

Circle of HOPE

Spring 2011

Knight Hires “Dream Team” Cancer Researcher

Internationally renowned breast cancer and genomic researcher Joe Gray, Ph.D., of the Lawrence Berkeley National Laboratory, recently joined the OHSU Knight Cancer Institute and the School of Medicine. Gray is known for, among other things, developing the FISH test (fluorescence in situ hybridization test that “maps” the genetic material in a person’s cells) that transformed how treatments are selected



for breast cancer patients.

“Bringing Joe Gray to the OHSU Knight Cancer Institute is like signing Michael Jordan to your team, back when Jordan was changing how basketball was played,” said Brian Druker, M.D., director of the Knight Cancer Institute, JELD-WEN Chair of Leukemia Research, and associate dean for oncology. “Joe is one of the top minds in cancer research and genetic testing and his approach is changing how quickly advances in the lab will be able to help patients.

He will build on the Knight’s momentum in working to better understand how cancer grows so that we can find therapies that target the specific cells driving the disease and ultimately save more lives.”

Advancing research into personalized cancer medicine with experts such as Gray is part of the Knight Cancer Institute’s strategic plan to leverage the \$100 million gift from Phil and Penny Knight.

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Scientists Discover Cell of Origin for Childhood Muscle Cancer

Researchers at OHSU’s Doernbecher Children’s Hospital have defined the cell of origin for a kind of cancer called sarcoma. In a study published in *Cancer Cell*, they report that childhood and adult sarcomas are linked in their biology, mutations and the cells from which these tumors first start. These findings may lead to non-chemotherapy medicines that can inhibit “molecular targets” such as growth factor receptors, thereby stopping or eradicating the disease.

Childhood muscle cancer, or rhabdomyosarcoma, is a condition that when spread throughout the body has a low survival rate — just 20 percent to 40 percent. In adults with soft tissue sarcomas, survival can be even lower. Now, for the first time, the researchers have shown from where these tumors arise and what drives them to grow and spread.

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**KNIGHT
CANCER INSTITUTE**
Oregon Health & Science University

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.

OHSU Knight Cancer Institute
3181 SW Sam Jackson Park Road, CR 145
Portland, OR 97239-3098
503 494-3607
www.ohsu.edu/cancer
supporttheknight@ohsu.edu

OHSU Knight Cancer Institute Council

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Director's Message

Changing the Face of Cancer

On May 10, 2011, the OHSU Knight Cancer Institute will celebrate the 10th anniversary of the FDA's approval of Gleevec – the world's first targeted cancer therapy that was developed right here at OHSU. Our discovery of Gleevec showed that targeted cancer therapies can work and launched the field of personalized cancer medicine.

It's impossible to overestimate Gleevec's impact in redefining how researchers and care providers around the world think about cancer. The Knight is committed to building upon this track record of success to make personalized cancer medicine a reality for all cancer patients. Achieving our vision means we must harness the power of cancer biology, using new tools and technologies to understand the specific molecular properties that drive each patient's cancer so we can match patients to the best available therapies based on their tumor type.

In this issue, I am pleased to share with you just a few of the ways the Knight is beginning to deliver on this vision of personalized cancer medicine, including the recent recruitment of internationally renowned breast cancer and genomics expert Joe Gray, Ph.D., and his research team; the establishment of the Knight's Diagnostic Laboratories, which will offer tests that create a detailed genetic map of a patient's tumor; and investments in research that are leading to new breakthroughs. In addition the Knight is collaborating with communities, such as Coos Bay, to offer screenings to detect cancer at its earliest, most treatable stages. We also are establishing new programs to enhance the well being and quality of life for patients as they live through and beyond cancer.

These advancements and discoveries are made possible, in large part, through the generosity and advocacy of our philanthropic partners. We are grateful for our growing circle of supporters who champion our work and help us bring new hope to cancer patients.

Sincerely,



Brian Druker, M.D.

Director, OHSU Knight Cancer Institute
JELD-WEN Chair for Leukemia Research
Associate Dean for Oncology

Celebrate the Knight on Tuesday, May 10

On Tuesday, May 10, at 2 p.m. the OHSU Knight Cancer Institute will celebrate the 10th anniversary of the FDA's approval of Gleevec, the world's first targeted cancer therapy. Knight Director Brian Druker, M.D., led the development of this revolutionary drug that has benefited patients around the world and changed how cancer research is conducted. We invite you to join us for this celebration, which will be held in the OHSU Center for Health & Healing on our SW Waterfront campus. For information, call 503 494-3607.

