

College	Department Name	Name	Involved in Sustainability Research?	Research Project Example	Major Sustainability Challenge (UN SDGs)
Manning School of Business	Marketing, Entrepreneurship and Innovation	Dunlap, Denise	Y	FCOI: The Center for Advancing Point of Care in Heart, Lung, Blood and Sleep Diseases	Good health and well-being
Francis College of Engineering	Biomedical Engineering	Buchholz, Bryan O	Y	RCR: FCOI: Occupational Health and Safety Training Grant	Decent work and economic growth
		Punnett, Laura	Y	FCOI: Center for the Promotion of Health in the New England Workplace (CPHNEW)	Decent work and economic growth
		Roelofs, Cora Ruth	Y	DIA Opioid Alternative Pathway Program Evaluation	Good health and well-being
		Xi, Jinxiang	Y	Testing and Multi-scale modeling of IM Reusable Masks with Optimal Fiber Matrix Configuration and Charge Loading	Responsible consumption and production
		Black, Bryan James	N	FCOI: hiPSC-based DRG Tissue Mimics on Multi-well Microelectrode Arrays as a Tissue Chip Model of Acute and Chronic Nociception	
		Franco, Walfre	N	Only photons can do that	
		Ghezzi, Chiara Elia	N	Use of Subcutaneous Silk Scaffolds to Modulate the Interface between Skin and Percutaneous Osse	
		Li, Yanfen	N	Strip Away the Backlog	
	Chemical Engineering	Che, Fanglin	Y	EAGER: Electrocatalysis Modulated by Bifunctional Organic Monolayer: CO2 Reduction to C2	Climate action - GHG reduction
		de Almeida, Valmor	Y	Design of a Commercial-Scale, Fluoride-Salt-Cooled, High-Temperature Reactor with Novel Refueling and Decay Heat Removal Capabilities	Affordable and clean energy
		Galbraith, Shaun Colin	Y	Building Cooperative Biomanufacturing Workforce Training Network	Decent work and economic growth
		Aghara, Sukesh	N	EV: Aggregating Detection Probabilities for Evaluating State-Level Objectives via Monte Carlo Techniques	
		Camci-Unal, Gulden	N	RES: Rapid Bio-Detection and Identification Multiplex System	
		Gu, Zhiyong	N	EV: AT2 - CLIN 0043 - Electronic Textiles Platform for Physiological Monitoring, Sensing, Data, and Power Mgmt	
		Lawton, Carl W.	N	Entegris: Filtration Equipment Testing	
		Xie, Dongming	N	E. coli fermentation Optimization and Recombinant VHH Protein Production	
		Yoon, Seongkyu	N	2020-37: Transcriptomic Studies Coupled with Medium Optimization to Address the "Bottleneck" in the Cellular Physiology for AAV Production	
		Civil and Environmental Engineering	Chen, Danjue	Y	A UAS Network for Transportation Emergency Response
	Faraji, Susan		Y	Base Project 3.7 - Behavior, Analysis and Design of Integral Abutment	Industry, innovation and infrastructure
	Kurup, Pradeep U.		Y	EV: MN10-P3 - CLIN 0037 - Voltammetric Sensor System for the Detection of Toxic Metals and Organics in Water	Life below water - pollution prevention
	Pagsuyoin, Sheree		Y	RCR: FCOI: CAREER: Environmental Fate and Ecosystem Impacts of Drugs of Abuse in Receiving Waters (INTERN Funding)	Life below water - pollution prevention
	Xie, Yuanchang		Y	Developing Massachusetts Specific Trip Generation Models for Land Use Projects	Sustainable cities and communities
	Yan, Weile		Y	Chemically Enhanced Electrodialysis for Recovery of Rare Earth Elements	Life on land - pollution prevention
	Yu, Tzu-Yang		Y	C.11 - Development of a system-level distributed sensing technique for long-term monitoring of concrete and composite bridges. Research Thrust Area: Thrust # 1	Industry, innovation and infrastructure
	Zhang, Xiaoqi		Y	Implementation of the Statewide Sampling for PFAS Contaminants in Drinking Water	Life below water - pollution prevention
