

UW-ONCOPLEX, SECOND TO NONE IN GENETIC PROFILING OF CANCER CELLS



One of the biggest breakthroughs of the year at Seattle Cancer Care Alliance (SCCA) is the launch of a long-wished-for diagnostic tool called UW-OncoPlex. Driven by high powered, “next generation” genetic sequencing, UW-OncoPlex allows doctors to predict which of the available therapies will be most effective for an individual patient’s cancer.

Developed by Colin Pritchard, MD, PhD and his team in the Clinical Molecular Genetics Laboratory at UW Medicine, UW-OncoPlex analyzes 194 different genes for “driver mutations” that are associated with specific types of cancer.

The diagnostic power of UW-OncoPlex stems from the fact that it is evaluating the genetics of the patient’s tumor cells – not healthy tissue. A mutation that appears on the UW-OncoPlex panel points to a known sub-type of the disease, whether it’s melanoma, lung cancer, sarcoma, gastrointestinal/colon cancer, or leukemia. Armed with this information, doctors can choose the therapy that’s known to work best to destroy or control the patient’s tumor type.

For example, in lung cancer, UW-OncoPlex can identify mutations in three different tumor genes. Each of these lung cancer variants has a U.S. Food and Drug Administration-approved therapy that promotes tumor shrinkage two to three times better than chemotherapy. The patient benefit is significant, says Renato Martins, MD, MPH, medical director of Thoracic/Head and Neck Oncology at SCCA: “Patient responses can last between nine and 14 months, which used to be the time lung cancer patients survived – period. In some cases, the disease has remained under control for much longer than 14 months – a huge improvement in a patient’s expected outcome.”

Robin Jones, MD, MRCP is excited about the potential of UW-OncoPlex to drive innovation in his area of specialization: sarcoma. “Sarcoma actually consists of 60 to 70 different histological subtypes,” he explains. “Historically, these have been treated systemically with exactly the same therapy. Yet it’s clear they are completely different diseases.” He describes the success in identifying the driver mutation for gastrointestinal stromal tumor (GIST) as “the paradigm for targeted treatment in solid tumors.”

Says Pritchard, “I believe that, within 15 years, we’ll develop highly effective combination treatments that can turn some of the most lethal cancers into chronic diseases. I’m quite optimistic about that.”

Read more about UW-OncoPlex at www.seattlecca.org/diseases/oncoplexoverview.cfm.

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Fred Hutchinson Cancer Research Center
UW Medicine
Seattle Children’s

SKAGIT VALLEY HOSPITAL REGIONAL CANCER CARE CENTER

Mehrdad Jafari, MD serves as medical director of medical oncology at the Skagit Valley Hospital Regional Cancer Care Center. Jafari joined the center in 2008 and appreciates the multidisciplinary approach and the affiliation with Seattle Cancer Care Alliance as having significant benefits to patient care.



“We have a high standard of care and keep up with the progress that is being made in the field on a continuous basis,” Jafari says. “Cancer care has become very complex and we need to assure our patients that they can get

all of these services when they come to our center and be cared for right here in our community.”

Jafari served as an assistant professor of medicine in hematology-oncology at the University of Oklahoma Health Sciences Center, where he completed his residency and fellowship. He received his medical degree from the School of Medicine, Würzburg, Germany, and his PhD in molecular biology from Julius Maximilian University, Würzburg. Jafari studied gastrointestinal cancers at MD Anderson Cancer Center at the University of Texas. He is board certified in Medical Oncology and Internal Medicine.

BOZEMAN DEACONESS CANCER CENTER LAUNCHES
CANCER CLINICAL TRIALS AWARENESS MONTH

February marked Montana’s first observance of Cancer Clinical Trials Awareness Month. The research subcommittee of the Montana Cancer Control Coalition developed a clinical trials awareness program for use at cancer centers throughout the state of Montana. Spencer Green, business operations manager, and Elena Robison, clinical research coordinator, from Bozeman Deaconess Cancer Center are members of the research subcommittee and participated in the development of the awareness campaign, which included:

- » Clinical trial buttons for physicians, nurses, and clinic staff
- » Brochures about clinical trials for inclusion in new cancer patient packets
- » Posters for display in cancer centers
- » Public service announcements (15- and 30-second radio spots)
- » Suggestions for other awareness events (presentations at tumor boards, articles for newsletters, interviews for local TV programs, Facebook postings, etc.).