Dream Team (continued from page 1)

One of Dr. Gray's immediate goals will be to set up the Center for Spatial Systems Biomedicine. The center will use a combination of physics, biomedical engineering, chemistry and biology to study how cancer cells grow in three spatial dimensions as well as over time. Dr. Gray will hold the Gordon Moore Endowed Chair and serve as chair in the Department of Biomedical Engineering.

Gray, a physicist, is one of the most highly regarded scientists in the field of cancer research. He is known for breakthroughs that have changed clinical practices for cancer patients including aspects of flow cytometry, a technique for counting and examining microscopic

particles, such as cells and chromosomes. Because of his background Gray has been tapped to play leadership roles in the world's most important and ambitious cancer research projects including the Cancer Genome Atlas Project, a collaboration of scientists whose objective is to map the genomic characteristics of 20 different types of cancer. He also co-leads the Stand Up to Cancer Initiative's Breast Cancer Dream Team.

The Knight is proud to have Dr. Gray join our team and looks forward to the progress and discovery that his talents will help foster as we continue to ease the burden of cancer across the country and around the world.



Marilyn Owens, Ph.D., M.B.A.



Paul Spellman, Ph.D.

Key Recruits Will Advance Knight's Vision

Key research staff and others will also accompany Dr. Joe Gray from Lawrence Berkeley National Laboratory, including internationally regarded genome scientist Paul Spellman, Ph.D., of the Lawrence Berkeley National Laboratory. Spellman will conduct research at the Center for Spatial Systems Biomedicine and will serve as a faculty member in the Department of Molecular & Medical Genetics.

Spellman received his Ph.D. from Stanford University School of Medicine where he made major contributions to the development of microarray-based gene expression profiling. His

research focuses on the systematic understanding of the genetic causes of cancer and approaches for exploiting these genetic lesions to best treat individual patients.

The OHSU Knight Cancer Institute also recruited nationally known lab diagnostics professional Marilyn

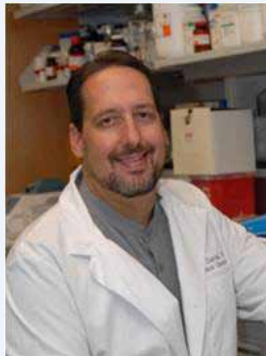
Owens, Ph.D., M.B.A., to serve as chief operating officer of the OHSU Knight Diagnostic Laboratories. The labs will offer tests that create a detailed genetic map of a patient's tumor – helping to match patients to the best available therapies based on their individual tumor type. The Knight Cancer Institute now offers clinical testing for mutations in cancer using the largest panels available anywhere in the world.

Owens has extensive experience in starting and managing successful diagnostic laboratories, leading clinical laboratories and clinical trial testing. Much of her career has focused on cancer diagnostics. She was senior vice president of operations for Caris Life Science and has held senior positions at IMPATH Inc., Genzyme Genetics and the Nichols Institute. She has consulted for many public and private testing laboratories.

“The field of personalized medicine is becoming heavily genetic and therefore the most successful testing operations will have a strong base in genetics,” Owens said. “The OHSU Knight Cancer Institute is positioned perfectly not only to compete in that space, but to add new testing rapidly and cost-effectively to benefit patients and physicians in the Pacific Northwest and across the U.S.”

Owens will work closely with Chris Corless, M.D., Ph.D., who was recently named chief medical director of the OHSU Knight Diagnostic Laboratories.

Radiation Biology: Advancing New Knowledge, Treatments



Wayne Zundel, Ph.D.

Wayne S. Zundel, Ph.D., has joined the OHSU Knight Cancer Institute as the inaugural director of the Division of Molecular Radiation and Cancer Biology within the Knight's Department of Radiation Medicine. Dr. Zundel was previously at the University of Louisville/Brown Cancer Center.

Nearly 60 percent of cancer patients receive radiation therapy at some point in their treatment and it is often

the main treatment for certain types of cancer such as head and neck, bladder, breast, prostate, and lung cancers, and Hodgkin's disease. Radiation therapy uses ionizing radiation to kill cancer cells and shrink tumors. Radiation works by breaking a piece of the DNA molecule inside the cancer cell, which keeps the cell from growing and dividing.

