

AUTM Partnering Forum

Medical Device Partnering Forum

Technologies represented: Updated on 2/6/19

Devices		
Technology Title	Organization	Organization Contact
An Anchored Non-Spherical Balloon for Obesity Treatment – Disclosure #SZI-0039	Children's National Medical Center	Sangeetha Raghavan
Augmented Reality Hybrid Endoscopic Visualization System with Refined Tracking and Calibration – Disclosure #SZI-0022, SZI-0071, SZI-0072	Children's National Medical Center	Sangeetha Raghavan
Automated Inflatable Binder to Counter the Effects of Orthostatic Hypotension	Vanderbilt University	Taylor Jordan
Autopilot Video Laryngoscope for Successful Single-handed Intubation – Disclosure #SZI-0070	Children's National Medical Center	Sangeetha Raghavan
Bedside Disposable Endoscope	Vanderbilt University	Masood Machingal
Biocompatible and Biodegradable Polymer Fiber Optical Waveguides	Penn State	Dustin Ritter
Body Mountable Robot for MR and CT Applications – Disclosure #SZI-0093	Children's National Medical Center	Sangeetha Raghavan
Catheter Having Temperature Controlled Anchor and Related Methods	Vanderbilt University	Taylor Jordan
Chest tube fixation device	Stavanger University Hospital	Matyas Kolsofszki
Continuous Shear Wave Elastography to Measure Stiffness in Soft Tissue	Penn State	Dustin Ritter
CoRISMA - Next Generation Ventricular Heart Assist Therapy	Yale University	Richard Andersson

Delivery Tool and Method for Devices in the Pericardial Space – Disclosure #SZI-0042	Children's National Medical Center	Sangeetha Raghavan
Device for Automated Point-of-Care Recognition of Innocent Still's Murmur in Children – Disclosure #SZI-0053	Children's National Medical Center	Sangeetha Raghavan
Disposable Hydro-Jet Capsule Robot for Gastric Cancer Screening in Low-Income Countries	Vanderbilt University	Masood Machingal
Endotracheal Tube Fixation Device	Stavanger University Hospital	Matyas Kolsofszki
Guidewire Torque Device for Interventional Medical Procedures	Vanderbilt University	Chris Harris
Image-Guided Navigation System for Endoscopic Eye Surgery	Vanderbilt University	Ashok Choudhury
Integrated Low-Profile Filtering Antennas for Wearable Communication Systems	Penn State	Dustin Ritter
IntelliCane: Instrumented cane for diagnosis and evaluation of gait	Vanderbilt University	Masood Machingal
LUMASIL: A Low-Level Light Therapy Device for Treating Diabetic Foot Ulcers	Vanderbilt University	Masood Machingal
Metasurface Wearable Antenna	Penn State	Dustin Ritter
Microwave Heating for Blood Perfusion Measurement	Penn State	Dustin Ritter
Millimeter-Sized 'Gastric Seeds' for Diagnosis and Treatment of Gastric Motility Disorders	Penn State	Dustin Ritter
Myoelectric Robotic Hand	Vanderbilt University	Ashok Choudhury
MRI and CT Compatible Robot Alleviates Patient Discomfort in Needle Placement Procedures – Disclosure #SZI-0023	Children's National Medical Center	Sangeetha Raghavan
Non-Invasive Skin Cancer Detection System using Raman Spectroscopy & OCT	Vanderbilt University	Ashok Choudhury

