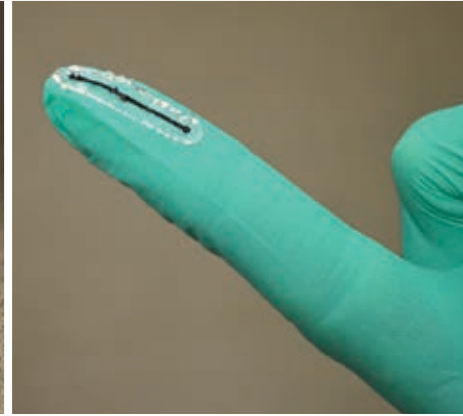
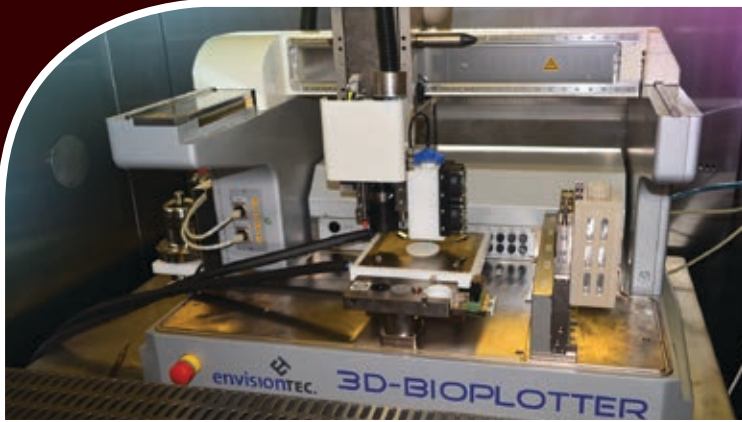


WE BUILD TRANSLATION

Advanced Platform Technology Center

A VA Research Center



TECHNOLOGY UPDATE

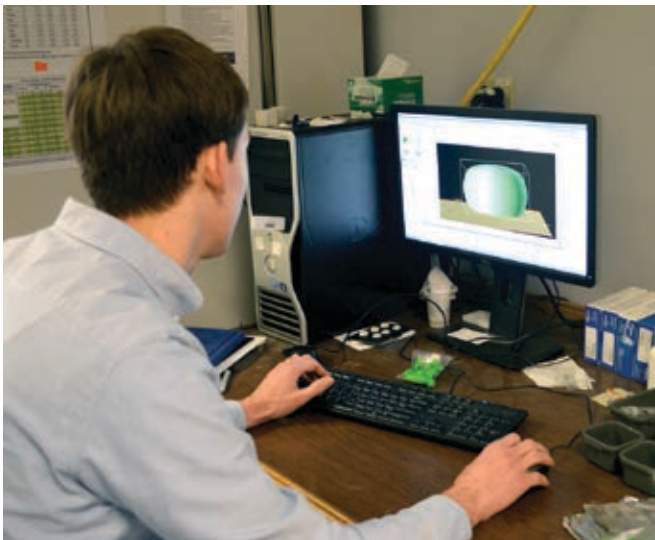
Additive Manufacturing for Biotechnology Core

Capabilities:

- The Core consists of an EnvisionTEC 3D-Bioplotter housed in a Baker Class 100 BioPROtest III cabinet that ensures a contamination-free atmosphere for additive manufacturing of complex biocompatible constructs.
- Multiple printer heads allow concurrent printing of up to 5 different materials, from soft hydrogels over polymer melts to hard ceramics and metals.

The “Additive Manufacturing for Biotechnology” facility, directed by APT Center Core Investigator Dr. Kath Bogie has been designated as Core Facility by the School of Medicine at Case Western Reserve University (CWRU), which enables its use by the community at large and enhances collaboration between the APT Center and researchers across the country.

The APT Center was instrumental in obtaining and installing millions of dollars’ worth of new high tech capital research equipment from the State of Ohio through DETECT (Diagnostic Engineering Technologies for Evaluating Connective Tissues) at the LSCVAMC and its partner institutions at CWRU, Cleveland Clinic Foundation and Austen BioInnovation.



For further detailed information please contact:

Dr. Kath Bogie
Email: kmb3@case.edu
Ph: (216) 368-5270

About Dr. Kath Bogie:



Dr. Bogie is a biomedical engineer with a background in translational research in tissue health, wound management and wheelchair seating. Dr. Bogie leads studies to develop health maintenance technologies, including the Modular Surface Stimulation (MSS) system to systematically evaluate the effects of electrotherapy for treatment of chronic wounds and an advanced modular cushion for cost-effective pressure relief. Dr. Bogie also studies the application of advanced digital imaging for clinically useful monitoring of chronic wounds and is working with the Rural Telehealth program to implement wound monitoring technology in the field.

About the APT Center:

The APT Center is one of 13 designated Centers in the Rehabilitation Research and Development (RR&D) Service of the US Department of Veterans Affairs. Established in 2005 as a collaboration between the LSCDVAMC and CWRU, the APT Center focuses on applying the most recent advancements in microelectronics, material science, microfabrication, wireless communication and mechanical design to the pressing medical needs of disabled veterans, and translating them into viable clinical options.

About Case Western Reserve University:

Case Western Reserve University is one of the country's leading private research institutions. Located in Cleveland, they offer a unique combination of forward-thinking educational opportunities in an inspiring cultural setting. Their leading-edge faculty engage in teaching and research in a collaborative, hands-on environment.

Founded in 1843, Case Western Reserve University School of Medicine is the largest medical research institution in Ohio and is among the nation's top medical schools for research funding from the National Institutes of Health. The School of Medicine is recognized throughout the international medical community for outstanding achievements in teaching.

About the School of Engineering:

The Case School of Engineering traces its roots to the 1880 founding of the Case School of Applied Science. The school became the Case Institute of Technology in 1947 and the Case School of Engineering in 1992. Currently, the Case School of Engineering is ranked among the nation's top 50 graduate engineering programs by U.S. News & World Report and top 10 in biomedical engineering. Case Western Reserve University ranks 12th among private institutions and 24th overall in federal expenditures for science and engineering research development.



Louis Stokes Cleveland Veterans Affairs Medical Center
Main Telephone Number: 216.707.6421

www.aptcener.research.va.gov



Veterans Health Administration
Research & Development
Improving Veterans' Lives → www.research.va.gov



CASE WESTERN RESERVE
UNIVERSITY EST. 1826