

UC San Diego

UC San Diego News Center

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Engineering a New Biomaterial Therapy for Treating Heart Attacks



University of California, San Diego bioengineer Karen Christman's new injectable hydrogel, which is designed to repair damaged cardiac tissue following a heart attack, has been licensed to San Diego-based startup Ventrix, Inc, which is planning the first human clinical trials of the technology. Christman is a co-founder of Ventrix.

In a 2013 study published in *Science Translational Medicine*, Christman reported the semi-solid, porous gel encourages cells to repopulate areas of damaged cardiac tissue and to preserve heart function. The hydrogel forms a scaffold to repair the tissue and increases cardiac muscle.

You can learn more about this technology at [Research Expo](#) on April 17, where Christman is one of six [faculty speakers](#) at the UC San Diego Jacobs School of Engineering event. Wang, an M.D./Ph.D. student in bioengineering, will present a poster explaining her research on how the hydrogel works to rebuild tissue in damaged hearts.

More than 200 forward-looking research projects will be presented. The annual event features cutting-edge research posters by engineering graduate students and their faculty advisors; ten-minute faculty talks; and a networking reception with faculty, students, industry partners and alumni.

Research Expo will be held on Thursday, April 17 from 2-6p.m. [Register today](#). Below is just a small sample of the projects that graduate students from the Jacobs School of Engineering will present in the area of life sciences and medical devices and instruments.

MEDIA CONTACT

Catherine Hockmuth, 858-822-1359, chockmuth@ucsd.edu

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