

# University of Colorado Medical Device Pipeline

## Available Technologies

Device	Applications	Inventor	Case #	Concept	Drawings/ Specs	Prototype	Preliminary Testing	Animal Testing	Regulatory Planning	Human Trials
Non-invasive Leukemia Diagnostic	Imaging - diagnosis/monitoring of leukemia	Gore-DeRyckere	CU2296H		n/a					
Non-invasive Measurement of Esophageal Inflammation	Esophageal disorders, GERD	Glenn Furuta	CU1857H					n/a		
Automatic Administration of Insulin	Type-I diabetes treatment	Peter Chase	CU1616H							
Digital Stethoscope	Detection of cardiac abnormalities	H. Weinberger	IR372H							
Biocompatible Neural Electrodes	Electrostimulation, recording of neural activity	Diego Restrepo	CU1156H							
Nanotube-reinforced Collagen Composite	Improved vascular grafts	Wei Tan	CU1822B							
Metabolic Cardiogram	Treatment of metabolic derangement	Charles Cairns	7009H							
Jet Swirl Nozzle	Drug delivery	Ted Randolph	2001.079							
Facile Surface Modification for Rapid Biological Assays	Tissue engineering, biological assays	Kristi Anseth	CU1295B		n/a					
Activity Monitor for Bedridden Patients	Fall prevention for bedridden patients	James Russell	CU1379B							
Tissue Fusion Device	Fusing of post-surgical nasal tissue	Michael Larson	CU1695C							
Myelin-mapping MRI	Imaging - diagnosis of neuro-degenerative disease	Yiping Du	CU1581H							
Shoe-based Biofeedback Device	Measure and influence body weight, physical activity	R. Browning	CU1906H							
Hydrogel Implants	Plastic and reconstructive surgery, bone regeneration	Kristi Anseth	CU1389B		n/a					
Knee Brace	Non-surgical treatment of knee osteoarthritis	Kaz Gamada	CU1153H							
Difficult Airway Tube (DAT)	Endotracheal tube	Charles Little	CU1362H							
Electrostatic Co-extrusion Device	Drug delivery	T. Anchordoquy	CU1091H							
Antibiotic Polymer Coating	Orthopedic hardware, implanted medical devices	Kristi Anseth	CU1582B		n/a					
Non-Toxic Biofilm Inhibitor	Medical devices and implants	Robert Hodges	CU1450H		n/a					
Device to Distinguish Cause of Hypoxemia	Distinguish cause of hypoxemia in obese patients	Rick Albert	DHHA1004H							
Sustained-release Drug Delivery Composition	Drug delivery	T. Randolph	8045B							
Polymer System for Tissue Regeneration	Tissue and organ regeneration	Kristi Anseth	2001.028B							
Portable Tool for Monitoring Myocardial Infarction	Diagnosis of heart failure	Mark Anderson	CU2187H							
Improved Flow Cytometry	Diagnostic and bioanalytic platform	Gibson-Lei	CU2192H							
DNA Hybridization Detection	Diagnostic and bioanalytic platform	Dan Schwartz	CU1915B							
Beacon - Miniature Medical Ultrasound Transducer	Surgical procedures	Robin Shandas	CU1404B							
Minimally Invasive Implantation of Interspinous Spacer	Medical devices and implants	Vikas Patel	CU1825H							
Neural Shunt	Improved shunt design to prevent cranial blockage	Dylan Dowlati	CU1766H							
Self-expanding Surgical Corridor	Minimally-invasive surgery	Kevin Lillehei	CU1111H							
Heart Valve Sensor	Medical devices and implants	Robin Shandas	10010H							
Susceptibility Weighted MR Imaging	Imaging - arterial and venous vasculature	Yiping Du	CU1954H							
Active/Invasive EEG	Seizure monitoring and locus mapping	David VanSickle	CU1149H							
Self-assembling RNA Nanotubes	Nano-molecular pump, drug delivery	Jeff Kieft	CU1862H							
Materials to Reduce ROS Damage	Medical devices and implants	Kristi Anseth	CU2032B							
Net-Shaped Materials (Orthopedic and Dental)	Medical devices and implants	Reed Ayers	10028B							

**IN PROGRESS**

**COMPLETED**

University of Colorado Technology Transfer Office

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To learn more about the technologies listed here, contact:

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Low-Shrinkage Dental Polymers	Dental prosthetics	Jeffrey Stansbury	Multiple							
Ultrasonic Particle Imaging Velocimetry Technique	Imaging - cardiovascular blood flow	Robin Shandas	CU1617B							
Novel Photopolymers	Dental restoratives	C. Bowman	CU1086B							
SMP Orthopedic Screw	Knee replacement, ankle reconstruction	Kenneth Gall	CU1375B							
SMP Arterial Stent	Arterial stents	Robin Shandas	CU1514H							
Biobattery Constructed Using Live Cell Cultures	Medical devices and implants	S. Rock Levinson	CU1357H							
Optical Biopsy Needle and Probe	Detection of prostate cancer	Priya Werahera	CU1385H							
Force Assistance Device	Walking rehabilitation therapy	Rodger Kram	CU1302B							
MicroFlex Endoscope	Microscale, dexterous surgical instruments	Dale Lawrence	2002.084B							
Wirelessly Powered Electronic Medical Devices	Medical devices and implants	Zane-Popovic	CU1342B							
Polymer System for Tissue Regeneration	Tissue and organ regeneration	Kristi Anseth	2001.028B							

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