## **Wisconsin Prostate Cancer SPORE**

# Improving Prostate Cancer Outcomes

#### What is the Prostate Cancer SPORE?

The UW Prostate Cancer Specialized Program of Research Excellence (SPORE) is funded by the National Cancer Institute and has a team of researchers at UW Carbone Cancer Center working to improve outcomes for prostate cancer patients. The program funds training and research to develop the next generation of prostate cancer researchers and cutting-edge studies.

#### What are we studying?

The researchers study prostate cancer, from individual cells in a lab to people in clinical trials. There are three main research projects of the Prostate Cancer SPORE.





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# Wisconsin Prostate Cancer SPORE Project 1: **Understanding resistance to prostate cancer treatments**

#### What do we know?

Advanced and metastatic (spreading) prostate cancer is very deadly. This cancer often is resistant to treatment.

#### What will we study?

Researchers will study prostate cancer cells from patients. In the lab, they will test how the area around cancer cells affects the cancer and look for better treatments for early prostate cancers.

#### What do we want to find out?

Researchers want to know what is happening in the tumor microenvironment, which is the area around the cancer cells. This can tell us what is causing resistance to treatment and what is allowing cancer to spread in the body.







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## Wisconsin Prostate Cancer SPORE Project 2: Creating new prostate cancer treatments

#### What do we know?

One type of cancer treatment uses vaccines. Anti-tumor vaccines target specific proteins in cancer cells, and can treat prostate cancer. One protein to target is the androgen receptor.

#### What do we want to find out?

Researchers want to know how to best use this new cancer vaccine with the hormone therapy usually used to treat prostate cancer.

#### What will we study?

Researchers will test the androgen receptor vaccine and immunotherapy treatment together in the lab, and in human clinical trials.





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## Wisconsin Prostate Cancer SPORE Project 3:

# Improving outcomes for patients with treatment resistant prostate cancer

#### What do we know?

Metastatic castration-resistant prostate cancer (mCRPC) is hard to treat. This cancer spreads to multiple spots in the body. Some of these spots cannot be treated with hormone therapy.

#### What will we study?

Researchers will use new computer analysis tools to find cancer cells in patients that are not responding to treatment and target these with radiation therapy in clinical trails.

#### What do we want to find out?

In this project, researchers want to know if treating individual cancer spots that don't respond to hormone treatment with radiation will help hormone treatment work longer on the rest of the cancer cells and give the patient better outcomes.







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## Wisconsin Prostate Cancer SPORE

# The Next Generation: Funding Training and Research

Career Enhancement Program (CEP)



To move our research findings into care for patients with prostate cancer, we need scientists with special knowledge. The CEP provides formal training for scientists who want to find new prevention and treatment for prostate cancer. Developmental Research Program (DRP)



This program supports new and unique cancer studies that will improve survival and quality of life for people with prostate cancer. We fund smaller studies than can become larger projects of the Wisconsin Prostate SPORE or be funded by other institutes.





DRP





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