Palatoglossal Stimulation for the Treatment of Obstructive Sleep Apnea	Vanderbilt University	Chris Harris
Patent Ductus Stent	Vanderbilt University	Taylor Jordan
Patient-Specific Tissue Engineered Vascular Graft System – Disclosure #SZI-0056	Children's National Medical Center	Sangeetha Raghavan
Peripheral Venous Catheter (PVC) fixation device	Stavanger University Hospital	Matyas Kolsofszki
Polymer-Blend Surgical Tissue Sealant - Disclosure #CRI-0022	Children's National Medical Center	Sangeetha Raghavan
PREMIEBREATHE - Breathing Aid for Newborns Suffering from Respiratory Distress	Yale University	Richard Andersson
PURE MARROW - Drug/Device Needle for Bone Marrow/Stem cell Transplant	Yale University	Richard Andersson
Radiation-Free Guidance for Transseptal Left Atrial Catheterization – Disclosure #CNMC-0023	Children's National Medical Center	Sangeetha Raghavan
Real-time Detection of Position and Orientation of Wireless Endoscopy Capsule	Vanderbilt University	Masood Machingal
Robotically Assisted Ankle Rehabilitation System (PedBot) – Disclosure #SZI-0064	Children's National Medical Center	Sangeetha Raghavan
Smart Tip LVAD Cannula	Penn State	Dustin Ritter
Speculum-Free Diagnostic Probe for Optical Assessment of the Cervix	Vanderbilt University	Ashok Choudhury
Stents/Balloons - Drug-coated balloon with sustained drug release - promotes re-endothelialization and reduces VSMC proliferation	Louisiana State University	Dan Felch
The Biocage: An Implantable Device for Direct Local Delivery of Therapeutic Agents – Disclosure #CNMC-0036	Children's National Medical Center	Sangeetha Raghavan
Vascular Access Kit	Stavanger University Hospital	Matyas Kolsofszki
Wireless Tissue Palpation for Minimally Invasive Robotic Surgery Techniques	Vanderbilt University	Masood Machingal

Wristed, Dexterous Laparoscopic Instrument	Vanderbilt University	Ashok Choudhury
Diagnostic		
Technology Title	Organization	Organization Contact
Affordable and easy-to-use diagnostic tool for eye disease detection/Smartphone attachment for analyzing corneal topography	Texas Tech University	Hutton Jones
Assessment of Right Ventricular Function Using Contrast Echocardiography	Vanderbilt University	Chris Harris
Biomedical Super-Resolution Imaging based on Ultrasound-Switchable Fluorescence	University of Texas at Arlington	Sharon Ngwenya
Chemically patterned paper-microfluidic device (cPMD) for medical screening and environmental monitoring/A Chemically Functionalized Paper-based Microfluidic Platform for Multiplex Heavy Metal Detection	Texas Tech University	Hutton Jones
Device and Software System to Assess and Manage Treatment Planning for Inflammatory Bowel Disease – Disclosure #SZI-0037	Children's National Medical Center	Sangeetha Raghavan
Diagnostic Technology for the Detection of Ultralow-Concentration Biomolecules	University of Texas at Arlington	Sharon Ngwenya
Domain Diffuse Optical Tomography Transrectal-Ultrasound (TRUS) for Enhanced Prostate Imaging	University of Texas at Arlington	Sharon Ngwenya
Imaging Systems - Hardware/Software solution for better soft-tissue CT imaging	Louisiana State University	Dan Felch
Imaging Systems - Phase-contrast X-ray interferometry with chirp grating, for improved low-dose resolution and contrast	Louisiana State University	Dan Felch
Injectable and Degradable Cancer Trap to Reduce Metastasis Cancer	University of Texas at Arlington	Sharon Ngwenya
Method to Obtain High Quality Medical Diagnostic Images at Low Radiation – Disclosure #SZI-0078	Children's National Medical Center	Sangeetha Raghavan
Nano-Scale Biosensor for Gene and Protein Expression Analysis	University of Texas at Arlington	Sharon Ngwenya

