



# MICROGRAVITY

Recent graduate Lisa Lee (center) from the class of 2014 participates in a medical-technology experiment aboard NASA's reduced-gravity aircraft, based at the Johnson Space Center's Ellington Field in Houston, Texas. Sometimes referred to as the "vomit comet," the plane performs a series of dives, giving those onboard periods of weightlessness for up to 25 seconds at a time. Lee teamed up with students from Stanford University (including Diniana Piekutowski, left, and David Gerson, right) to test a hemodynamic transesophageal echocardiogram (hTEE) in zero gravity for possible health monitoring in space. "Astronauts experience a lot of medical complications in space because there's no gravity, so there's a need to constantly monitor how they're doing," explains Lee, who received her degree in physics. "But a lot of current monitoring technology is very bulky, and there's a very steep learning curve to learning how to use it. This hTEE is very easy to learn how to use, it's small, and it's portable . . . and it would provide an easier way to monitor heart conditions." —*KF*