wonderful way to help the doctors who are helping me, as they try to conquer cancer. My entire experience at the OHSU Knight Cancer Institute was excellent. Everyone was so helpful with information, and they took the time to explain everything to me and my family. The people at the Knight Cancer Institute make you feel like they love their job, and they want to help you. I am so grateful for all they did for me."

– Anthony Esposito

"The OHSU infusion staff were totally dedicated – most of them had worked with cancer patients for years. They encouraged me and gave me hope that I would get through it."

– Alan McGuire Dale

"I always felt and continue to feel that everyone has treated me as a whole person, not just as cancer in a person. The ambience of the facility and the demeanor of the people who work there really made a difference in how I experienced my illness and how I am experiencing the road to recovery."

– Caron Blau Rothstein

Legacy Gift Advances Cancer Prevention and Outreach



Dr. Charles R. Sharp

Thomas M. Becker, M.D., Ph.D., professor and chair of the OHSU Department of Public Health, has been appointed as the first Charles R. and Velma E. Sharp Endowed Professor at the OHSU School of Medicine.

The establishment of this professorship was made possible through the visionary generosity of Dr. Charles and Velma Sharp who

included OHSU in their estate plans. The holder of the Sharp Professorship will focus his efforts in an area of cancer research that includes prevention or outreach, thus reflecting Dr. Sharp's values of battling grave diseases in the public health arena. Dr. Sharp, a 1935 graduate of the School of Medicine, met Velma when he was public health director in Douglas County. After serving in World War II, he studied public health at Johns Hopkins University and held positions with the public health office in Walla Walla and the U.S. Public Health Service in Washington, D.C., Cincinnati and Raleigh, North Carolina.

In keeping with the Sharp family's wishes, Dr. Becker will focus on a type of cancer work "outside of those cancer efforts most highly publicized in the media and which are funded through high profile events."

Circle of Hope spoke with Dr. Becker about his new appointment:

You are a wonderful advocate for under-served populations, especially Native Americans. One of the goals for this professorship is to "focus on advancements in the practice of public health, prevention or family medicine." How do you aim to accomplish this?

I hope to remain involved in prevention research efforts in tribal and in other American Indian and Polynesian communities. As director of the CDC-funded Prevention Research Center – the Center for Healthy Communities – I have worked on a variety of research efforts focused on disease prevention. My team members include a terrific group of researchers and staff, and my departmental faculty and colleagues at the Northwest Portland Area Indian Health Board have been very supportive of the Center's efforts.

One of the current prevention projects is focused on

colorectal cancer screening education and primarily involves the input and expertise of several American Indian researchers at the Board. Support from the Sharp professorship and other grants will help us continue to address additional challenges in minority and under-served population health.

What else do you hope to accomplish as the Sharp Endowed Professor?

I look forward to becoming more involved in the cancer prevention and control efforts at the Knight, working closely with Dr. Patty Carney and other excellent cancer prevention and control researchers. I've also been asked to head the search committee to hire a new molecular epidemiologist/geneticist at the Knight.

Providing community education is also important to me. Working through the Indian Health Board, I plan to develop and implement a cancer prevention and control course for Indian researchers through our Summer Research Training Institute for American Indian and Alaska Native Health Professionals. I also run our graduate training scholarship program for American Indian and Alaska Native trainees, many of whom are involved in cancer studies. I will continue the Prevention Research Center's activities in prevention of other chronic diseases, too.

In addition, the National Cancer Institute has just invited me to be on their external advisory group for the Cancer Community Network Program, a large effort that is community-focused in multiple locations nationwide.



Tom Becker, M.D., Ph.D., and the Sharp's daughter, Dinah Deshler

Research Updates

Kidney Cancer Discovery Could Expand Treatment Options



George Thomas, M.D.

OHSU Knight Cancer Institute researchers uncovered a gene that may be the key to helping kidney cancer patients who don't respond to current therapies. This discovery could also provide a toolkit to identify patients who are most likely to benefit from drugs that block this gene

from causing cancer cells to grow.

The OHSU study, published in *Science Translational Medicine*, identified a gene called Src that helps certain kidney cancers grow. Discovering that Src plays a role in kidney cancer could help in delivering more effective, individualized treatments to patients, said George Thomas, M.D., the study's senior author and a surgical pathologist at the OHSU Knight Cancer Institute. He says the next step is to initiate clinical trials to test how these tumors respond to drugs already available and approved by the FDA.

Last year alone, kidney cancer accounted for about 58,000 new cases of cancer and 13,000 deaths in the United States. More than a quarter of these patients have metastatic disease when their cancer is discovered, and patients who are treated with surgery frequently relapse.

Currently, treatment of kidney cancer is primarily focused on blocking the formation of new blood vessels. While this strategy has been successful in the short term, it does not cure the patient and, more importantly, there are subgroups of patients who don't experience any benefit from these drugs.