As a field of science radiation medicine generally has three sections that contribute to the development of new knowledge and treatments: clinical care, radiation physics and cancer biology.

The creation of a radiation and biology program at OHSU will boost the institute's ability to develop protocols that bring novel research breakthroughs made in the laboratory into the clinic to benefit patients. In addition Dr. Zundel is committed to training the next generation of physician-scientists, including Ph.D. students and medical residents.

Dr. Zundel's research examines the molecular mechanisms by which low oxygen mediates tumor initiation, progression, metastasis and therapeutic resistance in breast, lung and renal cancers. This research has revealed hundreds of previously unknown protein interactions that are altered during a cancer's progression and critical "nodes" within these pathways amenable to drug development. This work has led to the discovery of several novel drugs that show promising results in preliminary studies. In collaboration with OHSU oncologists, Dr. Zundel hopes to begin a clinical trial for a novel treatment for metastatic kidney cancer later this year.

A fundraising campaign led by the Radiation Medicine Advocacy Group helped provide resources to recruit Dr. Zundel and establish his laboratory in the OHSU Biomedical Research Building.

New Program Bridges Scientists, Clinicians, Students

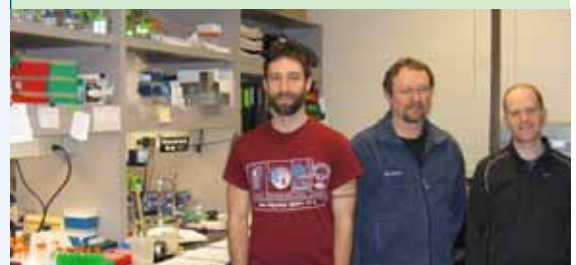
"Bench to bedside" is a term you hear a lot at the OHSU Knight Cancer Institute. It refers to the concept of moving discoveries made in the laboratory forward as quickly and safely as possible to benefit patients.

In an effort to get tomorrow's researchers and clinicians thinking in bench-to-bedside terms as early as possible, the Knight and the OHSU School of Medicine recently launched a Ph.D. program in cancer biology. Translational medicine – which pairs research investigators with clinicians – will be central to the new program, which emphasizes both course work and extensive laboratory training to prepare students for careers in basic and applied cancer research.

"What we'd really like to do by putting this program together is to force basic scientists and clinicians to interact and interact around students," says Matt Thayer, Ph.D., program director. "We have courses that are taught by both clinicians and basic science faculty. One of the problems we're trying to solve is that when researchers are in their labs, they don't often think about how their work is going to translate into a clinical application. They're often more focused on the fundamentally important aspects of biology. This program will force researchers to interact with the people who see patients and will enhance understanding of how the work fits in to the clinic and patient care."

The first students began the program in September. Between five and 10 students are expected to enroll each year.

Matt Thayer, Ph.D., (center) with students Nathan Donley (l) and Eric Stoffregen (r)





Gifts Fund Patient Programs

In addition to providing patients with exceptional treatment, Knight care providers are committed to enhancing the well-being and quality of life for people living with cancer.

Recently, generous gifts from patients, their families, business leaders and OHSU employees have enabled the Knight to expand its range of patient- and family-centered services. Popular programs include a Mindfulness Based Stress Reduction Class, Gentle Yoga for Women Healing from Cancer, massage therapy, art therapy and writing classes. Many of these activities, support groups and individual counseling are available for patients from the moment of diagnosis through all phases of treatment to survivorship.

A donation from Patty Reed Designs will benefit patient support services and breast cancer research.

“For me, these programs have been a refuge, a place to feel safe and comfortable in the midst of other cancer survivors,” says Deborah W., who recently received treatment. “I started last fall when I had finished treatment. I was experiencing extreme anxiety and depression commonly felt at treatment’s end. Yoga, the Mindfulness Based Stress Reduction class, lots of exercise, meds, reading a terrific book on survivorship, therapy, and time have helped me to feel better.”

The Knight recently launched a \$500,000 “Patient and Family Support Services” fundraising initiative to do even more to meet the needs of patients.

