The Hereditary Cancer Center

AT CREIGHTON UNIVERSITY SCHOOL OF MEDICINE

Robin Farias-Eisner, MD, PhD, Director Holder of the Charles F. and Mary C. Heider Endowed Chair in Cancer Research

The Rev. Daniel S. Hendrickson, SJ, PhD, presents the Charles F. and Mary C. Heider Endowed Chair in Cancer Research to Robin Farias-Eisner, MD, PhD.

> "The mission at Creighton makes it a great place. What was missing in my work, I think, was the Jesuits. They are a group of dedicated individuals who really live what they preach, and they are just amazing."

> > – Robin Farias-Eisner, MD, PhD



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In July 2019, Robin Farias-Eisner, MD, PhD, joined Creighton University as the new director of the Hereditary Cancer Center in the School of Medicine and holder of the Charles F. and Mary C. Heider Endowed Chair in Cancer Research. He chairs the Department of Obstetrics and Gynecology and serves as associate dean for women's health.

Dr. Farias-Eisner chose to specialize in women's health because it was an underrepresented area of surgery and science. He set out to fill the need for high-quality academic excellence, contributing in a large way.

Using a four-pronged approach—research, patient care, education and community engagement—he advances in the fight against ovarian and other cancers.

Research

It gets Dr. Farias-Eisner's self-described "Florentine blood" boiling. Cancer death rates have remained flat—not decreased—over the past 30 years. Why? Because an effective treatment for chemotherapy resistant cancers is not yet available.

Through his lab work, Dr. Farias-Eisner pursues new diagnostic tests and treatment therapies. He discovered new genetic markers for ovarian cancer, which proved to be extremely accurate in distinguishing between benign and malignant ovarian cysts. Additional research has focused on developing new drugs for treating ovarian cancer and other diseases.



Worldwide Cancer Death Rates by Type Per 100,000 Individuals

SOURCE: IHME, Global Burden of Disease (GBD) 'Using age-standardized rates.



A Novel Drug to Treat Cancer Tumors

Two diseases. Two publications. One conclusion about the uniqueness of a novel drug— HM-10/10—and its clinical applications. The drug Dr. Farias-Eisner developed and studied with colleagues at University of California, Los Angeles, and Creighton holds exciting possibilities for the treatment of cancers and many similar diseases.

A research study on cancer tumor development in mice published by the *Journal of Cancer Research and Therapeutic Oncology* in January 2020 outlined how HM-10/10 slowed cancer tumor growth in colorectal and ovarian cancers in mice.

Because cancer is a pro-inflammatory disease, as are heart disease, Alzheimer's disease, endometriosis and macular degeneration, among others, Dr. Farias-Eisner and his team studied how HM-10/10 could treat various diseases. Research published in the September 2019 *International Journal of Molecular Sciences* showed HM-10/10's possibilities as a treatment for macular degeneration.

When considered in economic terms, the impact of cancer was \$128 billion in 2018. Macular degeneration had a \$7 billion impact that year.

With the case for the drug's uniqueness established, clinical trials may begin.

ECONOMIC IMPACT





Macular Degeneration



Patient Care

As a surgeon-scientist, Dr. Farias-Eisner translates what he learns in his lab to patient care. When clinic trials affirm the effectiveness of HM-10/10, he foresees a transformation in patient care and recovery.

Today, treatments for chemotherapy-resistant cancers often prove both ineffective and highly expensive. Along with devastating patient side effects, most are approved only for cancer.



FUTURE TREATMENT WITH HM-10/10



Education and Community Engagement

In the late 1960s, long before the rest of the world recognized his genius, Creighton recruited Henry Lynch, MD, to the School of Medicine. While other researchers sought to find the cause for cancer in environmental factors, Dr. Lynch, troubled by a nagging doubt that cancers afflicting family members were merely coincidental, changed the worldwide course of cancer research.

His life's work provided evidence leading to the discovery of various gene mutations that contribute to two kinds of hereditary breast cancer, BRCA 1 and 2. A form of inherited colorectal cancer he identified is generally known as Lynch syndrome.

When Dr. Lynch died in June 2019, Creighton was blessed to recruit an eminent cancer researcher who had known him for 30 years.

"This is a wonderful opportunity to take the work of Henry Lynch, and his wife and research partner, Jane, further," Dr. Farias-Eisner says. "I'm going to apply their work to advance their legacies in cancer treatment and cure. Amazing talent exists in the School of Medicine, and I feel that my role will be to enhance and contribute to the growth of their outstanding enterprises."

INVESTING IN HOPE THROUGH THE Hereditary Cancer Center at Creighton University

With a legacy for excellence and a superb director in place, a strong foundation has been laid for the Hereditary Cancer Center. We are in an extraordinary, unique position right now.

With your partnership, Creighton will accelerate its ability to conduct life-saving research, serve patients from across the nation and prepare medical students and other health care professionals for the ways we will change the landscape of cancer prevention.

Our patented vision for curing and treating cancer sets us apart. We invite you to support Creighton's cancer research mission. Together, we will open new avenues for cancer research, medical treatments, diagnostics and technologies.

Your generosity will draw additional attention—as well as grants and gifts—to our work, contributing to our ongoing success. We invite you to transform our Hereditary Cancer Center.



School of Medicine

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