Point of Care Rheological Assay for Sickle Cell Disease	Vanderbilt University	Ashok Choudhury
Radiation-free quantification of intracranial volume and cranial bone malformations from 3D photography – Disclosure #SZI-0077	Children's National Medical Center	Sangeetha Raghavan
Reporter Dyes - Enzyme-activated fluorescent markers for imaging disease	Louisiana State University	Dan Felch
Software System to Analyze Complex Brain and Biological Images to Predict Disease Progression – Disclosure #SZI-0063	Children's National Medical Center	Sangeetha Raghavan
Software System to Diagnose Excess Kidney Fluid to Minimize Imaging Procedures – Disclosure #SZI-0061	Children's National Medical Center	Sangeetha Raghavan
System for Rapid Antimicrobial Susceptibility Testing and Pathogen ID	Penn State	Dustin Ritter
Zero-Power Biochemical Analysis Platform	Penn State	Dustin Ritter
Drug Therapy and Delivery		
Technology Title	Organization	Organization Contact
Adipocyte-derived Exosomes as drug delivery vehicles	Children's National Medical Center	Sangeetha Raghavan
RF-Modulated Drug Delivery System with Spatiotemporal Control	Penn State	Dustin Ritter
Supramolecular Chitosan Complex as a Novel Drug Delivery Platform	SUNY ESF: College of Environmental Science and Forestry	Olga Petrova
Therapeutic Microneedles for Hair Regrowth	Penn State	Dustin Ritter
PHA Polymer Production for Medical Materials and Drug Delivery	SUNY ESF: College of Environmental Science and Forestry	Olga Petrova
Neurologic Devices		
Technology Title	Organization	Organization Contact
Diagnostic: Contact-less tremor detector	University of Texas at Arlington	Sharon Ngwenya
Diagnostic: DETECT: A Rapid, Portable Technology to Screen for Concussions and Mild Traumatic Brain Injury	Emory University	Rajsekhar Guddneppanavar

Diagnostic: Implantable Device to Predict Epileptic Seizures	Emory University	Rajsekhar Guddneppanavar
Diagnostic: NEUROPROBE - Multimodal Brain Monitoring in the Neuro-ICU	Yale University	Richard Andersson
Surgical: Microporous Catheter Array for Delivery of Neurotherapeutics	University of Virginia Licensing & Ventures Group	Heather Bansbach
Surgical: Transnasal Sheath for Endoscopic Skull Base Surgeries	University of Virginia Licensing & Ventures Group	Heather Bansbach
Therapeutic: AcuStim: Wearable stimulator for veterinary electro-acupuncture	Louisiana State University	Dan Felch
Therapeutic: Adaptive Cognitive Prosthetic	Princeton University	Laurie Tzodikov
Therapeutic: A Method and Device for the Transdermal Delivery of Lithium	Emory University	Rajsekhar Guddneppanavar
Therapeutic: High-precision navigation method for transcranial magnetic stimulation (TMS) therapy for brain disorder/depression	Illinois Institute of Technology	Catherine Vorwald
Therapeutic: Mechanisms and Methods for Long-Distance and Selective Nerve Growth	University of Texas at Arlington	Sharon Ngwenya
Therapeutic: Regenerative Interface Electrode for Nerve Growth Stimulation	University of Texas at Arlington	Sharon Ngwenya
Adjustable Universal Platform for Surgical Navigation, Approach, and Implantation	Vanderbilt University	Ashok Choudhury
Endonasal Surgical Robot for Neurosurgery	Vanderbilt University	Ashok Choudhury
MemoryMonitor: A real-time neuroscientific-learning monitor	Vanderbilt University	Masood Machingal
Patient Specific Head Mount for Image-Guided Neurosurgery	Vanderbilt University	Ashok Choudhury
Perforating Drill Bit for Use During Deep Brain Stimulation Surgery	Vanderbilt University	Ashok Choudhury
Orthopaedic Devices		

Technology Title	Organization	Organization Contact
Diagnostic: Micro- and nano-device for cartilage injury detection and treatment	University of Texas at Arlington	Sharon Ngwenya
Diagnostic: SpineGuide: Magnetic Resonance Imaging-Compatible Spinal Therapeutics Delivery System	Emory University	Rajsekhar Guddneppanavar
Prosthetic: CCLink: Coracoclavicular Fixation Device	University of Virginia Licensing & Ventures Group	Heather Bansbach
Prosthetic: Improved Ankle Fusion Nail	Texas Tech University Health Science Center	Hutton Jones
Prosthetic: Internal Bone Lengthener by Plate and Screws	Texas Tech University Health Science Center	Hutton Jones
Prosthetic: Pneumatically actuated exoskeleton system for hand rehabilitation	University of Texas at Arlington	Sharon Ngwenya
Prosthetic: Spinal Frame for Resource Limited Settings	Emory University	Rajsekhar Guddneppanavar
Surgical: Cannulated Bone Tamp for Revision ACL Reconstruction Surgery	University of Virginia Licensing & Ventures Group	Heather Bansbach
Surgical: GrabTen: Optimized implant for incremental suture tensioning with standard bone tunnel	Louisiana State University	Dan Felch
Surgical: Graduated ACL Tibial Guide for ACL Reconstruction Surgery	University of Virginia Licensing & Ventures Group	Heather Bansbach
Surgical: GraftGrab: Tissue graft tension fixation instrument, for soft tissue repair	Louisiana State University	Dan Felch
Surgical: Graft Preparation System	Binghamton University	Olga Petrova
Surgical: HoldTen: A device for tensioning and fixation of multiple sutures to hard tissue	Louisiana State University	Dan Felch
Bone fixture assembly	University of Massachusetts Medical School	Pritam Patil
Compositions and methods for surface mineralization	University of Massachusetts Medical School	Pritam Patil