	Stamatiadis, Polichronis		N	Multisource Data Fusion for Real-Time and Accurate Traffic Incident Detection via Predictive Analytics	
	College of Engineering		Mead, Joey L.	Y	RES: Environmental-Friendly Superhydrophobic Coating Development
Chandra, Kavitha		N	RCR: Collaborative Research: IGE: Graduate Education in Cyber-Physical Systems Engineering		
Electrical and Computer Engineering	Lin, Yuzhang	Y	B1-20 - Navy Research Collaboration on Energy Resiliency	Affordable and clean energy	

		Lu,Xuejun	Y	RES: Wireless High Temperature Sensor Network for smart boiler systems	Affordable and clean energy
		Wang,Xingwei	Y	Base Project 1.5 - Distributed Sensing Textile for Bridge Monitoring	Industry, innovation and infrastructure
		Akyurtlu,Alkim	N	Task 1 and 2 - 2021 IRAD Engineering Services	
		Armiento,Craig	N	RES: Maritime Targeting Cell-Afloat	
		Chigan,Chunxiao	N	RCR: CCSS: Collaborative Research: Intelligent Full-Duplex Cognitive Radio Networks for Pervasive Heterogeneous Wireless Networking	
		Dutta,Joyita	N	Super-Resolution Tau PET Imaging for Alzheimer's Disease	
		Prasad,Kanti	N	Design Simulation with Exhaustive Testing of MMIC Transceiver Chipset using RF-ECAD deployable in 5G Mobile Communications	
		Robinette,Paul Michael	N	Individualized Adaptations to Calibrate Multi-Human Multi-Agent Team Trust	
		Shemelya,Corey Michael	N	Characterization of Thin-Film, RF Material Systems	
		Son,Seung Woo	N	RCR: CAREER: Reliable and Efficient Data Encoding for Extreme-Scale Simulation and Analysis	
		Strack,Guinevere Marie	N	Exhibit A - Conductive Inks for Aerosol Ink Jet Printing	
		Vokkarane,Vinod Mandayam	N	RCR: CNS Core: Small: Flexible Spectrum Allocation in Next-Generation Optical Networks	
		Weitzen,Jay A	N	e-Loran for use in timing and navigation (SBIR)	
		Wickramaratne,Dodampege Thanuka Lakmal	N	Opportunistic Sensing, Data Fusion, Vehicular Traffic Modeling, and Security using 5G Cellular Networks	
		Zhang,Hualiang	N	Compact LWIR Hyperspectral Imager (SBIR)	
	Mechanical Engineering	Agar,Ertan	Y	RES: Manufacturing of Fabric Electrodes using a High-Throughput Screening Platform for Redox Flow Batteries	Affordable and clean energy
		Hansen,Christopher J	Y	Creating the Next Generation Offshore Wind Workforce: Teaming with Industry to Fill Skills Gaps of MA Workforce	Affordable and clean energy
		Inalpolat,Murat	Y	Development of an Acoustics-based Automated Offshore Wind Turbine Blade Structural Health Monitoring System	Affordable and clean energy
		Kosny,Jan	Y	E3-20 - Navy Research Collaboration on Energy Resiliency	Affordable and clean energy
		Mack,John Hunter	Y	G1-20 - Navy Research Collaboration on Energy Resiliency	Affordable and clean energy
		Mao,Zhu	Y	Base Project 3.8 - Bridge Modal Identification via Image Processing and Quantification of Uncertainties	Industry, innovation and infrastructure
		Niezrecki,Christopher	Y	RCR: Phase II IUCRC University of Massachusetts Lowell: Center for Wind Energy Science, Technology and Research (WindSTAR)	Affordable and clean energy
		Sabato,Alessandro	Y	C1-20: Navy Research Collaboration on Energy Resiliency	Affordable and clean energy
		Sun,Hongwei	Y	F4-20 - Navy Research Collaboration on Energy Resiliency	Affordable and clean energy
		Van Dam,Noah Edwin	Y	G4-20 - Navy Research Collaboration on Energy Resiliency	Affordable and clean energy
		Amirkhizi,Alireza Vakil	N	Enhanced Source Localization using Optimally Designed Metamaterials and Advanced Machine Learning for Underwater Applications	