“We want to expand our survivorship program, offer opportunities for complementary therapies and explore how to better support patients who travel here for treatment and need temporary housing,” said Ann Raish, associate hospital administrator.

Gifts of all sizes will make a difference. To make a gift, contact Caitlin Wilson at 503 494-1891 or email supporttheknight@ohsu.edu.

New Center Provides Resources for Patients

Thanks to generous donations from Jim Fisher Volvo and the Fisher family, as well as Nathalie and Leo Joseph in honor of Vinod Sinnas, last year the OHSU Knight Cancer Institute and the American Cancer Society (ACS) celebrated the opening of the Patient Education Resource Center (PERC). The PERC is located on the seventh floor of the OHSU Center for Health and Healing at the South Waterfront campus.

The center provides patients and their families with easy access to free information and materials to help them navigate cancer diagnosis, treatment and recovery. ACS volunteers are available to help patients find information about specific types of cancer, survivorship and support services. Many brochures are available in Spanish. A bulletin board features information about community events,

lectures and activities. Patients can use the center’s two computer stations to find expanded information online. ACS patient navigator Sherry Willmschen will match patients who cannot make it to the center with volunteers who can go to them with needed information. The PERC also offers a selection of free hats, scarves, and wigs.

“The Resource Center has been invaluable since it opened and is an inviting area for conversations, using the computers and enjoying the rocking chair,” says Willmschen.

Left: NW Heart of Gold members donated a rocking chair and a gift for cancer research.

Right: Jim Fisher, Jane Graybeal and Ruth Fisher with Tom Beer, M.D., Katie Hennessy, L.C.S.W., and ACS’s Sherry Willmschen.





Susan G. Komen for the Cure grant recipients Lisa Domenico, M.B.A., Megan Troxell, M.D., Ph.D., and Xiangshu Sizo, Ph.D.

Komen Grants Fuel Knight Breast Cancer Research

Susan G. Komen for the Cure awarded three grants last year totaling more than \$1.5 million to the OHSU Knight Cancer Institute for projects aimed at improving treatment and early detection of breast cancer.

A Komen grant for \$559,996 awarded to Xiangshu Xiao, Ph.D., an assistant professor in OHSU's Program in Chemical Biology, Department of Physiology and Pharmacology, will fund work focused on developing novel chemical compounds to target breast cancer cells with an ultimate goal of providing better treatment options for breast cancer patients.

"These compounds could be the first step on the way to improved treatment options for breast cancer," Xiao said. "The Komen award will facilitate a productive collaboration between the Knight Cancer Institute and the OHSU Program in Chemical Biology that is focused on drug development."

Lisa J. Domenico, M.B.A., associate director, Regional Cancer Control Strategies, received \$500,000 for research that is developing tools to guide tactics to ensure women, especially those in at-risk populations, receive mammography screenings. The research will take findings from studies

for what has been shown to be effective in getting women to screenings and determine how those findings can be adapted for different types of settings such as urban and rural communities. Once the research is complete, the results will be shared with Komen for their community outreach activities.

"The goal is to maintain the fidelity of research done, but find ways to adapt it to specific situations," Domenico said. "It will help community groups determine what they should be doing to be more effective."

A grant for \$449,850 awarded to Megan Troxell, M.D., Ph.D., an associate professor in OHSU's Department of Pathology, will support work identifying genetic footprints in noncancerous breast tissue that may help doctors predict which breast abnormalities pose more danger of becoming cancerous than others.

"This project has the potential to impact future diagnosis and management of these poorly understood lesions," Troxell said. "I will also have the opportunity to benefit from the mentorship and experience of breast cancer researchers and scientists at OHSU and other institutions."

Volunteers Make a Difference

Each year, the OHSU Knight Cancer Institute benefits from volunteers who contribute hundreds of hours to raise philanthropic support to advance cancer research. These dedicated individuals host golf tournaments, ski competitions, scuba diving adventures, bike rides, rafting trips, auctions, and a myriad of other fund-raising events. Below are just a few examples (see page 11 for upcoming activities).

- Over the past 10 years, the Pumpkin Ridge Ladies Group has raised more than \$344,500 for breast cancer research through an annual “In the Pink” Golf Tournament.
- In 2010, Echelon Gran Fondo hosted its first Oregon fundraiser bike in Hood River that raised support for the Knight and LIVESTRONG. (Below is Team OHSU.)



