Scoring Rubric:

BMES
BIOMEDICAL ENGINEERING SOCIETY

Abstract Scoring Rubric

	Max Score	Assigned Score
Introduction **Presents the study's importance with respect to the literature and Its impact on society. Contains a clearly stated objective.**	**5**	
Materials and Methods **Describes essential techniques and demonstrates how methods used will address the questions presented in the introduction.**	**5**	
Results and Discussion **Summarizes significant positive and negative results**	**5**	
Conclusions **States the significance and implications of any presented data**	**5**	
Impact **Overall impact/importance of the work**	**5**	
Total	**25**	

Tracks and Subtracks

BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY

BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY > Analysis of Cell Signaling
BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY > Analysis of Multi-Cellular Systems
BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY > Machine Learning for Biomedical Applications
BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY > Models of Metabolism
BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY > Multiscale Computation Modeling
BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY > Novel Methods for Systems Biology
BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY > Omics Data: Methods, Modeling and Analysis
BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY > Single-Cell Measurements and Models
BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY > Precision and Predictive Medicine
BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY > Theory and Practice of Synthetic Biology
BIOINFORMATICS, COMPUTATIONAL AND SYSTEMS BIOLOGY > Other / Non-specified

BIOMANUFACTURING

BIOMANUFACTURING > Biomaterials for Cell Manufacturing and Tissue Biofabrication
BIOMANUFACTURING > Bioprocess Monitoring and In-Line Sensing
BIOMANUFACTURING > Cellular Biomanufacturing
BIOMANUFACTURING > Cryopreservation in Biomanufacturing
BIOMANUFACTURING > Microphysiological Systems (MPS) Manufacturing
BIOMANUFACTURING > Molecular Biomanufacturing
BIOMANUFACTURING > Tissue and Organ Biomanufacturing
BIOMANUFACTURING > Other / Non-specified

BIOMATERIALS

BIOMATERIALS > 3D Printing and Advanced Biomaterial Manufacturing
BIOMATERIALS > Advances in Biomaterials Integration with Chips and Devices
BIOMATERIALS > Biomaterials for Immunoengineering
BIOMATERIALS > Biomaterials for Regenerative Medicine
BIOMATERIALS > Biomaterials Scaffolds
BIOMATERIALS > Biomechanics of Biomaterials
BIOMATERIALS > Drug Delivering Biomaterials
BIOMATERIALS > Engineering the Stem Cell Microenvironment

BIOMATERIALS > Natural and Bioinspired Biomaterials
BIOMATERIALS > Other / Non-specified

BIOMECHANICS

BIOMECHANICS > Biofluid Mechanics
BIOMECHANICS > Biomechanics in Cell and Tissue Engineering
BIOMECHANICS > Biomechanics of Rehabilitation/Injury
BIOMECHANICS > Cancer Mechanobiology
BIOMECHANICS > Cardiovascular Biomechanics
BIOMECHANICS > Cellular and Molecular Biomechanics: Mechanobiology
BIOMECHANICS > Computational and Multiscale Modeling in Biomechanics
BIOMECHANICS > Human Performance/Sports Biomechanics
BIOMECHANICS > Matrix Effects in Mechanobiology
BIOMECHANICS > Mechanics of the Respiratory System
BIOMECHANICS > Mechanobiology of Stem Cell Engineering
BIOMECHANICS > Neuromuscular and Brain Biomechanics
BIOMECHANICS > Other / Non-specified

BIOMEDICAL ENGINEERING EDUCATION (BME)

BIOMEDICAL ENGINEERING EDUCATION (BME) > ABET Program Criteria, Student Outcomes
BIOMEDICAL ENGINEERING EDUCATION (BME) > Design and Curriculum
BIOMEDICAL ENGINEERING EDUCATION (BME) > Diversity, Equity, and Inclusion
BIOMEDICAL ENGINEERING EDUCATION (BME) > Experiential Learning (Curricular and Co-Curricular)
BIOMEDICAL ENGINEERING EDUCATION (BME) > Industry and Biomedical Engineering
BIOMEDICAL ENGINEERING EDUCATION (BME) > K-12 Outreach
BIOMEDICAL ENGINEERING EDUCATION (BME) > Mentorship
BIOMEDICAL ENGINEERING EDUCATION (BME) > Multidisciplinary and Interdisciplinary Curriculum
BIOMEDICAL ENGINEERING EDUCATION (BME) > Teaching, Learning, and Pedagogy
BIOMEDICAL ENGINEERING EDUCATION (BME) > Other/Non-Specified