		Avitabile,Peter	N	Experimental Investigations to Characterize "822" Roadbed Configuration	
		Chen,Lei	N	A universal and 3D-printed rat calvarium replacement system to enable for pan-cortical and sub-cortical recordings and optogenetics	
		Gu,Yan	N	CAREER: A Hybrid Filtering and Robust Control Framework for Legged Robot Locomotion on Dynamic Rigid Surfaces	
		Jerath,Kshitij	N	Neural Network Models of Competency Status To Enhance Human-Agent Team Performance	
		Jin,Xinfang	N	RES: A Multifunctional Isostructural Bilayer Oxygen Evolution Electrode for Durable Intermediate-Temperature Electrochemical Water Splitting	
		Maiaru,Marianna	N	Physics-Based Process Modeling for High Temperature and High Strength Composites	

	Plastics Engineering	Sherwood, James A.	N	Study of Baseball Compliance and Specifications	
		Stapleton, Scott Edward	N	Multi-Scale models based on Machine Learning and a Fiber Network Model	
		Trelles, Juan Pablo	N	EV: CLIN 109 - MN22 - Hydrogen Production from Solid Waste via Non-Thermal Plasma	
		Chen, Wan-Ting	Y	WRIP FY20: Microplastic Pollution in Freshwater Systems: Impacts of Biofilm Formation on Microplastic Surfaces	Life below water - pollution prevention
		Nagarajan, Ramaswamy	Y	Photovoltaic Energy Harvesting Textiles for Homeland Security Ensembles	Affordable and clean energy
		Park, Jay Hoon	Y	2021 M2I2 Award: Development of Alternative Filtration Media for Personal Protective Equipment	Responsible consumption and production
		Sobkowicz Kline, Margaret J	Y	RES: Biocconversion of Heterogeneous Polyester Wastes to High Value Chemical Products	Life on land - pollution prevention
		Ameli, Aboutaleb	N	Commercialization Gap Fund, 2020- Zhang	
		Barry, Carol M.F.	N	Injection molding of test specimens and characterization of the mechanical properties for materials	
		Budhlall, Bridgette	N	Antimicrobial, Anti-fouling, Antioxidative, Anti UV Properties of Plastic nanocomposites and Coatings	
		Johnston, Stephen P.	N	CIM IRAD 2020	
		Masato, Davide	N	Small scale thermoforming characterization	
		Peterson, Amy Michelle	N	Gradient, Large Scale Additively Manufactured Ceramic Structures	
College of Fine Arts, Humanities and Social Sciences	College of Fine Arts, Humanities and Social Sciences	Toof, Robin	Y	Re-Imagining Broadway-Crime Reduction Project	Sustainable cities and communities
		Kim, Sue J.	N	Resilience and Renaissance: Southeast Asian American Community Organizations	
	School of Education	Angulo, AJ	Y	Preparing Transformative Teacher Leaders for Excellence in Gender Equity, Global Exchange, and Mutual Understanding	Gender equality
		Lohmeier, Jill	Y	USED Full Service Community Schools Grant Program Evaluator For Lowell Public Schools	Quality education
		Lustick, Hilary Alissa	N	Esperanza Academy Program Evaluation	
	Economics	Schneider, Jack Edward	N	NEA Partnership	
		Turcotte, David	Y	Reducing Older Adult Asthma Disparities & Extension (ROAAD-X)	Good health and well-being
	English	Flowers, Katherine Stinson	N	Making the English-Only Movement: Writing, Scaling, and Resisting Language Policy	
	History	Farrant, Robert	N	Lowell National Historical Park Research Project	
	Music	Johnson-Green, Elissa Ann	Y	The EcoSonic Playground Project at NFI Family Resource Center in Lowell, MA	Reduced inequalities
	Philosophy	Evans, Nicholas Greig	N	The Ethics of Warfighter Participation in the Development and Testing of AI-Driven Performance Enhancements	
	Political Science	Cluverius, John	Y	Survey for Cape Cod Commission	Climate action