- The Tom Denhart Memorial Golf Tournament (previously the Prostate Cancer Challenge) continues to raise vital support for prostate cancer research – more than \$300,000 to date – through Par for Life.
- The Sherie Hildreth Ovarian Cancer Foundation’s Annual Empowerment Day Walk and Run (below) in Gladstone, Oregon, has raised more than \$305,000 for ovarian cancer research since 2005.



- Oregon dive enthusiasts from Eugene gather at the Eugene Skin Divers Supply “Dive for the Cure” at Woahink Lake in Florence, Oregon for fun-filled activities competitions (right) such as the Octotoss and the Fin Race. In a little over three years they have raised more than \$90,000 in support of breast cancer research programs.



- The Oregon Cancer Ski Out (below) – now in its 23rd year – holds a unique fun-filled two-day ski/snowboard event at Mt. Hood Meadows that has benefitted the Knight since its earliest days. The event draws all ages and abilities who are rewarded based on consistency rather than speed. Volunteer celebrity and professional coaches help to coordinate teams and assist skiers with professional race tips and instructions.



- Two years ago, a group of women from Rock Creek Country Club, inspired by others and even more so by their own personal experiences with cancer, started the “Power of Pink” Golf Tournament. To make sure the men at their club get in on the fun, they hold a coed horseshoe golf tournament as well.
- The GIST Cancer Research Fund holds a variety of fundraiser walks and events nationwide each year that raise support for GIST cancer research. Each year, volunteers and patients from around the U.S. gather for an annual lunch with OHSU researchers. The GCRF has given nearly \$650,000 to the Knight for GIST cancer research.

All of us at the Knight Cancer Institute tip our hats to these fantastic volunteers and are deeply grateful for their ongoing generous support and steadfast dedication.

Muscle Cancer Discovery (continued from page 1)

“A commonly held belief is that cancers should be cut out, burned out or killed. There is a fourth option – to have cancer cells choose to become normal cells, in this case muscle cells,” said OHSU Knight Cancer Institute member Charles Keller, M.D., principal investigator of the study. Keller is also the leader of Pediatric Cancer Biology Program in the Papé Family Pediatric Research Institute at Doernbecher and a member of the Oregon Stem Cell Center at OHSU.

“At least for a subset of patients, possibly the ones with hereditary cancer, one approach suggested by our research might be to administer drugs that cause muscle cancers to convert into non-cancerous muscle fibers. This is a minority opinion, but one held by a small group of careful scientists throughout the United States and abroad,” said Keller.

The survival rate for childhood muscle cancer that has spread has remained unchanged for more than 40 years. It has reached the point that increasing the intensity of chemotherapy, radiation or surgery is no longer having any improved effect, Keller explained. He and colleagues have taken a novel approach in the laboratory as well as in new clinical trials, using non-chemotherapy medicines to inhibit “molecular targets” such as growth factor receptors.

Suman Malempati, M.D., assistant professor of pediatrics and director of the Oncology Developmental Therapeutics Program at Doernbecher, is the lead on a national clinical trial of one such growth factor inhibitor. This is the Children’s Oncology Group’s first trial incorporating a molecularly targeted drug into a clinical trial for childhood muscle cancer and was funded by CureSearch for Children’s Cancer, a nationwide network of hospitals, doctors and leading scientists that develop new treatments for childhood cancer.

This research was funded by the National Cancer Institute and the Scott Carter Foundation.



Ray Davis, Charles Keller, M.D., Thomas Russell, M.D., Kelly Johnson

Umpqua Bank Awards Up-and-Coming Scientist

Thomas Russell, M.D., a second-year fellow in pediatric hematology/oncology, is the 2011 recipient of the Umpqua Bank Innovation Award for Pediatric Cancer Research.

In 2010, Umpqua Bank pledged \$100,000 to make one \$10,000 annual award for the next 10 years to promising cancer researchers at the OHSU Knight Cancer Institute and Doernbecher Children’s Hospital who are in the early stages of their career. The purpose of this award is to cultivate outstanding pediatric cancer research that has the greatest potential to yield improvements in pediatric cancer therapy, diagnosis or prevention. Each summer, Knight and Doernbecher leadership selects the award recipient.