Compositions and methods for templating three-dimensional mineralization	University of Massachusetts Medical School	Pritam Patil
Elastomeric and degradable high-mineral content polymer composites	University of Massachusetts Medical School	Pritam Patil
Elastomeric and degradable polymer scaffolds and high-mineral content polymer ...	University of Massachusetts Medical School	Pritam Patil
Multi-functional surface coating of implants	University of Massachusetts Medical School	Pritam Patil
Research Tool		
Technology Title	Organization	Organization Contact
Anatomically Realistic, Flexible Anthropomorphic Phantoms to Optimize Imaging Algorithms	Children's National Medical Center	Sangeetha Raghavan
Bioprinted Pancreas-on-a-Chip Platform for Drug Response Evaluation	Penn State	Dustin Ritter
Fluorogenic Assay of Protein Soluble and Insoluble Aggregates	Penn State	Dustin Ritter
Generation of Pancreatic Progenitors from Human Pluripotent Stem Cells Under Chemically Defined and Growth-Factor-Free Conditions	Penn State	Dustin Ritter
Reversible Polymeric Signal Amplification	Penn State	Dustin Ritter
Simple Microfluidic Device for 3D Hydrodynamic Focusing	Penn State	Dustin Ritter
Spatiotemporal Control of Microenvironment Using Oscillating Bubbles	Penn State	Dustin Ritter
System to Measure Phase Behavior of Concentrated Therapeutic Proteins	Penn State	Dustin Ritter
Versatile Display Scaffolds for Proteins	Penn State	Dustin Ritter
Software		
Technology Title	Organization	Organization Contact
Diagnostic - Universal software for automated anthropometry	Louisiana State University	Dan Felch

IDEAS: An Integrative and Discriminative Epigenome Annotation System	Penn State	Dustin Ritter
Imaging Software for Cranial Vault Reconstruction Surgery & Planning	Children's National Medical Center	Sangeetha Raghavan
Software System to Predict Outcome of Hemorrhage in Neonates using Cranial Ultrasound	Children's National Medical Center	Sangeetha Raghavan
Surgical		
Technology Title	Organization	Organization Contact
Cardiovascular: VADStent	University of Virginia Licensing & Ventures Group	Heather Bansbach
Endoscopic: Precision Endosurgery Suturing Device	Penn State	Dustin Ritter
Laparoscopic: HotPort for Minimally Invasive Surgery	University of Virginia Licensing & Ventures Group	Heather Bansbach
Post Surgical: Precision Medicine diabetic wound healing matrix-mediated stimulation of autologous fibroblasts	Illinois Institute of Technology	Catherine Vorwald
Surgery Aids: Table-top Analyzer-based phase contrast imaging with compact x-ray source	Illinois Institute of Technology	Catherine Vorwald
Allograft Insertion Device for Corneal Tissue Replacement	University of Texas at Arlington	Sharon Ngwenya
Image-Guided Surgery - Accuracy Enhancements	Vanderbilt University	Philip Swaney
Microrobot for Diagnosis and Evaluation of Tissue Properties in Confined Spaces	University of Texas at Arlington	Sharon Ngwenya
Minimally Invasive Internal Suturing System	Emory University	Rajsekhar Guddneppanavar
No Suture Chest Tube	Texas Tech University Health Science Center	Hutton Jones
Operating Room Table Clamp	Emory University	Rajsekhar Guddneppanavar
Operating Room Video System	Emory University	Rajsekhar Guddneppanavar