BIOMEDICAL IMAGING AND INSTRUMENTATION

BIOMEDICAL IMAGING AND INSTRUMENTATION > Contrast-Enhanced Ultrasound and Therapeutic Ultrasound (US)
BIOMEDICAL IMAGING AND INSTRUMENTATION > Magnetic Resonance Imaging and Applications (MRI)
BIOMEDICAL IMAGING AND INSTRUMENTATION > Nuclear Medicine Imaging (PET/SPECT)
BIOMEDICAL IMAGING AND INSTRUMENTATION > Optical and Spectroscopic Imaging, Microscopy, and Spectroscopy (Optics)
BIOMEDICAL IMAGING AND INSTRUMENTATION > Photoacoustic Imaging (PA)
BIOMEDICAL IMAGING AND INSTRUMENTATION > X-ray and Computed Tomographic Imaging (CT)
BIOMEDICAL IMAGING AND INSTRUMENTATION > Endoscopy and Optical Coherence Tomography (OCT)
BIOMEDICAL IMAGING AND INSTRUMENTATION > Deep Learning and Artificial Intelligence in Microstructural Imaging
BIOMEDICAL IMAGING AND INSTRUMENTATION > Imaging Cells, Molecules, and Genome
BIOMEDICAL IMAGING AND INSTRUMENTATION > Imaging Tissue, Organs, and Physiological Systems
BIOMEDICAL IMAGING AND INSTRUMENTATION > Imaging System Development & Emerging Imaging Technologies
BIOMEDICAL IMAGING AND INSTRUMENTATION > Other / Non-specified

CANCER TECHNOLOGIES

CANCER TECHNOLOGIES > Cancer Cell Motility and Migration
CANCER TECHNOLOGIES > Cancer Drug Delivery
CANCER TECHNOLOGIES > Cancer Immunoengineering, Immunomodulation and Immunotherapy
CANCER TECHNOLOGIES > Circulating Biomarkers: CTCs, Extracellular Vesicles and DNA
CANCER TECHNOLOGIES > Computational Modeling of Cancer
CANCER TECHNOLOGIES > Engineered Cancer Models for In Vitro Studies
CANCER TECHNOLOGIES > Imaging Strategies in Cancer Detection, Diagnosis, and Prognosis
CANCER TECHNOLOGIES > Molecular Profiling in Cancer
CANCER TECHNOLOGIES > Metastasis, Dormancy & Treatment Response
CANCER TECHNOLOGIES > Tumor Microenvironment
CANCER TECHNOLOGIES > Other / Non-specified

CARDIOVASCULAR ENGINEERING

CARDIOVASCULAR ENGINEERING > Angiogenesis and Engineered Vascularization
CARDIOVASCULAR ENGINEERING > Cardiac/Cardiovascular Regeneration and Stem Cells
CARDIOVASCULAR ENGINEERING > Cardiovascular Tissue Engineering
CARDIOVASCULAR ENGINEERING > Heart Valve Structure, Function, and Disease
CARDIOVASCULAR ENGINEERING > Sickle Cell Disease
CARDIOVASCULAR ENGINEERING > Thrombosis and Hemostasis
CARDIOVASCULAR ENGINEERING > Hemodynamics and Vascular Mechanics
CARDIOVASCULAR ENGINEERING > Cardiac Electrophysiology
CARDIOVASCULAR ENGINEERING > Cardiovascular Biomechanics

