# Across the Consortium – March 2015

## March 25, 2015:

Big Ten cancer centers continue to make advances in cancer research and treatment. In this edition of *Across the Consortium*, we highlight research from our member institutions in colorectal, prostate, brain, ovarian, and other cancers; we celebrate the generosity of the Hirair and Anna Hovnanian Foundation, whose gift to the University of Michigan Comprehensive Cancer Center will help researchers establish the world's most comprehensive genomic analysis of adrenal cancers; we see once again what is possible when state legislatures get behind cancer research; and we applaud our member institutions and investigators who have achieved recent accolades and honors, of which only a few are mentioned in this article.

# **University of Illinois Cancer Center**

Researchers know that obesity is linked to an increased risk of colorectal cancer. But they are less clear about why. Figuring out the why may be useful in creating strategies to help people who are obese lower their risk for getting colorectal cancer. There are a number of existing hypotheses.

One newer theory has to do with changes in the way the body processes iron when a person is obese, says Lisa Tussing-Humphreys, PhD, RD, an American Cancer Society-funded researcher at the University of Illinois at Chicago. Read more.

# Indiana University Melvin and Bren Simon Cancer Center

An accurate system for tracking the quality of colonoscopies and determining the appropriate intervals between these procedures could contribute to both better health outcomes and lower costs. Clinician-researchers from the Regenstrief Institute have created and tested such a system in the nation's first multiple institution colonoscopy quality measurement study utilizing natural language processing and report that it is as

accurate but less expensive than human review.

Natural language processing, a linguistic technique using sophisticated software to extract meaning from written language, allows a computer to rapidly "read" and "understand" the free text of reports prepared by the gastroenterologists who perform colonoscopies and the free text reports of pathologists who analyze the composition of growths removed from the colon. Read more.

## University of Iowa Holden Comprehensive Cancer Center

Men undergoing prostate cancer surgery have a new option for catheter placement that may be more comfortable and allow faster recovery than previous methods.

Chad Tracy, MD, a urologist and director of minimally invasive and robotic surgery at University of Iowa Hospitals and Clinics, explains: "Radical prostatectomy (prostate removal) is the gold standard for surgical treatment of patients with prostate cancer. While more patients are favoring robotic prostatectomy over traditional open surgery these days, they still face the discomfort of having a urethral catheter for one to two weeks after surgery."

Tracy now offers patients the option of foregoing the traditional urethral catheter in favor of a suprapubic catheter. Read more.

## University of Michigan Comprehensive Cancer Center

The University of Michigan Comprehensive Cancer Center received a \$1.65 million gift from the Hirair and Anna Hovnanian Foundation to fund adrenal cancer research. The gift will further the work of Gary D. Hammer, MD, PhD, and Shruti Jolly, MD, who treated a member of the Hovnanian family for adrenal cancer.

The bulk of the gift, \$1.5 million, will go toward establishing a named Adrenal Cancer Repository and Genomic Database. This gift will enable Hammer and his team of researchers to conduct the world's most comprehensive genomic and genetic analysis of adrenal cancer, which will facilitate translational and clinical research in adrenal cancer. Read more.

### Michigan State University Breslin Cancer Center

As a community-based medical school, one goal of Michigan State University's College of Human Medicine is to conduct collaborative, multidisciplinary and multi-community research that takes advantage of the institution's unique distributed campus system. Its focus is on clinical research that can be practically applied, as well as the critical research in the basic science departments affiliated with the college on mechanisms underlying human diseases and their integration. These basic science departments include Epidemiology, Biochemistry and Molecular Biology, Microbiology, Cell and Molecular Biology, Neuroscience, Genetics, Pharmacology, and Physiology. Read more.

#### Masonic Cancer Center, University of Minnesota

Last year, the 2014 Minnesota legislative session brought a big win for regenerative medicine, as legislators passed a bill allotting nearly \$50 million over 10 years for regenerative medicine research, clinical translation, and commercialization efforts.

Some of that research funding has now been awarded to Bruce Walcheck, PhD, professor in the University of Minnesota Department of Veterinary and Biomedical Sciences, whose proposal was one of six funded out of 90 applications. Dr. Walcheck is the principal investigator on a new \$500,000 grant for research on engineering human pluripotent stem cells to generate enhanced natural killer cells for cancer therapy. The ultimate goal: treating cancer using the patient's immune system.

A unique scientific and medical resource, pluripotent stem cells are self-replicating and have the potential to differentiate into almost any cell in the body. They are an important starting cell population for engineering enhanced immune cells for cell-based therapies that have the potential to cure various types of cancer. Read more.

