

Innovation Spotlight

UCSF Artificial Kidney Project Prepare for Clinical-Scale Device

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Researchers working on the Kidney Project in the Roy Lab successfully implanted a kidney bioreactor prototype in a healthy pig without immunosuppression. This achievement is a critical step towards the ultimate goal of creating an artificial kidney, which may someday obviate the need for kidney transplantation. The human kidney cells within the implanted bioreactor remained healthy and expressed normal biomarkers of functionality during the three-day study. The group is currently working towards the next two major milestones, including direct measurement of renal cell function within the bioreactor, and upscaling the device to provide clinically impactful cell therapy in an end stage renal disease large animal model.



Announcements

Congratulations PDC Accelerator Shark Tank Awardees!

Ten pediatric device innovators (including UCSF researchers) pitched their device ideas for children at the UCSF-Stanford Pediatric Device Accelerator virtual Shark Tank on March 30, 2020, to win over \$200K in seed funding, prototyping support and customized advising!

Congratulations to all awardees and thank you for your efforts to meet pediatric device needs.



Meeting Calendar

INNOVATOR'S FORUM: Tuesdays, 4-5pm, Virtual Meetings

- 4/7 Targeted Nanoparticles Delivery of RvD1 in Acute Vascular Injury; Alexander Kim, MD; Conte Lab, UCSF
- 4/14 CathPort: A device to make traditional urinary catheters obsolete; Sarah Hecht, MD; Children's Hospital, Colorado
- 4/21 ChemCath: an intravascular chemical monitor; Serena Blacklow; UCSF
- 4/28 Kidney Health Monitor; Prajakta Kulkarni, Ph.D; SciKare, Inc.

Opportunities

UCSF Surgical Innovations and Pediatric Device Consortium currently have limited opportunities for engineers and summer interns interested in medical device and technology development. Contact us for more information.

About Surgical Innovations

Surgical Innovations is an initiative of the <u>Department of Surgery</u> in partnership with the <u>Department of Bioengineering</u> <u>& Therapeutic Sciences</u> to identify, mentor, and facilitate the translation of novel medical technologies into transformative new devices and treatments to improve patient care. <u>Learn more >></u>