	Psychology	Bond, Meg A.	Y	Climate Assessment: Massachusetts State Senate	Climate action
		Lawrence, Jason S.	Y	How are Biracial People Stereotyped? An Exploration of What It Means to Be Black and White	Reduced inequalities
		Balsis, Stephen Michael	N	Improving Patient Classification and Outcome Measurement in Traumatic Brain Injury (TBI)	
		Hillier, Ashleigh J.	N	Concentration in Developmental Disabilities	
		Shen, Jiabin	N	Virtual Reality-based Rehabilitation for Children with Traumatic Brain Injuries	
		Stearns, Miko Maria	N	CAREER: A system of pleas: Using a role-playing simulation to test plea decision models	
		Wang, Yan	N	Incorporating Machine Learning into Factor Mixture Modeling: Selection of Covariates to Predict Population Heterogeneity	
	School of Criminology and Justice Studies	Harris, Christopher J.	Y	Local Action Research Partner for the Shannon Community Safety Initiative: Lawrence site - FY2021	Sustainable cities and communities
Zhang, Sheldon Xiaodong		Y	An Exploratory Study of Labor Trafficking among U.S. Citizen Victims	Gender equality	
Harris, Andrew		N	Coordinated Tribal Assistance Program Survey and Analysis		
Palacios, Wilson Raul		N	Drug Checking Pilot Evaluation		

		Perliger,Arie Leon	N	Characterizing and Preventing Domestic Terrorism: A Mixed-Methods Study of Five Far-Right Terrorist Groups	
		Shields,Ryan	N	The MA Children's Alliance Evaluation Project	
		Shortland,Neil David	N	NIJ Research Assistantship	
		Kirschbaum,Sheila L.	Y	Mass Cultural Council Organizational Support	Decent work and economic growth
Zuckerberg College of Health Sciences	Biomedical and Nutritional Sciences	Feldeisen,Sabrina Noel	Y	DyeWorks and East Island transformative neighborhood development project	Sustainable cities and communities
		Kim,Jonghan	N	FCOI: Nanochelation-Based Theranostics for Alzheimer Disease	
		Mangano,Kelsey McKee	N	FCOI: The role of dietary titanium dioxide on the human gut microbiome and health	
		Tucker,Katherine Louise	N	ASN	
		Zhang,Boce	N	Nanopore Phylogenetic and Phylotranscriptomic Analysis of Oral Microbiome for COVID-19 Diagnostic Assay	
	College of Health Sciences	Bello,Dhimiter	Y	FCOI: Reactive Chemical Systems in Construction: Part B - Developing data-driven interventions	Good health and well-being
		Hartmann,Christine	N	FCOI: Enhancing Sleep Quality for Nursing Home Residents with Dementia: Pragmatic Trial of an Evidence-Based Frontline Huddling Program	
	Department of Public Health	Hoppin,Polly	Y	Integrating Environment into Cancer Prevention in Southwestern Pennsylvania	Good health and well-being
		Kriebel,David	Y	Support in the Development of Conklin Office Furniture's Environmental Management System	Life on land - pollution prevention
		Li,Wenjun	Y	FCOI: Neighborhood Risk Factors for Falls in the Elderly	Good health and well-being
		Quinn,Margaret M.	Y	FCOI: Safety and Health for Home Care Aides in Healthcare and Social Assistance: The Safe Home Care Intervention Study	Good health and well-being
		Rajabiun,Serena	Y	Integrating Community Health Workers as part of the HIV Care team in rural and urban settings to improve viral suppression in Shelby County TN	Good health and well-being
		Tickner,Joel	Y	GC3: Green Chemistry & Commerce Council	Life on land - pollution prevention
		Woskie,Susan	Y	FCOI: Impact of Open Burn Pit Exposure on Respiratory and Cardiovascular Health among Military Veterans	Good health and well-being
		Morose,Gregory	N	Evaluation of Applications Using Methylene Chloride and 1-Bromopropane	