Bozeman Deaconess Cancer Center and the Montana Cancer Control Coalition are promoting improvements in cancer treatment through participation in clinical trials. Says Green,

“Clinical trials are another set of tools we use in the fight against cancer. Without trials, we don’t come up with new treatments or get closer to cures.”

Robison reports that patients and clinic staff are more interested in clinical trials now. Some patients are now talking about clinical trials in support groups.



The number of cancer patients who participate in cancer clinical trials at Bozeman Deaconess Cancer Center is growing each year. One patient joined a trial for chronic lymphocytic leukemia and drove 100 miles to Bozeman for five consecutive days of treatment once a month for six months. He agreed to be interviewed for the clinical trials awareness program and said, “I came in with an open mind, with the attitude that it might not help me, but if it helps somebody else, that’s great. That’s the way I was raised, to help your fellow man.” His oncologist,

Jack Hensold, MD reports that the patient is now in complete remission.

We are hoping that Green and Robison will help the Network prepare and offer a clinical trials awareness program to all Network Members as part of our Culture of Research Program.



Robin Jones, MD, MRCP
Seattle Cancer Care Alliance

Soft tissue sarcomas may be rare, but there's a great need for improving available treatment. That's why Robin Jones, MD, MRCP chose this area of cancer care as his specialty.

"I saw a great opportunity to make a difference for patients with these rare diseases, and SCCA is a great place to work toward improving existing treatments and developing new ones," he says.

Jones is an associate professor in the Division of Medical Oncology at the University of Washington School of Medicine. He divides his time between seeing patients at the Sarcoma Clinic at SCCA and conducting research at Fred Hutchinson Cancer Research Center.

Jones' research investigates sarcomas in-depth and includes all subtypes of the disease. The hope is to eventually develop drugs designed to treat the underlying molecular drivers of these diseases.

"I'm excited to see the scope of our treatment expanding and to see the improvements in results," Jones says. "But it happens gradually since these are really unique and rare diseases. We are using our growing understanding of the biology of these diseases to have a more targeted approach to treatment... and we are starting to see success," he says.

SCCA PROTON THERAPY, A PROCURE CENTER NOW OPEN



Proton therapy is a next-generation radiation treatment that precisely targets tumors, minimizing radiation to healthy tissue and improving the lives of patients with cancer. SCCA, in partnership with ProCure, brought this progressive technology to the Pacific Northwest to support SCCA's mission of providing the best available treatment for cancer patients.

Widely recognized for its benefits, proton therapy is used to treat a broad range of cancers, including many pediatric cancers, adult sarcomas, and tumors of the brain, central nervous system, gastrointestinal tract, head and neck, lung, and prostate. Proton therapy is most commonly recommended for treating anatomically complex tumors where avoiding damage to healthy adjoining tissue—particularly critical organs and structures—is imperative.

It is an emerging technology, and there is much that remains unclear about the cost-benefit profile of proton therapy relative to other radiation therapies. Our doctors view proton therapy as a tremendous opportunity to take the lead in active clinical investigations that will help define its role in future cancer treatment.

SCCA's is to provide patients with access to this technology in cases where its efficacy over standard X-ray treatment is clinically compelling. Ongoing studies conducted by our doctors will help chart a clear course for the use of proton radiation in achieving the best possible outcomes in treating cancer.

When proton therapy is recommended, you can be confident knowing your patient will receive excellent care at SCCA Proton Therapy, *A ProCure Center*. Our physicians are happy to talk with you at any time. They will provide you with updates throughout the treatment process along with a concise summary at the completion of treatment.

The new proton center is located on the campus of UW Medicine's Northwest Hospital & Medical Center. For more information on proton therapy treatment, go to www.sccaprotontherapy.com. To determine whether your patient is a good candidate for proton therapy, or to refer a patient, call (877) 897-7628 or email intake@sea.procure.com.

