



## News Release

FOR IMMEDIATE RELEASE

### **Cowboys for Cancer Research Funds Two UNM-NMSU Collaborations**

*Women's cancer research projects garner a total of \$60,000*

**Albuquerque, NM—March 10, 2011**—Historic sports rivalries between the Aggies and the Lobos notwithstanding, collaboration not competition is the rule for cancer researchers at New Mexico State University and the University of New Mexico. Two important collaborations between NMSU and UNM scientists investigating women's cancers recently got a boost from fundraisers dedicated to the concept of research collaboration by New Mexico's leading public institutions of higher education. Cowboys for Cancer Research, a Las Cruces-based nonprofit, together with NMSU Aggies Are Tough Enough to Wear Pink, a group that organizes a popular football benefit and related activities, annually donate proceeds from their fundraising events to support NMSU-UNM research partnerships. This year, a total of \$60,000 has been awarded: \$20,000 will support a longstanding collaboration between Dr. Jeffrey Arterburn at NMSU and Dr. Eric Prossnitz at UNM, and \$40,000 will fund research jointly undertaken by Dr. Joe Song of NMSU and Dr. Angela Wandinger-Ness and Dr. Laurie Hudson at UNM.

*NMSU-UNM Collaborative Research, cont.*

“We are so grateful for the support from Cowboys for Cancer Research and proud of our researchers and their NMSU colleagues,” said Dr. Cheryl Willman, Director and CEO of the UNM Cancer Center. “The two projects Cowboys for Cancer Research has chosen to fund are excellent examples of the exciting, cutting-edge collaborations that are fueling scientific discovery and helping cancer patients in New Mexico.”

“Cowboys for Cancer Research is proud to support cancer research happening collaboratively between NMSU and UNM,” said Denny Calhoun, one of the organizers of the group’s annual fundraising events. “We believe the money we raise improves the lives of cancer patients in New Mexico, now and in the future.”

### **Targeting Estrogen-Binding Receptors in Women’s Cancers**

Dr. Jeffrey Arterburn, Professor of Chemistry and Biochemistry at NMSU, and Dr. Eric Prossnitz, Professor of Cell Biology and Physiology at UNM, have been collaborating for more than seven years on the development of novel targeted agents, also known as molecular “probes,” that could one day be used to treat cancers responsive to the hormone estrogen. They have previously identified and characterized a new type of estrogen-binding receptor, GPR30, which is associated with poor long-term outcome/survival for endometrial and ovarian cancer patients and with tumor size and metastasis among breast cancer patients.

Having discovered this significant target within estrogen-receptive cancer tumors, Drs. Arterburn and Prossnitz are working to develop molecular probes that will locate and

bind to the GPR30 target and, in combination with imaging technologies, help detect, diagnose and monitor tumors. The researchers have already pioneered a GPR30-targeted molecular probe; with support from Cowboys for Cancer Research, they are refining this probe to improve its ability to work in tandem with cancer imaging technologies. Beyond potential imaging applications, the “second generation” probe could also provide a foundation for developing highly targeted therapies for a range of women’s cancers.

### **Targeting Proteins Responsible for Cancer Movement and Metastasis**

UNM Cancer Center researchers Dr. Angela Wandinger-Ness, Professor of Pathology, and Dr. Laurie Hudson, Regents’ Professor of Pharmaceutical Sciences, have identified novel protein targets, known as Rho-family GTPases, that govern the motility, or movement, and spread of cancer cells. These proteins, which are more abundant and active in cancer cells than in normal cells, affect a range of cell functions that are linked to cancer development and progression. Drs. Wandinger-Ness and Hudson have shown that inactivation of these proteins significantly impairs cancer cell motility and other functions associated with the spread of the disease.

Thanks to support from Cowboys for Cancer Research, Drs. Wandinger-Ness and Hudson are now collaborating with Dr. Joe Song, Associate Professor of Computer Science at NMSU, to develop the first realistic spatiotemporal model of the molecular events relevant to cancer cell motility. Using biological data gathered at UNM, this model will allow researchers to predict cancer tumor responses to protein targeting agents and to identify the protein molecules that show the most promise as novel targets for

therapies designed to impede the movement of cancer cells. In this way, the research could provide the basis for the eventual development of new cancer drugs aimed at slowing or blocking metastasis. Such drugs have particular relevance for those cancers, notably ovarian, that tend to be diagnosed at a late state of the disease, when cancer cells have spread beyond the original tumor site and long-term prognosis is linked to containing further metastasis.

### **About Cowboys for Cancer Research**

Las Cruces-based nonprofit Cowboys for Cancer Research has been raising funds for cancer research for nearly 30 years at its annual Dinner, Dance and Team Roping Event. Funds benefit the fight against cancer in New Mexico by supporting cutting-edge cancer research collaborations between UNM Cancer Center scientists and colleagues at NMSU. For more information, visit [www.cowboysforcancerresearch.org](http://www.cowboysforcancerresearch.org).

### **About the UNM Cancer Center**

The UNM Cancer Center is the Official Cancer Center of New Mexico and the only National Cancer Institute (NCI)-designated cancer center in the state. One of just 66 NCI-designated cancer centers nationwide, the UNM Cancer Center is recognized for its scientific excellence, contributions to cancer research and delivery of medical advances to patients and their families. It is home to 85 board-certified oncology physicians representing every cancer specialty and more than 125 research scientists hailing from such prestigious institutions as M.D. Anderson, Johns Hopkins and the Mayo Clinic. The UNM Cancer Center treats more than 65% of the adults and virtually all of the children in

*NMSU-UNM Collaborative Research, cont.*

New Mexico affected by cancer, from every county in the state. In 2010, it provided care to more than 15,800 cancer patients. The Center's research programs are supported by over \$59 million annually in federal and private funding.

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