Thomas says preclinical tests have found that cancer cells that have increased Src activity are more sensitive to dasatinib (Sprycel), an existing FDA-approved drug. He and his colleagues have also developed a panel of clinical markers that could potentially select patients most likely to benefit from Src inhibitors.

Scientists Develop Method to Determine Order of Mutations That Lead to Cancer

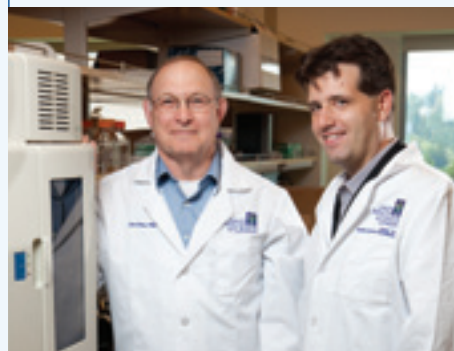
Zeroing in on the early cell mutations that enable a cancer to grow is one of the best ways to find a personalized therapy to stop it. Scientists were able to use a statistical approach for the first time to map out the order in which these abnormalities form to analyze the pattern of DNA changes in advanced skin and ovarian tumors.

The study's findings are the result of a collaboration of scientists at the OHSU Knight Cancer Institute; the Lawrence Berkeley National Laboratory, the University of California, San Francisco; and the Samsung Advanced Institute of Technology. The researchers focused on assessing mutations involving TP53, a gene that normally prevents cells from becoming cancerous. By examining how additional copies of the mutant gene accumulated, they found that changes in TP53 occurred earlier in the disease's progression than previously believed.

Cancers are the result of multiple mutations, but the ones that happen first set the stage for additional abnormalities.

"We anticipate that this information will enhance our ability to detect cancer early when it is more likely to respond well to treatment," said Joe Gray, Ph.D., associate director for translational research for the OHSU Knight Cancer Institute.

Early mutations are also important because they are found in every cell of the cancer. "By understanding what happens early in a tumor's growth, you can develop therapies that will target all cancer cells," said Paul Spellman, Ph.D., a lead scientist of the study who joined the OHSU Knight Cancer Institute from the Lawrence Berkeley National Laboratory in July.



Joe Gray, Ph.D., and Paul Spellman, Ph.D.



SuEllen J. Pommier, Ph.D.

Research Updates (continued from page 9)

Malignant Stem Cells May Explain Why Some Breast Cancers Develop and Recur

Mutations that are found in stem cells could be causing some breast cancers to develop and may be the reason the disease recurs. These abnormal cells are likely controlling cell functions in the tumor and, given they are not targeted by chemotherapy and radiation, they enable the disease to recur.

The mutations were discovered in a study conducted by scientists and physicians at the OHSU Knight Cancer Institute. The study examined breast cancer cells removed during surgery.

“By studying normal and malignant cells that were collected from breast tissues removed during surgery, we were able to look at what is occurring in the body,” said SuEllen J. Pommier, Ph.D., the lead author of the study and associate research professor in the Division of Surgical Oncology at the OHSU Knight Cancer Institute.

Working with samples taken directly from surgeries made the findings in this study possible, Pommier said, because the biology of breast stem cells could be compared with their malignant counterparts in a way that hadn’t been done before. The cultured cell lines used in most studies can’t provide accurate information about normal breast stem cells.

The study, which was funded primarily by the Avon Foundation for Women, may prove that some current therapies that target mutations in the tumor won’t be effective in stamping out the disease for some patients. The study also helped identify other areas for which more research is needed.

“This study provided us with new insights into breast cancer stem cells and possibly into the earliest mutations. That information is crucial for developing treatments,” Pommier added.

Advanced Technologies Continue to Benefit Patients

OHSU Knight radiation oncologists and Calypso Medical Technologies recently marked a milestone in treatment of prostate cancer patients worldwide who have received radiation treatments through the Calypso System as the 10,000th patient begin treatment at the Knight. The Knight was the first cancer center in Oregon to offer Calypso®, also referred to as GPS for the body, and is currently testing it for use in treating some head and neck cancers.

“The Calypso System allows us to immediately respond to prostate movement during radiation therapy, thereby minimizing the exposure to surrounding healthy tissue,” said Arthur Hung, M.D., assistant professor in the Department of Radiation Medicine and one of the Knight’s radiation oncologists, “Since August 2008, we have treated 250 prostate cancer patients with radiation in conjunction with the Calypso System. This combination has been effective at killing cancer cells, with fewer and less serious side effects compared to traditional external beam radiation.”

Renowned Researcher (continued from page 1)

the Cure Promise grant to translate her laboratory findings into better treatments. She will hold the Hildegard Lamfrom Chair in Basic Science. This chair was created as a result of a generous contribution from Gert Boyle and Tim and Mary Boyle to honor Gert Boyle’s sister, a renowned researcher who furthered cancer research.