Portfolio of Continuum Robotic Systems, Algorithms, and Software Technologies	Vanderbilt University	Masood Machingal
Self-Deployed Cuff and Skirt Tracheal Tube	Texas Tech University Health Science Center	Hutton Jones
Smart Wearable Surgical Camera	Vanderbilt University	Philip Swaney
Scalpel handle	University of Massachusetts Medical School	Pritam Patil
Surgical cavity drainage and closure system	University of Massachusetts Medical School	Pritam Patil
Surgical forceps	University of Massachusetts Medical School	Pritam Patil
SYSTEMS AND METHODS FOR PREVENTION OF PRESSURE ULCERS	University of Massachusetts Medical School	Pritam Patil
Systems and methods for prevention of pressure ulcers	University of Massachusetts Medical School	Pritam Patil
Universal Surgical Wrist Support	Emory University	Rajsekhar Guddneppanavar
Zygomatic elevator device and methods	University of Massachusetts Medical School	Pritam Patil
Therapeutic		
Technology Title	Organization	Organization Contact
Multimodal Theranostic NanoParticles	Children's National Medical Center	Sangeetha Raghavan
Imaging Software for Cranial Vault Reconstruction Surgery & Planning	Children's National Medical Center	Sangeetha Raghavan
Immune-Cell-Mediated Stem Cell Delivery for Tissue Regeneration	Penn State	Dustin Ritter
Software System to Predict Outcome of Hemorrhage in Neonates using Cranial Ultrasound	Children's National Medical Center	Sangeetha Raghavan
Other		
Technology Title	Organization	Organization Contact
Biologics: Amphiphilic degradable polymers for immobilization and sustained delivery of ...	University of Massachusetts Medical School	Pritam Patil

Biologics: Chemically modified cellulose fibrous meshes for use as tissue engineering ...	University of Massachusetts Medical School	Pritam Patil
Biologics: Degradable hydrogel with predictable tuning of properties, and compositions and ...	University of Massachusetts Medical School	Pritam Patil
Biologics: Monomers and polymers for functional polycarbonates and poly(ester-carbonates) ...	University of Massachusetts Medical School	Pritam Patil
Biologics: Thermal-Responsive Polymer Networks, Compositions, And Methods And Applications ...	University of Massachusetts Medical School	Pritam Patil
Biologics: Zwitterionic hydrogels for delivery of biomolecules	University of Massachusetts Medical School	Pritam Patil
Cardiac Surgical Devices: Annuloplasty Rings for Tricuspid Valve Repair	Emory University	Rajsekhar Guddneppanavar
Cardiac Surgical Devices: CorAccess: Tissue Strengthening and Port Access System for Transapical Cardiac Surgery	Emory University	Rajsekhar Guddneppanavar
Cardiac Surgical Devices: Heart Stabilizer for Minimally Invasive Cardiac Bypass Surgeries	Emory University	Rajsekhar Guddneppanavar
Cardiac Surgical Devices: Improved Antegrade Catheter for Delivery of Cardioplegia Solutions	Emory University	Rajsekhar Guddneppanavar
Cardiac Surgical Devices: MitraPlug: Transcatheter Mitral Valve Repair	Emory University	Rajsekhar Guddneppanavar
Cardiac Surgical Devices: MitraSurg: A Device for Minimally Invasive Robotic Mitral Valve Repair	Emory University	Rajsekhar Guddneppanavar
Cardiac Surgical Devices: Modified Protein Polymers (B10)	Emory University	Rajsekhar Guddneppanavar
Cardiac Therapeutic Devices: A Catheter for Delivery of Stem Cells or Cytokines to the Heart via the Pericardial Space	Emory University	Rajsekhar Guddneppanavar

