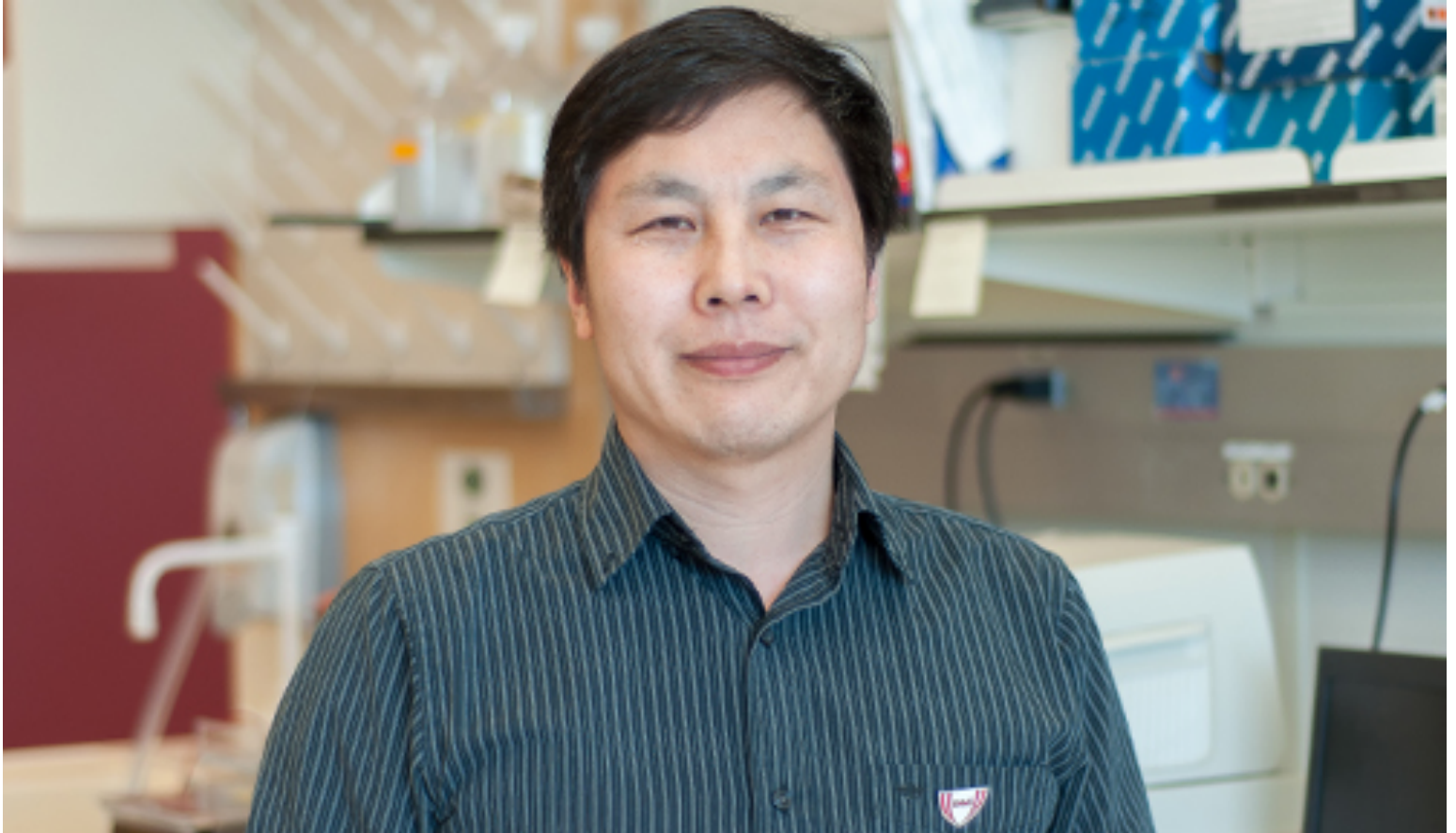


Grant will help lab's efforts to battle ovarian cancer

by John Keenan, UNMC public relations | March 12, 2015



Cheng Wang, Ph.D.

Cheng Wang, Ph.D., assistant professor, 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](http://www.colleensdream.org/) (<http://www.colleensdream.org/>) and local community efforts in Harlan, Iowa.

Dr. Wang, in collaboration with Jixin Dong, Ph.D., of the Fred and Pamela Buffett Cancer Center, is investigating whether the hippo signaling pathway drives migration and proliferation of the cancer

About the Foundation

cells. His studies show that a recently-described new cell signaling pathway which controls organ size and how rapidly cells divide, may be responsible.

"The disruption of the Hippo pathway transformed these cells," he said.

Suppressing the Hippo pathway, or overexpression of the YAP pathway, can lead to organ overgrowth or tumor growth. But whether the pathway contributes to the initiation of ovarian cancer cells is currently unknown.

In addition, Dr. Wang will be investigating whether, as some recent studies have conjectured, the Fallopian tube is the primary site of origin for ovarian cancer.

"This is important, because it was previously believed ovarian cancer came from ovarian surface epithelial cells (OSE), and it possibly may originate from fallopian tube secretory epithelial cells (FTSEC)," Dr. Wang said.

Still, there is no direct evidence, for now. Dr. Wang's project also may provide molecular evidence to show that ovarian high-grade serous carcinoma originates in the fallopian tubes.

"This has important clinical implications," Dr. Wang said. "Early cancer screening tests may allow surgical removal of malignant cells, preventing them from colonizing ovarian tissue."

"Understanding how the tubal cells colonize the ovary may facilitate the development of methods to prevent cancer cells invading the ovary."

The implications are especially important because despite the rapid progress made in ovarian cancer research in the past several decades, the mortality rate of patients with ovarian cancer remains very high. It is the most lethal female cancer in the U.S. In 2014 alone, the American Cancer Society estimates that 21,980 new cases will be diagnosed.

"If the diagnosis is made early, 90 percent of the women are saved," Dr. Wang said. "With a later diagnosis, the survival rate is less than 40 percent, and at stage four, it's 10 to 20 percent. Early detection is very important."

Colleen's Dream Foundation started in 2012 and supports research for early detection and improved treatment for ovarian cancer. Based in Phoenix, the foundation is named after Colleen Drury, who died of ovarian cancer after a five-year battle. NFL kicker Billy Cundiff, a member of the board of directors and Colleen's son-in-law, is a former Harlan Cyclone. For more information on the foundation board, click [here](https://www.colleensdream.org/colleensdream) (<https://www.colleensdream.org/colleensdream>)



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Joyce Inman

March 13, 2015 at 6:55 AM

I am very interested in this research as was diagnosed with Stage 2 in Sept. 2014. While education efforts are very high for breast cancer, there is little to no education for women on early detection of ovarian cancer. Warning signs need to be taught verbally and looked for during the female exam right along with the breast exam. CA 125 test needs to be a standard test for female yearly check-up.

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