

FROM RESEARCH TO INDUSTRY

cea tech

CEA TECH SERVICES FOR THE HEALTHCARE INDUSTRY

Technology for tomorrow's healthcare challenges:



CEA Tech can help the following businesses:

- Pharmaceutical companies
- Medical equipment manufacturers
- Medical systems manufacturers
- Rehabilitation systems manufacturers
- Athletic equipment manufacturers

Here are some of the ways CEA Tech can support your development:



Imaging systems

Low-cost or high-performance medical equipment (like scanners); assisted surgery; lensless characterization of biological environments from virus to tissue

***Micro-energy-sources
integrated into systems***

Vibration-energy recovery; microbatteries for implanted devices like pacemakers

***Micro-medical-systems
for healthcare***

Smart bandages; instrumented textiles; Parkinson's treatments; vision systems

***Physical and
biochemical sensors***

Pacemakers, industrial bioprocess control, physiological testing (blood, urine, sweat, skin), and position, geolocation, and motion sensors

***Sensor systems for
environmental monitoring***

VOC measurement; detection of molecules in water; gas measurement; industrial emissions monitoring

Labs-on-chip

Fast fluid analysis for testing and diagnostics

Software

Biological profiling of patient groups for clinical testing; decision-making assistance for diagnostics and treatment

Data security

Data storage and security; data encryption; smart card security

Robotics & cobotics

Exoskeletons; assisted surgery

Vision systems

In-home patient monitoring and security

Advanced manufacturing

Energy optimization; process monitoring; training; manufacturing scenarios

***Treatment simulation
and calibration***

Support for in-hospital tumor treatment

Drug delivery systems and equipment

Biocompatible encapsulation for cellular therapy; lipid nanoparticles to carry drugs

Materials and characterization

Biocompatible encapsulation for implanted systems; structural weight reduction of implants like prostheses