CLINICAL TRIAL OPPORTUNITIES

NEWLY OPENED CLINICAL TRIALS

- » **Nordion TS-102:** A Phase III Clinical Trial Evaluating TheraSphere® in Patients with Metastatic Colorectal Carcinoma of the Liver Who Have Failed First-Line Chemotherapy
www.seattlecca.org/clinical-trials/coloncancer-NCT01483027.cfm
- » **FHCRC 7755:** A Phase II Study of Weekly ABRAXANE® (nab-paclitaxel) for Patients with Advanced NSCLC with EGFR Mutations Following Front-Line Therapy with EGFR Tyrosine Kinase Inhibitors
www.seattlecca.org/clinical-trials/lungcancer-NCT01620190.cfm

ON-GOING CLINICAL TRIALS

BRAIN

- » **ECOG E3F05:** Phase III Study of Radiation Therapy with or without Temozolomide for Symptomatic or Progressive Low-Grade Gliomas
www.seattlecca.org/clinical-trials/braincancer-NCT00978458.cfm
- » **RTOG 0834/EORTC 26053_22054:** Phase III Trial on Concurrent and Adjuvant Temozolomide Chemotherapy in Non-1p/19q Deleted Anaplastic Glioma. The CATNON Intergroup Trial
- » **RTOG 0534:** A Phase III Trial of Short Term Androgen Deprivation with Pelvic Lymph Node or Prostate Bed-Only Radiotherapy (SSPORT) in Prostate Cancer Patients with a Rising PSA After Radical Prostatectomy
www.seattlecca.org/clinical-trials/prostatecancer-NCT00567580.cfm
- » **Hoosier Oncology Group GU09-145:** Phase I/II Study of BNC105P in Combination with Everolimus or Following Everolimus for Progressive Metastatic Clear Cell Renal Cell Carcinoma Following Prior Tyrosine Kinase Inhibitors
www.seattlecca.org/clinical-trials/kidneycancer-NCT01034631.cfm

BREAST

- » **RTOG 1005:** A Phase III Trial of Accelerated Whole Breast Irradiation with Hypofractionation Plus Concurrent Boost Versus Standard Whole Breast Irradiation Plus Sequential Boost for Early-Stage Breast Cancer
www.seattlecca.org/clinical-trials/breastcancer-NCT01349322.cfm
- » **FHCRC 6628:** Combined Targeted Therapies for Triple Negative Advanced Breast Cancer—A Phase II Trial of Weekly Nab-Paclitaxel and Bevacizumab Followed by Maintenance Targeted Therapy with Bevacizumab and Erlotinib
www.seattlecca.org/clinical-trials/breastcancer-NCT00733408.cfm

GENTOURINARY

- » **RTOG 0926:** A Phase II Protocol for Patients with Stage T1 Bladder Cancer to Evaluate Selective Bladder Preserving Treatment by Radiation Therapy Concurrent with Radiosensitizing Chemotherapy Following a Thorough Transurethral Surgical Re-Staging
www.seattlecca.org/clinical-trials/bladder-cancer-NCT00981656.cfm
- » **FHCRC 7048:** Phase II Trial of Radiation with Androgen Deprivation (AbiRAD): Abiraterone Acetate, Prednisone, and LHRH Agonist Prior to and Concurrent with Radiation Therapy
www.seattlecca.org/clinical-trials/prostate-7048.cfm

HEAD & NECK

- » **RTOG 0920:** A Phase III Study of Postoperative Radiation Therapy (IMRT) +/- Cetuximab for Locally Advanced Resected Head and Neck Cancer

OVARIAN

- » **Endocyte EC-FV-06:** A Randomized Double-Blind Phase III Trial Comparing EC145 and Pegylated Liposomal Doxorubicin (Pld/Doxil®/Caelyx®) in Combination Versus PLD in Subjects with Platinum-Resistant Ovarian Cancer
www.seattlecca.org/clinical-trials/gynecancer-NCT01170650.cfm
- » **Esperance ACT 12601:** A Novel LHRH Receptor-Targeted, Membrane-Disrupting Peptide, Plus Paclitaxel Versus Paclitaxel Alone for Refractory or Recurrent Ovarian Cancer: A Phase II Randomized, Multicenter Trial
www.seattlecca.org/clinical-trials/ovarian-cancer-NCT01485848.cfm

In Remembrance of E. Donnell Thomas

1920 - 2012

Written by Fred Appelbaum, MD

Born in Texas in 1920, Don Thomas followed his general practitioner father into the field of medicine. He attended Harvard Medical School, where he developed an interest in hematology.

