

# Cancer Research Center 2019 Highlights

More than any other time in history, patients with cancer are achieving better outcomes. This is thanks, in large part, to research. There's so much opportunity to build on this success – it's the driving force behind our new Cancer Research Center.

In 2019, we aligned our research expertise across HealthPartners and Park Nicollet and more closely partnered with our care delivery colleagues. This has created more efficient administrative operations and stable finances, essential elements of any strong research program.

Most importantly, we're developing new cancer treatments, improving quality of life and increasing survival for patients. Our patients have improved access to innovative clinical trials and leading-edge cancer therapies.

Our efforts are informing key areas of cancer care, including precision medicine, pain management and treatment affordability. We're pleased to share this snapshot of our work and look forward to advancing the ways we serve patients with cancer and their families.



**Dylan Zylla, MD, MS** Medical Director



Michele Lacy, RN, BSN, OCN Administrative Director



# National Cancer Institute awards \$20 million grant to support our cancer research efforts

Patients with cancer across Minnesota's metro area and surrounding communities will have access to clinical trials and study opportunities thanks to a \$19.7 million grant from the National Cancer Institute (NCI). These studies span new and emerging treatments, cancer prevention, symptom management and care delivery. The money will be used over six years to fund the Metro-Minnesota Community Oncology Research Consortium, which is administered by HealthPartners Institute.

The consortium consists of 25 hospitals and clinics that identify and enroll patients in NCI-sponsored studies. Park Nicollet was one of the consortium's founding member organizations in 1983. Since then, it's routinely designated as a high-performing community oncology research program by the NCI. While NCI has awarded the consortium numerous grants since it began, this latest grant is the largest – rewarding its continued high-enrollment rates, trial availability and investigator participation.

## **Exploring new ways to treat mesothelioma**

Mesothelioma is a type of cancer that occurs in the thin layer of tissue that covers the lungs. It's often diagnosed after the disease can no longer be cured. A clinical trial led by Cancer Research Center is exploring whether using two drugs – one to improve blood supply and the other to enhance the immune system – can help the body fight this cancer. This study shows the momentum behind our Early Phase Therapeutics Program, which offers phase I and II trials and improves access to the newest investigational drugs.



#### Potential of medical cannabis

New research supports early evidence that medical cannabis may help improve symptoms patients experience due to cancer and its treatment. In partnership with collaborators at Minnesota Department of Health, our investigators analyzed self-reported data from patients with cancer enrolled in Minnesota's medical cannabis program. The research, published in 2019 in the Journal of Oncology Practice, showed that

medical cannabis may help reduce the severity of symptoms such as pain, nausea and insomnia with few side effects reported. Separately, our team developed a randomized trial for 30 patients and showed patients using cannabis had better pain control and required less opioids. Our Cancer Research Center is quickly becoming a research leader in this field and gave talks to national and international audiences in 2019.

## The pursuit of a newer, faster immunotherapy

Through our early phase therapeutics program, we've begun developing a new prosthetic antigen receptors (PARS) immunotherapy. PARS involves modifying a patient's T-cells to attack specific proteins on cancer cells. PARS therapy can modify T-cells within the patient's body, unlike other immunotherapies that require T-cells to be extracted, re-engineered and injected back into the patient. This streamlined process should allow cancer-fighting cells to start working immediately, rather than weeks, which is typical of existing immunotherapies. In addition, PARS cells can be quickly "turned off" in the patient's body, reducing the risks of negative side effects.

# Improving cancer care experience through research

Patients often have symptoms between chemotherapy cycles that go unreported to their cancer care team. Our investigators created an electronic patient-reported outcome (ePRO) tool in the hospital medical record to automatically send symptom surveys to patients on a weekly basis. Survey results were automatically sent to the cancer care team and severe symptoms were promptly addressed. In 2019, study findings published in Supportive Care in Cancer showed high satisfaction among patients and physicians with our ePRO system. Collecting ePROs has since become the standard way we assess symptoms in all of our patients receiving chemotherapy.

# Make a difference by giving

Generous giving from individuals and community partners enables us to conduct research that improves health and well-being in our community and beyond. We recognize the crucial role of giving in furthering research and discovery. We are grateful to the many patients, families and community organizations who make this work possible.

Donations to Cancer Research Center are administered by Regions Hospital Foundation and Park Nicollet Foundation.