CARDIOVASCULAR ENGINEERING > Cardiovascular Devices

CARDIOVASCULAR ENGINEERING > Other / Non-specified

CELLULAR AND MOLECULAR BIOENGINEERING

CELLULAR AND MOLECULAR BIOENGINEERING > Cell Migration

CELLULAR AND MOLECULAR BIOENGINEERING > Engineering and the Microbiome

CELLULAR AND MOLECULAR BIOENGINEERING > Epigenetics and Chromatin Regulation

CELLULAR AND MOLECULAR BIOENGINEERING > Gene Delivery and Genome Bioengineering

CELLULAR AND MOLECULAR BIOENGINEERING > Reprogramming/Directed Differentiation in Stem Cell Engineering

CELLULAR AND MOLECULAR BIOENGINEERING > Single-Cell Measurements and Models

CELLULAR AND MOLECULAR BIOENGINEERING > Micro/Nano Tools in Molecular Biology (Genomics, Proteomics)

CELLULAR AND MOLECULAR BIOENGINEERING > Molecular and Cellular ImmunoEngineering

CELLULAR AND MOLECULAR BIOENGINEERING > Molecular Bioengineering

CELLULAR AND MOLECULAR BIOENGINEERING > Molecular Imaging in Live Cells

CELLULAR AND MOLECULAR BIOENGINEERING > Other / Non-specified

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS > Assistive Technology

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS > Design and Control of Prostheses and Exoskeletons

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS > Musculoskeletal Robotics and Biomechatronics in Rehabilitation

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS > Interventional Devices and Robotics

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS > Surgical Robotics

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS > Biosensors

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS > Implantable Sensors and Devices

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS > Wearable Sensors and Devices

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS > Neural Devices and Electronics

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS > Point of Care / Mobile Devices

DEVICE TECHNOLOGIES AND BIOMEDICAL ROBOTICS > Other / Non-specified

DRUG DELIVERY

DRUG DELIVERY > Cancer Drug Delivery

DRUG DELIVERY > Delivery Systems for Proteins and Vaccines

DRUG DELIVERY > Drug Delivery for Immunomodulation and Immunotherapy

DRUG DELIVERY > Nucleic Acid Delivery

DRUG DELIVERY > Respiratory Drug Delivery

DRUG DELIVERY > Other / Non-specified

GLOBAL HEALTH TECHNOLOGIES

GLOBAL HEALTH TECHNOLOGIES > Automated technologies for use in developing countries

GLOBAL HEALTH TECHNOLOGIES > Industry Pathways into other countries

GLOBAL HEALTH TECHNOLOGIES > International collaborations on chronic disease

GLOBAL HEALTH TECHNOLOGIES > International collaborations on infectious disease

GLOBAL HEALTH TECHNOLOGIES > Nanotechnologies for Global Health Technologies and Systems

GLOBAL HEALTH TECHNOLOGIES > Social science collaborations across countries

GLOBAL HEALTH TECHNOLOGIES > Other / Non-specified

NANO AND MICRO TECHNOLOGIES

NANO AND MICRO TECHNOLOGIES > Bioinspired/Biomimetic Micro/Nano Devices and Systems

NANO AND MICRO TECHNOLOGIES > Biomaterials Integration with Micro/Nano Chips and Devices

NANO AND MICRO TECHNOLOGIES > In Situ Tissue Regeneration via Micro/Nano Engineered Technologies

NANO AND MICRO TECHNOLOGIES > Micro/Nano Fluidic Engineering, Lab-on-Chip and Organ-on-Chip Systems

NANO AND MICRO TECHNOLOGIES > Micro/Nano Technologies in Molecular and Cellular Bioengineering, Medicine and Biology

NANO AND MICRO TECHNOLOGIES > Micro/Nano Tools for Precision Medicine

NANO AND MICRO TECHNOLOGIES > Molecular Sensors and Nanodevices for Diagnostics and Biomedical Imaging

NANO AND MICRO TECHNOLOGIES > Other / Non-specified (Implantable systems, flexible/wearable systems, 3D printing/bioprinting, tools to study and manipulate the microbiome, courses and training approaches, etc.)