		Palacios,Natalia	N	The Gut Microbiome in Parkinson Disease	
		Walter,Angela Wangari	N	FCOI: Implementation and Dissemination of 'Gabby,' a Health Information Technology (HIT) System for Young Women, into Community-Based Clinical Sites	
Labor Education		Pellerito,Elizabeth Mary	Y	Unions and Technological Change	Decent work and economic growth
Physical Therapy	Gauthier,Lynne Vonda	N	OSU Peer Review		
	Kao,Pei-Chun	N	EV: CLIN 104 - EX6 - Characterizing human adaptation and performance of soldier-relevant tasks while wearing exoskeletons		
	Swartz,Erik E	N	Reducing Head Impact Exposure in Hawaiian Football Players and Enhancing Community Awareness and Environment for Head-Safety		
	Wu,Yi-Ning	N	EV: CLIN 103 - EX5 - Mitigating impacts of explosive ordnance disposal (EOD) bomb suits on wearer performance via exoskeleton integration		
School of Nursing	El Ghaziri,Mazen	Y	FCOI: Development of Evidence Informed Learning Resources for the Reduction of Staff Trauma and Organizational Stress in Prison and Jail Settings	Decent work and economic growth	
	Enah,Comfort	Y	FCOI: Medical Information Service via mobile Telephone (m-MIST TM) Provider Support to Improve Pregnancy Outcomes	Good health and well-being	
	Zhang,Yuan	N	FCOI: Treatment of Circadian Disruption from Shiftwork in Older Adults		
Kennedy College of Sciences	Biological Science	Fish,Jennifer Leslie	N	FCOI: Cellular mechanisms underlying Fgf8-mediated asymmetry of the pharyngeal endoderm	

		Gaines, Peter C.	N	EV: Optimizing in vitro Cell Models of Injured Muscle and Immune Tissues: A New Tool to Identify Nutritional Interventions to Improve Muscle Repair	
		Hochberg, Rick	N	RCR: Collaborative Research: Life cycle evolution in Rotifera: The influence of sexual reproduction on contemporary systematics of Monogononta	
		Moore, Jeffrey Robert	N	Revealing Pathomechanisms of Mutant TPM1 Through a Hybrid Computational-Experimental Approach	
		Steinel, Natalie Christina	N	Fish (microbes) and chips	
		Sundar, Sai Lavanya	N	Biophysical characterization of cardiomyopathy-linked mutations of the tropomyosin overlap domain	
Chemistry		Gkikas, Emmanouil	Y	Breast Cancer Detection Empowered by Contrast Agents, Spectral CT, and Machine Learning	Good health and well-being
		Ross, Michael Brendan	Y	G2-20 - Navy Research Collaboration on Energy Resiliency	Affordable and clean energy
		Ryan, David K	Y	Safe and Efficient On-Demand Hydrogen Production by Catalytic Splitting of Water at Low Temperatures Using Nano-Structured Cobalt	Affordable and clean energy
		Barsegov, Valeri	N	Mechanisms of mechano-chemical rupture of fibrin clots and thrombi	
		Reuther, James Fredrick	N	CLIN 110 - MN23 - Oxime-Modified Activated Carbon Composites for Adsorption and Detoxification of Nerve Agents	
		Sun, Yuyu	N	Rechargeable Infection-responsive Anticandidal Denture Materials	
		Xu, Jin	N	LC-MS Analysis of AAV Capsid Proteins	
College of Sciences		Martin, Fred	N	RCR: Collaborative Research: CS Pathways RPP: A District Ownership-based Approach to Middle School Computer Science	
		Yu, Hong	Y	FCOI: Improving Suicide Prediction using NLP-derived Social Determinants of Health	Good health and well-being
		Fu, Xinwen	N	Hosting a GenCyber Student Camp at UMass Lowell	
		Liu, Weisong	N	IPA	
		Norton, Adam	N	FCOI: Standardization of Test Methods for Evaluating Response Robot Mobility and Dexterity	
		Pourkamali Anaraki, Farhad	N	SUBCLIN104: Data science approaches to advance high solids loading additive manufacturing	