Park Nicollet Foundation 952-993-5023 parknicollet.com/give

Regions Hospital Foundation

651-254-2376

regionshospital.com/donate

#### Cancer research at HealthPartners

HealthPartners Institute conducts research on many topics and conditions. Research studies are designed to find better ways to prevent, diagnose and treat diseases and improve health. This research benefits the community in a variety of ways. Study participants can contribute to the improvement of health and health care, locally and nationally. Visit healthpartnersinstitute.org to learn about research and cancer studies at HealthPartners.

# BY THE NUMBERS

**25** 

Cancer Research Center currently has 25 active studies.

3

Our researchers presented at three scientific conferences in 2019.

**25** 

25 HealthPartners doctors are active cancer researchers.

21

Our researchers published 21 scientific articles in 2019.

125

More than 125 patients are participating in cancer research studies.

5

We collaborated with five other internationally recognized research institutions.



#### **Cancer Research Center**

This newly created center aligns cancer research from HealthPartners Cancer Care Centers and Park Nicollet Frauenshuh Cancer Center. The result is one team actively involved in more than 20 research trials and projects. Our goal is to benefit our patients through innovative cancer care that seamlessly integrates clinical research and quality improvement into routine care close to home.

Our work includes all early pre-clinical research, as well as phase 1, 2 and 3 clinical trials. This gives patients access to emerging treatment options within their local community hospital, eliminating the need to travel to alternative health care settings. We conduct studies through HealthPartners Institute. The Institute manages hundreds of research studies each year to advance treatment, care and systems to improve lives and share findings across the world. It is active in health services, survey-based, behavioral intervention, clinical and basic science research.

### Leadership team

Michele Lacy, RN, BSN, OCN Center Administrative Director

**Dylan Zylla, MD, MS**Center Medical Director

**Daniel Anderson, MD, MPH**MMCORC Principal Investigator

**Arkadiusz Dudek, MD, PhD**Early Phase Therapeutics Program (EPTP)
Medical Director

Rachel Lerner, MD, MS
Core Investigator

**Joanna Hill, MBA, CCRP** Senior Oncology Research Manager

**Justin Eklund, MS, CCRP**Oncology Research Manager

#### **Publications**

Each year, our authors contribute to science and improvements in care by disseminating their research findings. In 2019, our authors published 23 peer-reviewed papers, books and book chapters. Here's a selection of that work.

Lonial S, Jacobus S, Fonseca R, Weiss M, Kumar S, Orlowski RZ, Kaufman JL, Yacoub AM, Buadi FK, O'Brien T, Matous JV, **Anderson DM**, Emmons RV, Mahindra A, Wagner LI, Dhodapkar MV, Rajkumar SV. Randomized Trial of Lenalidomide Versus Observation in Smoldering Multiple Myeloma. Journal of Clinical Oncology.

Shah HA, Fischer JH, Venepalli NK, Danciu OC, Christian S, Russell MJ, Liu LC, Zacny JP, **Dudek AZ**. Phase I Study of Aurora A Kinase Inhibitor Alisertib (MLN8237) in Combination with Selective VEGFR Inhibitor Pazopanib for Therapy of Advanced Solid Tumors. American Journal of Clinical Oncology.

Halfdanarson TR, Foster NR, Kim GP, Meyers JP, Smyrk TC, McCullough AE, Ames MM, **Jaffe JP**, Alberts SR. A Phase II Randomized Trial of Panitumumab, Erlotinib, and Gemcitabine Versus Erlotinib and Gemcitabine in Patients with Untreated, Metastatic Pancreatic Adenocarcinoma: North Central Cancer Treatment Group Trial N064B (Alliance). The Oncologist.

Patel MR, Dash A, Jacobson BA, **Ji Y**, Baumann D, Ismail K, Kratzke RA. JAK/STAT Inhibition with Ruxolitinib Enhances Oncolytic Virotherapy in Non-Small Cell Lung Cancer Models. Cancer Gene Therapy.

**Pawloski PA**, Brooks GA, Nielsen ME, Olson-Bullis BA. A Systematic Review of Clinical Decision Support Systems for Clinical Oncology Practice. Journal of the National Comprehensive Cancer Network.

Anderson SP, **Zylla DM**, McGriff DM, Arneson TJ. Impact of Medical Cannabis on Patient-Reported Symptoms for Patients with Cancer Enrolled in Minnesota's Medical Cannabis Program. Journal of Oncology Practice.



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