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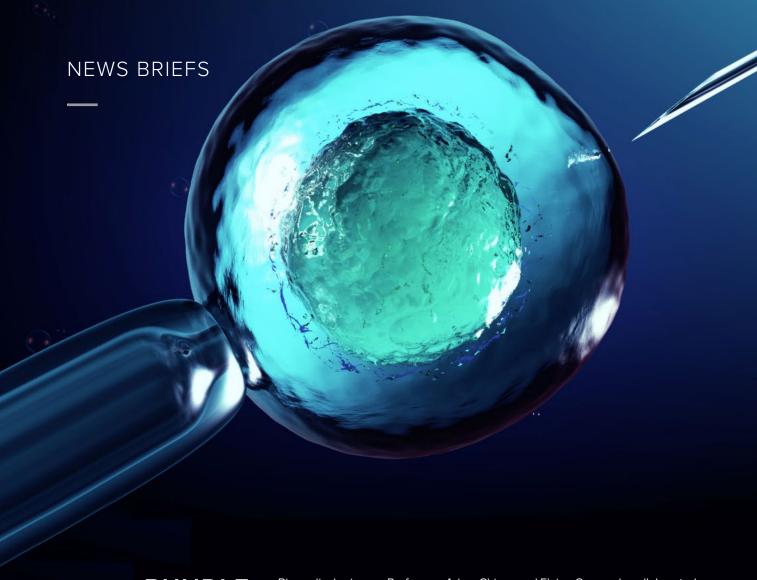
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BUNDLE OF ENERGY IT TAKES A LOT TO GROW A BABY.

Biomedical sciences Professors Adam Chicco and Elaine Carnevale collaborated with Professor Tom Chen from the Department of Electrical and Computer Engineering and Rebecca Krisher at the Colorado Center for Reproductive Medicine to develop a sensor that can measure the energy quality of an egg in order to better understand what happens in the earliest stages of life.

The project explores egg metabolism in the contexts of aging and obesity and how changes in mom's diet can alter this and improve fertility. It's widely known that there is a decline in fertility with aging, but the role of egg energy supply in this decline is unclear.

"There is currently no concrete measure of quality when an IVF clinic selects the best eggs to use. It's all based on visual inspection," Chicco said. "Our team hopes to develop a test that can provide a signature for a healthy egg, leading to more successful in vitro fertilization outcomes."

The sensor could become a standard feature in IVF clinics and might also be useful in the study of cancers and infectious diseases. ■

- RHEA MAZE

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