Dr. Russell received his medical degree from the University of New Mexico (UNM) in 2006 and completed his pediatric residency at the UNM Hospital (UNMH) prior to starting his Pediatric Hematology/Oncology Fellowship at OHSU. Dr. Russell’s interests include hematopoietic stem cell transplantation and graft versus host disease. He joined Dr. Peter Kurre’s research lab last fall and is developing new methods of targeted cellular therapy.

Dr. Charles Keller, leader of the Pediatric Cancer Biology Program, and Dr. Russell, along with Knight director Brian Druker, M.D., recently met Umpqua Bank President & CEO Ray Davis and Executive Vice President Kelly Johnson to explain some of their research into pediatric cancer.

Dr. Russell expressed his deep gratitude for Umpqua Bank’s gift, “You’re not just helping me learn to be a good scientist and further the goal of OHSU, you’re helping foster an understanding of cancer and cancer biology in a way that will help us help children face cancer in a way that they are not able to do now.”

Research Updates

New Study Looks at Exercise Benefits

Knight researchers are studying not only whether men with prostate cancer see the benefits of exercise (which could reduce side effects from their cancer treatment), but also whether spouses who exercise with their husbands or partners benefit from the couple exercising together.

“Previous exercise interventions aimed at cancer survivors have only targeted the patient and have neglected to include the spouse, who could also benefit from physical activity,” said Kerri Winters-Stone, Ph.D., F.A.C.S.M., principal investigator and an associate professor in the OHSU School of Nursing.

“We think that exercise can be more beneficial to the health of couples if they exercise together. To our knowledge, this is the first study that fosters teamwork between the cancer patient and spouse by having them exercise as training partners. By training as a team, we expect that not only will each person become stronger, but the team will, too.”

“I am very appreciative of what is being done for me and my wife,” says participant Ed Ritt. “The study is good in that it’s picked me up and got me going. The key is exercising. No matter how you get to it, you’ve got to do it.”

Study Shows Targeted Radiation as Effective, More Convenient for Breast Cancer

For select women with breast cancer, a one-time, targeted dose of radiation given at the time of surgery to remove a breast tumor is as effective as standard multi-week, post-operative radiation therapy, according to the results of a 10-year, international study. The results could mean significant changes with regard to how breast cancer is treated.

The Knight is the only medical facility in the Pacific Northwest to offer its breast cancer patients targeted radiation therapy using the Intrabeam® system.

“This study demonstrates that for certain women, a single treatment with Intrabeam® is equivalent to weeks of treatment with standard radiation,” said Carol Marquez, M.D., associate professor of radiation oncology in the OHSU School of Medicine. “This efficient, targeted therapy represents an important change in how radiation is given and will change the impact breast cancer has on many women’s lives.”

“This is groundbreaking news for women with early-stage breast cancer and for the doctors who treat them,” said OHSU Breast Cancer Clinic Director Arpana Naik, M.D., an

assistant professor of surgical oncology in the OHSU School of Medicine. “Intrabeam® not only offers patients a more precise, less-toxic therapy, but it also saves time. Women with early-stage breast cancer can get back to their lives more quickly and doctors have one more tool to help patients heal.”

Knight Prostate Team Leads Discoveries

This is one of the most exciting times in prostate cancer drug discovery with more promising treatments than ever before on the horizon, says Knight Deputy Director Tom Beer, M.D., director of the Prostate Cancer program and Grover C. Bagby Endowed Chair for Prostate Cancer Research. Knight prostate cancer researchers have played an important role in these advancements.

Last year the FDA approved two new prostate cancer drugs – Provenge (Sipuleucel-T) and Cabazitaxel – to improve survival in men with advanced prostate cancer. Previously only one other drug had been shown to extend survival after hormone therapy fails.

Provenge is the first specific immunotherapy to target prostate cancer and proves that the immune system can be important in fighting prostate cancer. Provenge is intended for the treatment of men with metastatic prostate cancer that is resistant to standard hormone treatment, and who have minimal or no symptoms of the disease. For the past eight years the Knight has been actively engaged in clinical trials to test Provenge and is among the first sites in the nation to treat advanced prostate cancer patients with Provenge since its FDA-approval.