In the early 1950s, he became aware of the experiments of Leon Jacobsen and others, showing that marrow of normal mice could be destroyed by radiation and replaced by marrow from a normal donor. With that knowledge, Don became convinced of the clinical potential of marrow transplantation.

In 1955, he moved to the Mary Imogene Bassett Hospital in Cooperstown, New York, to join Joseph Ferrebee. There, in 1956, they performed the first human marrow transplants. Although some success was seen in identical twins, transplants between siblings uniformly failed because of graft rejection or graft-versus-host disease. Don turned to a canine model of transplantation, and over the next decade, first in Cooperstown and then in Seattle starting in 1963, he and his colleagues figured out the basic requirements for transplant compatibility, for a safe and effective preparative regimen, and for the use of post-transplant methotrexate to prevent lethal graft-versus-host disease.

With this foundation, in the late 1960s, he returned to the clinical challenge of human transplantation. The early years of clinical transplantation were particularly challenging; the patients were extremely ill, support systems were rudimentary, and the medical community was highly skeptical. However, Don was able to show that allogeneic marrow transplantation could, indeed, cure otherwise incurable patients, and that set the stage for all that has followed.

Don was extremely bright but always anxious to learn more. If you were working in an area he was unfamiliar with, he'd stop by and modestly ask for a lesson. He was soft spoken

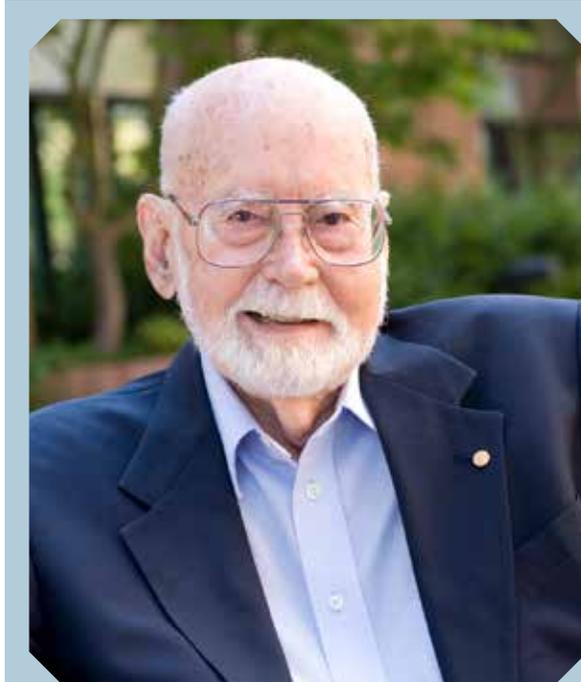
and would let others lead most discussions, but he projected a remarkable aura of authority. When he did speak, everyone would stop and listen. He could be a stern critic. You didn't miss a due date or send him a poorly prepared draft manuscript or grant proposal. At faculty meetings, if someone dared to

make a joke, no one would laugh unless Don did. Then everyone would laugh until Don stopped, and then everyone would stop. At heart, though, he was modest and extremely generous, deflecting praise to his co-workers to whom he was very loyal, and we, of course, felt blessed to be able to return that loyalty.

There are many aspects of Don's approach that are extraordinary, but two deserve specific mention. First, he truly believed in the concept of marrow transplantation and was willing to bet the farm on it. While other cancer centers were concerned about becoming "comprehensive," Don focused almost the entire clinical efforts of the Fred Hutchinson Cancer Research Center on marrow transplantation. A second aspect of Don's approach was his appreciation that if marrow transplantation was going to work, it would take a team to do it, including nurses, lab techs, administrators, and medical subspecialists focused on the entire spectrum of complications his patients might develop. When Don learned that he had been awarded the Nobel Prize, one of the first places he went was to the transplant unit's nursing station to thank the nurses, who he called his secret weapon.

