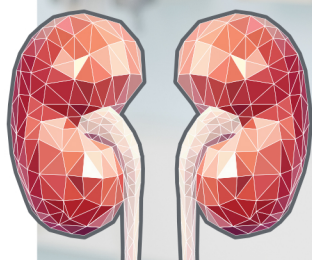


ENGINEERING THE NEXT GENERATION OF REPLACEMENT HUMAN ORGANS

Each year in the United States:



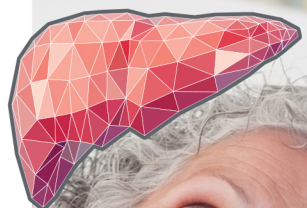
7,000,000
PATIENTS EXPERIENCE
HEART FAILURE



871,000
PATIENTS EXPERIENCE
RENAL FAILURE



800,000
PATIENTS EXPERIENCE
LUNG FAILURE



633,000
PATIENTS EXPERIENCE
LIVER FAILURE

THE MAJORITY OF THESE PATIENTS ARE NOT PUT ON THE ORGAN TRANSPLANT WAITING LIST AND WILL NEVER BE CONSIDERED FOR A TRANSPLANT BECAUSE THERE AREN'T ENOUGH NATURAL HUMAN ORGANS AVAILABLE.

What are biohybrid organs?

Biohybrid organs are a new generation of long-term replacement human organ engineered from a combination of bioprinted cellular and synthetic materials. This life-saving technology has the potential to eliminate the current organ transplant waiting lists.

**OUR GOAL IS TO
SAVE LIVES
BY INCREASING
THE AMOUNT OF
ORGANS AVAILABLE
TO PATIENTS
IN NEED.**



How will biohybrid organs help?

Collaborative research at Carnegie Mellon University in 3-D printing, tissue engineering, biomaterials, cellular mechanics, and artificial organs can support or replace diseased organs. These biohybrid organs can improve survival rates for the million of patients with end-stage organ failure in the United States.

Learn about the next generation of replacement human organs, visit bme.cmu.edu

Carnegie Mellon University
College of Engineering