Breathing Easier

Researchers' patented device battles SIDS

When Hung Cao saw his baby boy behind the big glass window at the hospital, the UT Arlington graduate student thought, “How can I be sure he's fine?”

From that moment several years ago, a device was born that could save babies’ lives through improved and rapid detection of breathing problems, including sudden infant death syndrome (SIDS).

Cao, now a newly minted doctoral graduate, teamed with electrical engineering Professor J.-C. Chiao and Heather Beardsley, a research engineer at TMAC, to develop a wireless sensor system that can detect carbon dioxide exhaled by babies as they sleep. More importantly, the sensors know—quickly enough for intervention—when infants are not expelling carbon dioxide.

“This has the chance to save lives,” says Dr. Chiao, who holds the Janet and Mike Greene and Jenkins Garrett professorships in the College of Engineering. “Our system is more accurate than current systems and should reduce false alarms that desensitize parents or caregivers.”

The researchers have received a patent for the device, which can attach to a baby’s crib or car seat.

The Texas Medical Research Collaborative recently awarded the research team a grant to develop and test a model, design a
commercially viable carbon dioxide-based monitoring system, and
manufacture a prototype. TxMRC is a consortium of UT Arlington, UT
Dallas, the UNT Health Science Center, Texas Instruments, and the
Texas Health Research & Education Institute. It funds medical
technology projects to address critical health care issues.

TMAC is administering the projects on behalf of the consortium. UT
Arlington is partnering with UNTHSC on the SIDS technology project.

More in Campus Buzz »

Leave a Reply

Your email address will not be published. Required fields are marked *

Name *

Email *

Comment

Post Comment