The Knight is currently leading research efforts for three new drugs – MDV-3100, Abiraterone, and Ipilimumab – each of which is in clinical trials treating patients with metastatic cancer that is resistant to hormonal therapy, as well as in patients who have shown resistance to both hormonal therapy and chemotherapy combined.

Knight Researchers Isolate Important Breast Cancer Gene

Knight researchers found that the GRB7 gene drives an aggressive form of breast cancer and acts independently of the HER-2 gene, which is known to be a stimulator of breast cancer growth. Isolating the role of this gene could ultimately help fine-tune a patient’s treatment and enable physicians to provide a more accurate prognosis.

(continued on page 10)



*Malia Wasson, Peter Kurre, M.D.,
Amy Skinner, Ph.D., Brian Druker, M.D.*

U.S. Bank Honors Promising Researcher

Amy Skinner, Ph.D., is the recipient of the 2010-11 U.S. Bank Cancer Research Development Award. This is the second of five \$10,000 awards U.S. Bank pledged to support promising researchers in the early stages of their careers. The purpose of the award is to cultivate outstanding cancer research by assisting in the generation of preliminary data for peer-reviewed national funding, career development proposals, or similar.

Dr. Skinner will use the award to support her project, "Fused hematopoietic cells: A novel platform to study genomic instability and leukemogenesis." At a recent lunch on campus, Dr. Skinner presented an overview of her project to U.S. Bank President Malia Wasson and Vice President and Manager of Community Relations David Wynde. Knight Director Brian Druker, M.D., and Peter Kurre, M.D., director of the Bone Marrow Failure Clinic, helped explain how Dr. Skinner's work stands out.

In very simple terms, Dr. Skinner's project aims to understand whether cancer causes chromosomal changes in the body, or whether those changes are instead harbingers of cancer. Dr. Skinner received her Ph.D. from Oregon State University/ OHSU in 2006 and joined the laboratory of Dr. Peter Kurre in July 2006.

Wasson told the group that U.S. Bank is especially proud of this award, and of the opportunity to see its benefits in action.

"We love the idea of providing support in the early phase of a study, which we know is hard to fund," Wasson said. "We're excited because these studies could go on to have an exponentially larger impact and we could live to see the day when a new treatment or a new drug changes the lives of so many people. This is unlike any other philanthropic investment we make."

Research Updates (continued from page 9)

The study showed that levels of GRB7 are important on their own as a marker for aggressive breast cancer. Previously it was understood that patients whose breast cancer tumors tested positive for high levels of the HER-2 protein, tended to have a more aggressive form of the disease than patients whose tumors did not have elevated levels of this protein. However, Knight researchers found that the protein driving this aggressive form of the disease is GRB7 rather than HER-2 on its own.

"Our work shows GRB7 protein levels are an important and independent factor in determining a prognosis for breast cancer," said Knight researcher Shih-Wen Luoh, M.D., Ph.D., senior author of the paper.

"Our work was only made possible with the availability of a breast tumor repository that OHSU and the Knight began collecting about 20 years ago," said study co-investigator Ed Keenan, Ph.D.

Knight Director Receives Prestigious Awards

The National Institutes of Health has given its first MERIT (Method to Extend Research in Time) award of 2011 to Knight Director Brian Druker, M.D., for his research into chronic myeloid leukemia. Initiated in 1987, the MERIT Award program extends funding to experienced researchers who have superior grants and who have demonstrated a long-term commitment to and success in research.

Dr. Druker, along with Charles L. Sawyers, M.D., of Memorial Sloan-Kettering, also received the American Society for Clinical Investigation's Stanley J. Korsmeyer Award, which recognizes physician-scientists for advancing knowledge in their field and mentoring future generations of life-science researchers. The award celebrates their work, collaboratively and as individuals, in revolutionizing the treatment of cancer through rigorous molecular science.

Researcher Tapped for International Program

Elie Traer, M.D., Ph.D., a hematology/oncology fellow in Dr. Druker's lab, will participate with 19 other early-career scientists in the 2011 American Society for Hematology (ASH) Translational Research Training program. This combined program of ASH and the European Hematology Association (EHA) was developed for early career scientists to learn more about the fundamentals of translational research, develop grant-writing skills, and improve the quality of their research proposals through direct input from peers and faculty.

Get Involved

Show your support of cancer research by participating in an event below. While not sponsored by the Knight, we are fortunate to benefit from net proceeds.