Cardiac Therapeutic Devices: Catheter for Controlled Drug Delivery during Reperfusion	Emory University	Rajsekhar Guddneppanavar
Cardiac Therapeutic Devices: Modified Protein Polymers	Emory University	Rajsekhar Guddneppanavar
Cardiac Therapeutic Devices: Stent Sheath Technology For Local Drug Delivery Following Angioplasty	Emory University	Rajsekhar Guddneppanavar
Cardiovascular: A Wireless Wrist-worn Heart Sound Monitor	University of Texas at Arlington	Sharon Ngwenya
Diabetes: Anti-Inflammatory Conformal Barriers for Cell Transplantation	Emory University	Rajsekhar Guddneppanavar
Diabetes: Dermally Implantable Optical Glucose Biosensors	Penn State	Dustin Ritter
Diabetes: Insulin-Producing Microcapsules for Treatment of Type 1 Diabetes	Emory University	Rajsekhar Guddneppanavar
Diabetes: Lancing Strip for Self Monitoring of Blood Glucose	University of Virginia Licensing & Ventures Group	Heather Bansbach
Emergency Medicine: Endovascular Occlusion Device for Controlling Traumatic Hemorrhage	University of Virginia Licensing & Ventures Group	Heather Bansbach
Emergency Medicine: Clog Resistant Medical Suction Device	University of Virginia Licensing & Ventures Group	Heather Bansbach
Endotracheal tubes: Double-lumen Endotracheal Tube with Double Beak	University of Virginia Licensing & Ventures Group	Heather Bansbach
Endotracheal tubes: OstoPump: Ostomy System for Enteral Refeeding	University of Virginia Licensing & Ventures Group	Heather Bansbach
Endotracheal tubes: SafetyBreak for Percutaneous Endoscopic Gastrostomy (PEG) Tubes	University of Virginia Licensing & Ventures Group	Heather Bansbach
Equipment: Always In Reach (AIR) Intubation Tray	Texas Tech University Health Science Center	Hutton Jones
Equipment: Low Power Electrically-Driven Microfluidic Pumping/Delivery Device	Binghamton University	Olga Petrova

Equipment: Pressure Ulcer Prevention: Dual Layer Active Insole for Diabetic Foot Ulcer Prevention	University of Texas at Arlington	Sharon Ngwenya
Equipment: Pressure Ulcer Prevention: iGait: Low-Cost and Non-Wearable System for Walking Pattern Monitoring	University of Texas at Arlington	Sharon Ngwenya
Equipment: Pressure Ulcer Prevention: Pressure Offloading and Redistribution for the Prevention of Pressure Ulcers	University of Texas at Arlington	Sharon Ngwenya
Equipment: Pressure Ulcer Prevention: Smart Shoes For Diabetic Foot Ulcer Prevention and Rehabilitation	University of Texas at Arlington	Sharon Ngwenya
Equipment: Pressure Ulcer Prevention: Pressure Ulcer Prevention Pad	Binghamton University/PUPP Inc.	Olga Petrova
Eye Devices: Near Vision Accommodating Intraocular Lens with Adjustable Power	Emory University	Rajsekhar Guddneppanavar
Eye Devices: Surgical Kit for Treating Age-Related Macular Degeneration (AMD)	Emory University	Rajsekhar Guddneppanavar
Imaging: Medical Imaging Based on Full Waveform Imaging or Adjoint Tomography	Princeton University	Linda Jan
Imaging: Tunable Liquid GRIN Microlens for Endoscopes and Labs-on-a-Chip	Penn State	Dustin Ritter
Inhalation Drug Delivery - Deep lung delivery via nano-aerosols for asthma and controlling abuse of opioids in pain management	Princeton University	Laurie Tzodikov
Instruments: Label-free, high-throughput holographic cell screening	Texas Tech University	Hutton Jones
Instruments: Lab-on-a-chip: High Precision and Fast Dispensing Digital Microfluidic Device	University of Texas at Arlington	Sharon Ngwenya
Instruments – Imaging: 2D and 3D Noninvasive imaging of the Retina Microvasculature	University of Texas at Arlington	Sharon Ngwenya