While Don was extremely hardworking, he also appreciated that there was life outside of work. When

faculty candidates came to visit Seattle, Don would jokingly ask them if they were skiers or fisherman because he wanted to balance the two to ensure that enough people would be at work both winter and summer. He and his wife Dottie were avid hunters and fisherman, and every meal we shared at Don's house came courtesy of their rod or gun. They particularly enjoyed having new faculty over at their house, and it never got old watching Don take a new recruit over to a picture of Dottie holding a shotgun in one hand and several dead ducks in the other. He would advise the recruit, with only a slight smile, that it would be best if they got their papers in to Dottie on time.



- Performed the first human bone marrow transplant in 1956 and pioneered the use of hematopoietic stem cell transplantation to treat malignant and non-malignant disorders.
- Served as the first director of medical oncology at Fred Hutchinson Cancer Research Center starting in 1974 and led its development into a premier center for transplant research and clinical care.
- Awarded the Nobel Prize in Medicine in 1990.

CONFERENCES

Personalized Cancer Prevention for Women with Hereditary Risk

April 5, 2015

Learn about breast and ovarian cancer risk reduction options and screening, surgical and pathological techniques for prophylactic oophorectomy, chemoprevention for breast cancer risk reduction, and prophylactic mastectomy options.

Location: Group Health Capitol Hill Campus, Seattle

3rd Annual Pacific Northwest Head & Neck Symposium

April 19, 2015

This symposium will bring up-to-date scientific information to clinicians involved in the care of patients with head and neck skin cancer. A multidisciplinary panel of experts will discuss the most recent clinical innovations in their respective fields.

Location: Swedish Education and Conference Center, Seattle

Nurse Shadow Visits

May 24, June 28, and August 23, 2015

We offer one-day nurse shadow visits for Network Member nurses wanting to learn about and experience the various clinics at SCCA. There will be opportunities to ask questions and receive expert advice from highly trained nurses. The day includes a visit to apheresis, general oncology, infusion services, procedure suite, radiation oncology, and transplant. Lunch will be provided.

Benefits of these visits:

- Gain new information about leading-edge cancer care
- Receive excellent observational experience
- Interact with other RNs outside of your own institution for another perspective

For more information or to register for any of the events listed here, contact the SCCA Network Office at (206) 288-1066 or sccanet@seattlecca.org.

NETWORK PHYSICIAN ACCESS POINTS

REFERRALS TO SCCA

1. Complete and fax the "Confidential Patient Referral Form" supplied to your Network Member institution, along with patient demographics and relevant records to (206) 288-1025. For additional copies of the required form, contact your cancer center director or the SCCA Network Office.
2. Call the toll-free SCCA Network Referral Line: (866) 484-1283 and identify yourself as an SCCA Network physician with any questions or concerns about your referral.

MEDICAL RECORDS

U-LINK

<https://mindscape.mcis.washington.edu>

U-link offers secure, web-based access to records for patients seen at SCCA or UW Medical Center. Physician notes are available for viewing within 48 hours of dictation. Training sessions on the system can be scheduled through the UW physician liaison at (206) 598-5693 or UWMCPL@u.washington.edu.

CLINICAL QUESTIONS

MEDCON

(800) 326-5300 or medcon@washington.edu

MEDCON offers physicians a resource to get in touch with the attending physician at SCCA, UW Medical Center, or Fred Hutchinson Cancer Research Center for assistance with clinical questions. This service is available 24 hours a day, seven days a week.

SCCA NETWORK OFFICE

The following are SCCA direct lines that may at times route you to voicemail. If you receive voicemail, please leave a message.

Clinical Research — (888) 201-0060

Referral Issues — Autumn Mumaw (206) 598-5897

SCCA Network (services, questions, or concerns) — (206) 288-1066