Coussens joins OHSU from the University of California San Francisco (UCSF) where she is a professor in the Department of Pathology and a member of the UCSF Helen Diller Family Comprehensive Cancer Center. Coussens demonstrates a deep commitment to educating and mentoring the next generation of scientists. She is widely published, a sought-after public speaker, has received numerous awards, and is a deputy editor for the journal *Cancer Research*. Dr. Coussens has an international reputation for exceptional high-impact research; her pioneering studies have fueled a paradigm shift in understanding the role of the tumor microenvironment in regulating breast cancer development, and its response to therapy.

At OHSU, Dr. Coussens will expand our basic science and breast cancer research programs in ways that focus both on improving outcomes for cancer patients and on supporting a highly collaborative, multi-disciplinary scientific culture at OHSU. Her recruitment is a key element in meeting the Knight Cancer Institute’s strategic plan of delivering personalized cancer medicine to all patients.

“With the recruitments of Joe Gray and Lisa Coussens we will have the best breast cancer research team in the country,” said Brian Druker, M.D., director of the OHSU Knight Cancer Institute.

Five Ways You Can Make a Difference in the Fight against Cancer

The OHSU Knight Cancer Institute is committed to fundamentally altering what it means to have, treat and survive cancer. Philanthropy plays a vital role in these efforts – helping to launch new research studies, fund important outreach and patient care initiatives, and educate future cancer experts. Your support makes a difference in our ability to bring new hope to patients more quickly.

Below are five ways your gift will help:

- **Accelerate the pace of discovery.** Gifts to the Knight Cancer Institute Research Fund support the most promising research projects focused on finding better ways to treat, diagnose and prevent cancer. Support also may be directed to a specific area of cancer research. Opportunities are available to name faculty research awards and pilot projects.
- **Provide patients with important programs and services** to enhance their emotional health, quality of life and mental well-being as they undergo treatment for cancer. Gifts can fund art therapy and wellness programs, patient assistance funds, massage therapy and survivorship programs among others.
- **Educate the next generation of promising physician-scientists.** The Knight's Hematology/

Oncology Fellowship Program is a three-year training program designed to transform promising physician-scientists into tomorrow's outstanding hematologists and oncologists. OHSU has the only hematology/ oncology fellowship program in Oregon. Many of our trainees have gone on to build their careers at OHSU and many stay in Oregon to practice.

- **Endow faculty positions** to help us recruit and retain exceptional faculty. An endowment is a permanent fund that provides support in perpetuity. Endowed professorships and chairs give faculty the freedom and resources to invest in the kinds of research and activities that will really make a difference in the fight against cancer. Investment in top talent through an endowed position is one of the smartest moves we can make. **Currently one of our top priorities is to fund an endowed chair in urology.**
- **Support the highest and most urgent research, care and outreach priorities through gifts to the Knight's Changing the Face of Cancer Fund.**

To make a gift or learn more about how you can help, contact the OHSU Knight Cancer Institute Office of Development at 503 494-3607 or email supporttheknight@ohsu.edu.

\$5 Million Boost (continued from page 1)

to exceptional prospective chairs, providing one of the nation's largest and best-organized databases of melanoma tumor genetics and patient information. The registry's growth is expected to increase OHSU's participation in major national clinical trials of promising new melanoma drugs developed at OHSU and at other institutions. Access to this information enables oncologists to match more melanoma patients with drugs or clinical trials appropriate for their particular type of tumor.

"John Gray's partnership will enable the OHSU Knight Cancer Institute to deliver better care to Oregon melanoma patients while creating new standards of care for the disease that benefit patients everywhere," Druker said. "We are profoundly grateful for his vision and confidence."

Today's decisions can become tomorrow's discoveries

You have the power to make a difference in the future of health care.

With a legacy gift to benefit the OHSU Knight Cancer Institute, you can play a critical role by funding leading-edge research and discoveries that bring breakthrough treatments and new hope for all.

A gift to OHSU through your will, trust or retirement plan is an investment in knowledge, care and the vitality of our region.

The OHSU Foundation Gift Planning Team is ready to provide the information you need to help meet your financial goals – and leave a legacy of hope and health for the future.

503 228-1730 • 800 462-6608 • pginfo@ohsu.edu
www.giftplanning.ohsufoundation.org



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**Let's cure cancer.
Eliminate breast cancer.
Prevent prostate cancer.
Stop lung cancer.
End Cancer As We Know It.**

Hope begins here. At the OHSU Knight Cancer Institute, medical care providers and research teams are transforming how the world understands and fights cancer. Your investments help fuel the discoveries that bring new hope to cancer patients. Your gifts can change the world. Join us in our mission to defeat cancer. Support the OHSU Knight Cancer Institute today.

Please visit: www.ohsu.edu/cancer

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