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RESEARCH AND ECONOMIC AFFAIRS

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Imaging centers boost Arizona biomedical research

Leaders from Arizona's bioscience community met Wednesday morning to celebrate the opening of the Barrow Neurological Institute/Arizona State University Center for Pre-clinical Imaging. The collaborative center is a part of the Core Imaging Center at Barrow Neurological Institute, which also includes the Keller Center for Imaging Innovation. The centers will give biomedical researchers access to state-of-the-art imaging technology and expertise.

The Center for Preclinical Imaging houses a 7-Tesla Bruker Biospec small-animal MRI, funded by an NIH grant to Professor Ranu Jung at ASU through The National Center for Research Resources. The 7-Tesla magnet is about 140,000 times more powerful than the Earth's magnetic field. The machine is the highest resolution MRI currently available, allowing researchers to study exquisitely small anatomical structures in live specimens.

The new center also houses a Xenogen IVIS Spectrum Imager. This device uses powerful optical imaging technology for non-invasive longitudinal monitoring of disease progression, cell trafficking and gene expression patterns in live animals.

A 3-Tesla GE MRI scanner is located in the nearby Keller Center. The Keller Center brings together BNI imaging scientists, ASU engineering faculty, and engineers from GE Healthcare in an effort to improve patient diagnosis and care, serve as an imaging resource for the surrounding research community, and provide education in medical imaging.

"The opening of the Preclinical Imaging Center is a signature of the strong and growing partnership between BNI and ASU, and is reflective of the larger partnership in interdisciplinary and translational research that extends throughout the Valley and the state," said R. F. "Rick" Shangraw, ASU vice president for Research and Economic Affairs, at Wednesday's ceremony.

Also speaking at the event were Dr. Robert Spetzler, director of BNI; John Gore, keynote speaker and director of the Institute of Imaging Sciences at Vanderbilt University; Roy Gordon, vice president of Bruker Biospin; and researchers from ASU and BNI who were instrumental in establishing the collaborative centers.

John Murphy, president of the Flinn Foundation, commended the collaborative spirit of the two institutions and highlighted the center as a facility that will help Arizona strengthen its biomedical research base.

Over the past decade, high-field MRI systems have opened the door to new discoveries in medicine. Through the BNI/ASU collaboration, investigators can use this technology to examine both anatomy and function in their preclinical models. The centers also provide expertise to help researchers develop and implement their imaging protocols.

If you are interested in using the 7T MRI or the IVIS imager for your research studies, contact program manager Gregory Turner:
gregory.turner@chw.edu
602.406.2649

If you are interested in using thehuman 3T MRI, contact research technologist Sharmeen Joomun:
sharmeen.joomun@chw.edu
602.406.2644