		Rumshisky, Anna	N	CAREER: Developing an Underspecified Representation for Temporal Information in Text	
		Yanco, Holly	N	NERVE Center Income Account	
Environmental, Earth and Atmospheric Sciences		Barlow, Mathew	Y	Observed and modeled interactions between droughts and heat waves for the Northeast U	Climate action
		Gamache, Robert R.	N	I-Corps: Reducing the Threat from Active Shooters Using Miniature Air Vehicles	
Mathematical Science		Cho, Min Hyung	N	RCR: Collaborative Research: On Some Fundamental Computational Issues in Simulating Interaction Models	
		Christodoulou, Dimitris	N	X-ray Pulsars across the Parameter Space of Luminosity, Accretion Rate and Spin	
		Guha, Nilabja	N	RCR: New Directions in Bayesian Change-point Analysis	
Physics and Applied Physics		Beaudoin, Christopher Joseph	N	Geodetic Reference Instrument Transponder for Small Satellites (GRITSS)	
		Chakrabarti, Supriya	N	Planetary Imaging Concept Testbed Using a Recoverable Experiment - Coronagraph (PICTURE-C)	
		Chowdhury, Partha	N	State-of-the-art Gamma-ray Spectroscopy to enhance the ENSDF Database for use in Medical Isotope Science	
		Cohen, Ofer	Y	The Living, Breathing Planet	Climate action
		Galkin, Ivan	Y	RES: Dynamic and Coupling Processes in the Mid-Latitude and Equatorial Thermosphere and Ionosphere during Geomagnetic Storms	Climate action
		Gatesman, Andrew J.	N	RES: FY21-4.1.1. State of the Art Knowledge	
		Gaudiuso, Rosalba	N	VA IPA FY2019	

		Jandel, Marian	N	Equipment Upgrades at University of Massachusetts Lowell Research Reactor (UMLRR) to enable neutron-induced reaction research	
		Kamal, Archana	N	RCR: CAREER: Entanglement engineering in dissipation-driven quantum systems	
		Kumar, Jayant	Y	EV: CLIN 112 - MN25 - Development of flexible power storage device and connectors for wearable electronics	Affordable and clean energy
		Laycock, Silas	N	Automating Schueller Observatory for the COVID Era	
		Podolskiy, Viktor	N	RCR: Collaborative research: Mid-IR Photonic Funnel: Coupling, emitting, and re-shaping mid-IR photons in the nano-world	
		Rogers, Andrew Michael	N	Gamma and Proton Testing of Optical Samples	
		Sajo, Erno	N	Support of WisperCAM Radiation Detector Development	
		Song, Paul	N	RES: EV: VLF Transmitter (TNT) / WIPER: Pre-Launch, Launch, and Post Launch Support	
		Tries, Mark A.	N	Faculty Development Program for Health Physics and Nuclear Engineering at the University of Massachusetts Lowell	
		Tu, Jiannan	N	Tracing the Height-dependence of Upward Acceleration in Ion Outflow	
		Yaroslavsky, Anna	N	Integrating Sphere Spectrophotometry and Optimization of Laser Parameters	
	Radiation Laboratory	Bobek, Leo M.	N	Neutron Testing of Electronic Components	
		Montesalvo, Mary A	N	Displacement Damage Dose Testing for Draper Labs	
University	University	O'Donnell, Thomas J	N	RCR: Type I: Mass-I-Corps at UMass Lowell	
		McSwain, Matthew	N	University of Massachusetts Lowell Research Institute Department of Defense Emerging Technology Hub	
		Donohoe, Kerry F.	Y	RCR: Urban Massachusetts Louis Stokes Alliance for Minority Participation Mid-Level Program (UML SAMP)	Reduced inequalities
		Moloney, Jacqueline	Y	RCR: ADVANCE: Institutional Transformation: Making WAVES: Disrupting Microaggressions to Propagate Institutional Transformation	Reduced inequalities
		Stonely, Paul	Y	World Association for Cooperative Education	Quality education
		Chen, Julie	N	MERT 2.0 - MA PPE Manufacturing	
		Tello, Steven F.	N	University of Massachusetts Innovation Venture Fund - FY21	