Around 60 percent of infants are born jaundiced and many spend their first days of life isolated from their mothers underneath special lights that help them eliminate the excess bilirubin in their bloodstreams.

Three College of Engineering students at Michigan State University have created a prototype of a device that breaks down bilirubin molecules while the baby is coddled in the loving arms of its mother.

Their project, called Swaddle-mi-Bili, is one of 150 innovative projects showcased at the MSU College of Engineering 20th Anniversary Design Day on Friday, April 25. The 8 a.m. to noon event is open to the public in the Engineering Building on the MSU campus at 428 S. Shaw Lane, East Lansing, Mich.
“The medical staffs loved the idea and were ecstatic about it.”

Hoang, a biosystems engineering student from Okemos, Mich., noted that the wearable solution could reduce the cost of treatment and allow for easy deployment in low-income areas of the United States.

Swaddle-mi-Bili has already won a student business model competition in Lansing and finished in the top eight of 84 teams at the Michigan Collegiate Innovation Prize competition, both in February. The team will compete at the International Business Model Competition at Brigham Young University in May.

All three students will graduate from Michigan State in May. Bloom will continue his studies in a biomedical engineering master’s degree program at the University of Michigan, Hoang will enter the operations management training program at global food giant Heinz Company, and Jones will enter the analyst program with the multinational investment banking firm Goldman Sachs.

Hoang said the lessons learned by the team were tremendous. “We’ve learned so much about engineering, business and team work,” he added.

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About Design Day

The 20th anniversary of the MSU College of Engineering Design Day will feature the innovation and technical skills of more than 600 students on Friday, April 25. Participants and guests will roam the busy halls of the Engineering Building to see demonstrations, competitions and posters from 8 a.m. to noon.


**Related Website:** [Design Day video](http://www.egr.msu.edu/news/2014/04/18/20th-design-day-friday-april-25)
[Design Day project descriptions and team photos](http://www.egr.msu.edu/news/2014/04/18/20th-design-day-friday-april-25)
[Faculty Advisor - Dr. Tim Whitehead](http://www.egr.msu.edu/news/2014/04/18/20th-design-day-friday-april-25)

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