Thursday, May 26: The Mahina Young Charitable Fund's 3rd Annual Golf Tournament for the Awareness of Prostate Cancer at the Langdon Farms Golf Club will raise funds for prostate cancer research and community education. (www.mahinayoung.org)

Saturday, June 25: Second Annual "Splash for Pink" in Maupin, Oregon, includes raft trips, a BBQ lunch and live music on the lawn at Imperial River Company to raise funds for breast cancer research. (www.splashforpink.com)

Saturday, Aug. 6: The Sherie Hildreth Ovarian Cancer Foundation's 7th Annual Empowerment Day includes a 5K/10K walk and run, a one-mile family walk, a pancake breakfast, and an gynecologic cancer survivor breakfast. (www.shocfoundation.org)

Saturday, Sept. 24: The 4th Annual "Dive for a Cure" at Woahink Lake in Florence, Oregon, includes an "Octotoss" and "Fin Race." (www.diveforacure.org)

Saturday, Sept. 24: The second Echelon Gran Fondo in Hood River, Oregon, is one of a series of European-style mass participation cycling rides for casual riders, weekend warriors, amateur racers and professional cyclists. (www.echelongranfondo.org)

Screening in Coos Bay Attracts Hundreds

On Saturday, Jan. 29, the OHSU Knight Cancer Institute collaborated with the Bay Area Hospital in Coos Bay, Oregon, to host a head and neck screening day to check for visible signs of cancer on the face/neck and inside the mouth. By noon more than 400 people had signed up for this free screening and by the end of the day another 180 people were on the waiting list for future screenings.

Thirteen doctors and dentists from OHSU and the Coos Bay community volunteered to conduct the screenings including OHSU's Neil Gross, M.D., and Babak Givi, M.D. Carl Jenson, M.D., a radiation oncologist at Bay Area Hospital who helped coordinate this event, said they felt that they had made a difference. More than 90 people screened received recommendations for further follow-up.

"We found a few things that we're very worried about, but the point of all this was to find cancers very early, and I think we found a number of things that, at least left unattended, would have become malignant with enough time. Over the next several months, those things can be taken care of," said Dr. Jenson.

"It's important for us to work with folks in their own communities, so they can get care close to home if they need it," says Katie Hennis, Knight community relations manager.



2010 Knight Cancer Institute Hood to Coast team wearing new AYA t-shirts

T-shirts Raise Funds for AYA Oncology

The OHSU Knight Cancer Institute Adolescent & Young Adult Oncology Program is one of the few dedicated patient care and research programs in the country working to address the needs of cancer survivors ages 15-39. Last year to raise awareness and funds for this program, the Adolescent and Young Adult (AYA) External Advisory Committee called for t-shirt design submissions in a contest launched during National Young Adult Cancer Awareness Week.

Emily Saunders and Carrie Tillotson submitted the winning designs. Emily is a young adult cancer survivor and member of the Young Adult Support Group. Now working towards a master's degree at the University of Oregon, Emily says she is grateful for the support she received during her treatment.

Carrie Tillotson works as a research associate for the Oregon Clinical & Translational Research Institute Biostatistics and Design Program. Carrie's design is featured on the back of the shirt and shows a climber scaling the words "cancer doesn't care how old you are."

Today's decisions can become tomorrow's discoveries

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

With a generous legacy gift to benefit the OHSU Knight Cancer Institute, you can play a critical role by funding leading-edge research and discovery that brings 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 or pginfo@ohsu.edu
www.giftplanning.ohsufoundation.org



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When Coquille native Christopher Amling, M.D., returned to Oregon to lead OHSU's Division of Urology he did so with the vision of making our program one of the 10 best in the country. Given that urologic malignancies (prostate, kidney, bladder and testicular) comprise 40% of all cancers in men, we're glad he's here. Dr. Amling and his colleagues are transforming cancer care through pioneering advancements in robotic surgery, groundbreaking research and education of future urologists.

Funding a \$2.5 million endowment to help Dr. Amling build his dream program at OHSU is a top priority of the OHSU Knight Cancer Institute. Please help us achieve this vision by making a gift today.

Invest in OHSU. Create hope. Change the world.

To learn more call 503 494-3607 or email supporttheknight@ohsu.edu.



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