Instruments: Software-Defined Radar Respiration monitor for Gated Lung Cancer Radiotherapy	Texas Tech University	Hutton Jones
Kidney Device: KIDSCRRT – A Device for Continuous Renal Replacement Therapy in Children	Emory University	Rajsekhar Guddneppanavar
Kidney Device: Improved Fluid Management System for Continuous Hemofiltration	Emory University	Rajsekhar Guddneppanavar
Mammography/Radiopharmaceutical: Table-top Analyzer-based phase contrast imaging with compact x-ray source	Illinois Institute of Technology	Catherine Vorwald
Electroactive Biodegradable Polymers with Photoacoustic Contrast	Penn State	Dustin Ritter
MRI-Active Biodegradable Polymers	Penn State	Dustin Ritter
Medical Device Security: MedMon: A Novel Device for Monitoring Medical Device Security	Princeton University	Laurie Tzodikov
Medical Device Security: Vibration-Based Secure Side Channel for Medical Devices	Princeton University	Laurie Tzodikov
Medical Device Security: Hardware/Software Architecture for Improving the Safety of Implantable and Wearable Medical Devices	Princeton University	Laurie Tzodikov
Medical Imaging/Radiopharmaceutical: Platform binding agent & linker copositions for diagnostic imaging & targeted radiation therapy	Illinois Institute of Technology	Catherine Vorwald
Medical monitoring: A Hierarchical Health Decision Support System Based on Wearable Medical Sensors and Machine Learning Ensembles	Princeton University	Laurie Tzodikov
Medical monitoring: Keep the Stress Away With SoDA: Stress Detection and Alleviation System	Princeton University	Laurie Tzodikov
Medical monitoring: Noninvasive Mid-Infrared In Vivo Glucose Sensor	Princeton University	Laurie Tzodikov

Medical Training: Method for creating a synthetic pulse on an actor during medical simulation	Texas Tech University Health Science Center	Hutton Jones
Oncology: Radiation Bandage	Binghamton University/DB Therapeutics	Olga Petrova
Organs-on-a-chip: Novel microfluid devices with extracellular matrix membranes	Illinois Institute of Technology	Catherine Vorwald
Ostomy Devices: Extended Wear Carrier for Liquid Deodorizers Used in an Ostomy Pouches	Emory University	Rajsekhar Guddneppanavar
Ostomy Devices: Liquid Deodorizer for Ostomy Pouches	Emory University	Rajsekhar Guddneppanavar
Ostomy Devices: Solid Deodorizer for Ostomy Pouches	Emory University	Rajsekhar Guddneppanavar
Point-of-care, renal dialysis: Bead-based enzymatic assay/multiple detection of different class of molecules	Illinois Institute of Technology	Catherine Vorwald
Sensors: A self-powered paper-based microbial sensor for lactate monitoring in sweat	Binghamton University	Olga Petrova
Sensors: Biological fluid and biomarker sensor	Binghamton University	Olga Petrova
Sensors: Breath sensor for detection of volatile organic compounds (Applications include lung cancer biomarker detection)	Binghamton University	Olga Petrova
Sensors: Self-powered Paper Patch for Glucose Monitoring in Sweat and Detection of Exercise-Induced Hypoglycemia	Binghamton University	Olga Petrova
Tommography: ADEPT spatial resolution-enhanced dual-wavelength time-domain fluorescence tomography system	Illinois Institute of Technology	Catherine Vorwald
A Simple and Highly Portable Flow Phantom for Doppler Ultrasound Quality Measurements	Vanderbilt University	Chris Harris

Heart Rate Estimation from Face Videos	Binghamton University	Olga Petrova
Implants for Smoothing Out Nasolabial Folds	Emory University	Rajsekhar Guddneppanavar
Improved Timing Pulse Generator and Programmer	Emory University	Rajsekhar Guddneppanavar
Low Profile Oral Airway	Vanderbilt University	Philip Swaney
Method and Apparatus for Applying Vibromyographic Technology to the Assessment of Muscle Force and Balance	Binghamton University	Olga Petrova
Non-Invasive Measurement of Skin Tension Lines	Binghamton University	Olga Petrova
Poly(B-Amino Ester) Co-Methyl Methacrylate Networks	Emory University	Rajsekhar Guddneppanavar
Substance for Prevention of Biofilm Formation on Medical Surfaces	Binghamton University	Olga Petrova
Vivarium for Continuous, Wireless Monitoring of Animal Behavior and Physiology	Emory University	Rajsekhar Guddneppanavar