

# SANFORD REPORT

Monthly Newsletter of Sanford Stem Cell Clinical Center

**UC San Diego Health**  
Sanford Stem Cell Clinical Center

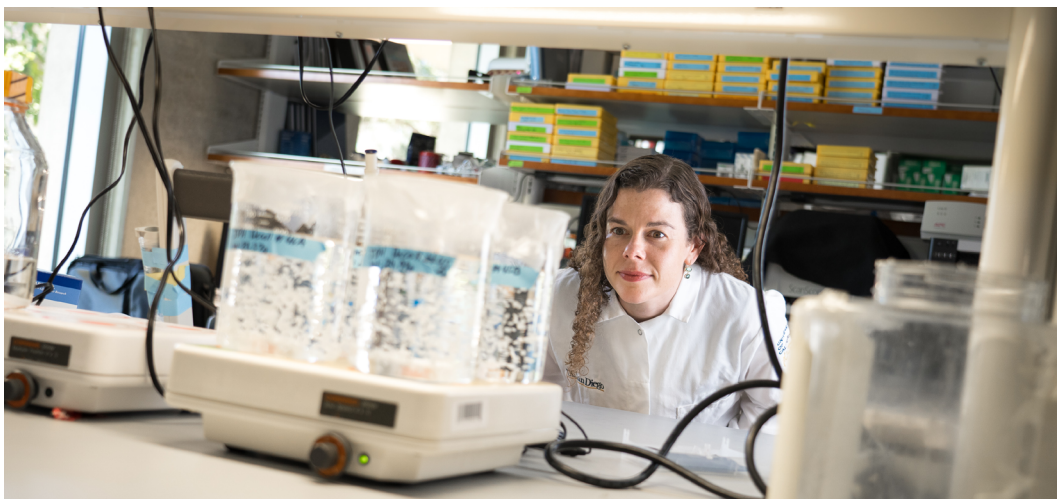
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Karen Christman, PhD, professor in the department of bioengineering at UC San Diego and Sanford Stem Cell Clinical Center researcher, led the development of VentriGel, a hydrogel to repair heart tissue after heart attacks.  
Credit: David Baillot



Larry Goldstein, PhD, Distinguished Professor in the departments of cellular and molecular medicine and neurosciences at UC San Diego, Director Emeritus of the Sanford Stem Cell Clinical Center and scientific director of the Sanford Consortium for Regenerative Medicine

## Commentary: Why California's landmark stem cell agency deserves more funding

By Larry Goldstein, Aileen Anderson and Malin Burnham,  
The San Diego Union-Tribune

Evangelina Padilla Vaccaro was born with "bubble baby" disorder owing to a barely functional immune system. She was doomed to live with recurring infections and faced a dramatically shortened lifespan. Fortunately, Evangelina received a stem cell-based treatment that restored her immune system. She now lives a near normal life.

Clinical trials at UCLA, UC San Francisco and Stanford funded by the California Institute for Regenerative Medicine (CIRM)  
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## FDA Phase 1 Trial Shows Hydrogel to Repair Heart Is Safe to Inject in Humans—A First

By Ioana Patringenaru, UC San Diego News Center

Ventrix, a University of California San Diego spin-off company, has successfully conducted a first-in-human, FDA-approved Phase 1 clinical trial of an injectable hydrogel that aims to repair damage and restore cardiac function in heart failure patients who previously suffered a heart attack.

The trial is the first to test a hydrogel designed to repair cardiac tissue. It is also the first to test a hydrogel made from the natural scaffolding of cardiac muscle tissue, also known as extracellular matrix, or ECM. This is significant because ECM hydrogels have been shown in preclinical studies to potentially be effective for other conditions, such as poor blood circulation due to peripheral artery disease. The trial showed that the hydrogel, known as VentriGel, can be safely injected via catheter into patients who had suffered a heart attack in the past 2 to 36 months.

"Although the study was designed to evaluate safety and feasibility and not designed to show whether VentriGel effectively helps improve heart function, we observed some improvements in patients," said Karen Christman, the paper's senior author and a professor of bioengineering in the Jacobs School of Engineering and the Institute of Engineering in Medicine at UC San Diego. "For example, patients could walk longer distances. We also observed signs of improving heart function in patients who experienced a heart attack more than one year prior to treatment." [Read more](#)

## Commentary: Why California's landmark stem cell agency deserves more funding

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appear to have given more than 50 children like Evangelina their lives back. These trials are on track to achieve FDA approval. Similarly, many other patients with crippling or near-fatal diseases are also dramatically improving because of experimental stem-cell based therapies in CIRM-funded clinical trials.

CIRM was established in 2004 when nearly 60% of California voters passed a ballot initiative committing \$3 billion to fund stem cell research and therapy development for 10 years. CIRM funding has established an impressive pipeline of new stem cell-based therapies being tested in 78 human trials directly funded by CIRM or based on CIRM-funded research. CIRM funding has also led to over 3000 published medical discoveries.

CIRM funding also attracted substantial philanthropy and matching funds totaling \$3.6 billion, doubling funding approved by California voters. In San Diego, Denny Sanford's inspired generosity helped establish the multi-institutional Sanford Consortium for Regenerative Medicine and the Sanford Stem Cell Clinical Center at UC San Diego. [Read more](#)



*The UC San Diego Health CIRM Alpha Stem Cell Clinic team*

## Recharge Rates Available at UC San Diego Health's CIRM Alpha Stem Cell Clinic

The mission of the UC San Diego Health CIRM Alpha Stem Cell Clinic is to accelerate the design of innovative stem cell research to advance the testing and delivery of safe and effective stem cell-based therapies in regenerative medicine.

The Alpha Clinic is the cell therapy arm of Sanford Stem Cell Clinical Center at UC San Diego Health. We specialize in early phase, first-in-human trials.

To learn more about available services, [click here](#).

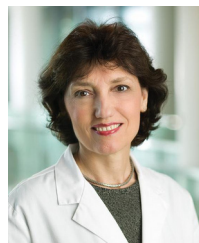
### UPCOMING

Oct. 18, 2019 - [CREST program](#) is currently accepting applications from researchers interested in receiving supplemental training in clinical and translational research

Nov. 4, 2019 - [DRM Seminar Series](#) featuring Andrew Dillin, PhD from UC Berkeley on "Neuroendocrine Regulation of ER Stress, Metabolism and Aging"



*Eric Adler, MD*



*Barbara Parker, MD*



*Sandip Patel, MD*



*David Piccioni, MD*



*Rebecca Shatsky, MD*

## Alpha Clinic Principal Investigators Named "Top Docs"

We are pleased to announce that six of our principal investigators were named "Top Docs" by their San Diego colleagues in the annual San Diego Magazine "Physicians of Exceptional Excellence" survey.

From cardiovascular disease to medical oncology, our Top Docs are recognized among the best physicians in San Diego County. Respected by their peers for their exceptional skills, our physicians were named as the doctors their colleagues would recommend to their own family members and friends — one of the highest compliments a physician can receive. [Congrats to our 2019 Top Docs!](#)

We are honored to work with physicians who consistently impress us with their exceptional skills and professionalism. Every single day, we see how they go above and beyond for our patients. Our physicians are truly transforming health care: finding ways to do things better, educating our next generation of medical students and advancing medical science through innovative research and breakthrough treatments.