# Fred & Pamela Buffett Cancer Center (University of Nebraska)

Cheng Wang, PhD, assistant professor in obstetrics/gynecology, recently received a grant to study the initiation and progression of ovarian cancer.

The \$70,000 grant came from Colleen's Dream Foundation and local community efforts in Harlan, Iowa.

Dr. Wang, in collaboration with Jixin Dong, PhD, of the Fred & Pamela Buffett Cancer Center, is investigating whether the hippo signaling pathway drives migration and proliferation of the cancer cells. His studies show that a recently described new cell signaling pathway which controls organ size and how rapidly cells divide may be responsible. Read more.

# Robert H. Lurie Comprehensive Cancer Center of Northwestern University

The Northwestern Medicine® Division of Hematology/Oncology has received a new three-year certification from the Quality Oncology Practice Initiative (QOPI®) Certification Program, an affiliate of the American Society of Clinical Oncology (ASCO). QOPI certification is only given to outpatient hematology-oncology practices that meet the highest standards for quality.

The QOPI certification is achieved by practices that undergo a voluntary, comprehensive on-site and documentation assessment using evidence-based quality care standards. Read more.

# Penn State Hershey Cancer Institute

The Commission on Cancer of the American College of Surgeons has granted its 2014 Outstanding Achievement Award to a select group of 75 accredited cancer programs throughout the United States, including the Penn State Milton S. Hershey Medical Center. Award criteria were based on qualitative and quantitative surveys conducted last year.

The purpose of the award is to raise the bar on quality cancer care, with the ultimate goal

of increasing awareness about quality care choices among cancer patients and their loved ones.

Learn more about the Commission on Cancer.

#### Purdue University Center for Cancer Research

Two Purdue University Center for Cancer Research members have received accolades for their work.

The American Chemical Society Division of Organic Chemistry and Organic Letters named Dr. Mingji Dai as the winner of the 2015 Organic Letters Outstanding Author of the Year Lectureship Award. Dr. Dai was nominated for the divergent total synthesis of monoterpene indole alkaloids.

The American Association for Cancer Research is honoring Dr. Philip S. Low with the AACR Award for Outstanding Achievement in Chemistry in Cancer Research. Dr. Low, Purdue University's Ralph C. Corley Distinguished Professor of Chemistry, will receive the award at the association's annual meeting April 18-22 in Philadelphia.

## **Rutgers Cancer Institute of New Jersey**

Helping to advance scientific and clinical knowledge to combat cancers that affect the bladder, kidneys, urinary tract, and male reproductive organs, physician scientists at Rutgers Cancer Institute of New Jersey presented their latest research in this area at the 2015 Genitourinary Cancers Symposium (co-sponsored by the American Society of Clinical Oncology, American Society for Radiation Oncology, and the Society of Urologic Oncology) in Orlando.

Through a population-based study, investigators examined complication rates in patients with uncontrolled diabetes who underwent surgery to remove the entire bladder and nearby lymph nodes. Read more.

# **University of Wisconsin Carbone Cancer Center**

UW Carbone Cancer Center members John S. Kuo, MD, PhD, and Jamey Weichert, PhD, recently made a guest appearance on the Larry Meiller Show on Wisconsin Public Radio to discuss new advances in brain cancer detection and treatment. Listen to the episode.

Information for this story was compiled from BTCRC member websites, news releases, and social media.

**About the Big Ten Cancer Research Consortium:** The Big Ten Cancer Research Consortium creates a unique team-research culture to drive science rapidly from ideas to treatment-changing paradigms. Within this innovative environment, today's research leaders collaborate with and mentor the research leaders of tomorrow with the unified goal of improving the lives of all patients with cancer.

**About the Big Ten Conference:** The Big Ten Conference is an association of worldclass universities whose member institutions share a common mission of research, graduate, professional, and undergraduate teaching and public service. Founded in 1896, the Big Ten has sustained a comprehensive set of shared practices and policies that enforce the priority of academics in student-athletes' lives and emphasize the values of integrity, fairness, and competitiveness. The broad-based athletic programs of the 14 Big Ten institutions provide nearly \$200 million in direct financial aid to almost 9,500 student-athletes for more than 11,000 participation opportunities on 350 teams in 42 different sports. The Big Ten sponsors 28 official conference sports, 14 for men and 14 for women, including the addition of men's and women's lacrosse as official sports for the 2014-15 academic year. For more information, visit www.bigten.org.