

While you were sleeping: Monitor alerts parents if baby stops breathing

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Owlet baby monitor smartphone app created by BYU students.

Every parent worries about their baby. They worry while it's eating, while it's playing—and especially while it's sleeping. But a new device created by BYU students may help parents rest easier while their baby

sleeps.

Student [innovator](#) Jacob Colvin and his team created a [baby monitor](#) that straps around an infant's foot and uses [pulse oximetry](#) to monitor the [heart rate](#) and blood-oxygen levels. If the infant stops breathing or has a significant change in heart rate the monitor will notify parents by alerting them on their smart phone.

Colvin and his five colleagues hope the device, which is completely wireless and uses safe, non-invasive technology, will reduce the annual cases of [Sudden Infant Death Syndrome](#) (SIDS), which number around 2,500 in the United States each year.

"Our hope is that we can give parents time to react and see that something's wrong before it's too late," said Colvin, a father of two himself.



Owlet baby monitor prototype and smartphone app created by BYU students.

Colvin's team recently debuted a prototype of their Owlet Baby Monitor at the third annual Student Innovator of the Year competition. They won both first place and crowd favorite awards, with cash prizes totaling \$6,000.

The Student Innovator of the Year competition was sponsored by the Ira A. Fulton College of Engineering and Technology and the Rollins Center for Entrepreneurship and Technology and was led by Venture Factory, a student organization that encourages innovation. The competition gives participants the chance to create a prototype of their invention, get feedback from judges and potentially win \$6,000 to continue improving

their device. This year, 39 teams participated.

"This year's student innovators showed remarkable creativity and originality," said Justin Zsiros, faculty advisor to the competition. "The Owlet baby monitor has the potential to really benefit our society—and bring some [peace of mind](#) to new parents. I can easily imagine Owlet or any one of the 39 teams creating a successful venture in the near future."

To get their prototype working, the Owlet team still has a long road ahead that involves finalizing the patent (paperwork has been filed and a patent is pending), more prototypes and more testing. But they're not discouraged.

"If we can hear just one mother say that we made a difference, it would all be worth it," Colvin said. "That makes all the difference in the world."

In addition to Colvin, a European studies major, the team includes chemical engineering students Kurt Workman and Anna Hawes, mechanical engineering students Jason Dearden and Wyatt Felt, and Tanor Hodges, a nurse at the University of Utah.

The second place Student Innovator award of \$3,000 went to iLived, a family history social media site. Leenovation, a doorbell with security camera features, and Intuiplan, a paperless management tool, tied for third with \$2,000 cash prizes for each.

The "great potential" award of \$1,000 went to Hiven, a system that prevents pipes from freezing in the winter. The winners now have the option to compete in the Social Venture Competition or the 2013 Miller New Venture Challenge through the BYU Marriott School of Business.

Provided by Brigham Young University

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