NEURAL ENGINEERING

NEURAL ENGINEERING > Computational Neural Modeling

NEURAL ENGINEERING > Glial Cell Engineering

NEURAL ENGINEERING > Neural Decoding and Control

NEURAL ENGINEERING > Neural Device Interfaces

NEURAL ENGINEERING > Neural Disease and Injury: Modeling and Therapeutics

NEURAL ENGINEERING > Neural Stem/Progenitor Cell Engineering

NEURAL ENGINEERING > Neuroimaging

NEURAL ENGINEERING > Neuromodulation: Brain and Spinal Cord Stimulation

NEURAL ENGINEERING > Neuromodulation: Peripheral Nerve Stimulation

NEURAL ENGINEERING > Neuro-regenerative Engineering

NEURAL ENGINEERING > Neurorehabilitation

NEURAL ENGINEERING > Other / Non-specified

ORTHOPAEDIC AND REHABILITATION ENGINEERING

ORTHOPAEDIC AND REHABILITATION ENGINEERING > Musculoskeletal Stem Cell Engineering

ORTHOPAEDIC AND REHABILITATION ENGINEERING > Articular Cartilage, Meniscus and Joints

ORTHOPAEDIC AND REHABILITATION ENGINEERING > Rehabilitation Engineering

ORTHOPAEDIC AND REHABILITATION ENGINEERING > Spine and Intervertebral Disc

ORTHOPAEDIC AND REHABILITATION ENGINEERING > Bone

ORTHOPAEDIC AND REHABILITATION ENGINEERING > Orthopedic and Rehabilitation Engineering: Implant and Prosthetic Biomechanics

ORTHOPAEDIC AND REHABILITATION ENGINEERING > Orthopedic: Mechanobiology and Mechanotransduction

ORTHOPAEDIC AND REHABILITATION ENGINEERING > Other / Non-specified

TECHNOLOGIES FOR EMERGING INFECTIOUS DISEASES

TECHNOLOGIES FOR EMERGING INFECTIOUS DISEASES > Drug Delivery (vaccines, novel ways to deliver antivirals)

TECHNOLOGIES FOR EMERGING INFECTIOUS DISEASES > Modeling Spread of Contagion

TECHNOLOGIES FOR EMERGING INFECTIOUS DISEASES > Prevention

TECHNOLOGIES FOR EMERGING INFECTIOUS DISEASES > Rapid Detection

TECHNOLOGIES FOR EMERGING INFECTIOUS DISEASES > Sterilization

TECHNOLOGIES FOR EMERGING INFECTIOUS DISEASES > Systems Biology of Infectious Disease

TECHNOLOGIES FOR EMERGING INFECTIOUS DISEASES > Technology Advancements (3D Printing, Devices, etc.)

TECHNOLOGIES FOR EMERGING INFECTIOUS DISEASES > Other / Non-specified

TISSUE ENGINEERING

TISSUE ENGINEERING > 3D Bioprinting and Patterning of Tissues

TISSUE ENGINEERING > Biomechanics of Engineered Tissues

TISSUE ENGINEERING > Developmental Biology and Morphogenesis of Engineered Tissues

TISSUE ENGINEERING > Multi-Cellular Engineered Living Systems

TISSUE ENGINEERING > Engineering Replacement Tissues

TISSUE ENGINEERING > Gastrointestinal Stem Cell and Tissue Engineering

TISSUE ENGINEERING > Gene and Drug Delivery to Engineered Tissues

TISSUE ENGINEERING > Musculoskeletal Tissue Engineering

TISSUE ENGINEERING > Neural and Neurovascular Tissue Engineering

TISSUE ENGINEERING > Stem Cells in Tissue Engineering and Disease Modeling

TISSUE ENGINEERING > Organ-on-Chip for Regenerative Medicine

TISSUE ENGINEERING > Other / Non-specified

WOMEN'S HEALTH

WOMEN'S HEALTH > Cancers of female organs

WOMEN'S HEALTH > Endometriosis

WOMEN'S HEALTH > Mechanics of Pregnancy and Birth

WOMEN'S HEALTH > Menopause related technologies

WOMEN'S HEALTH > Oncofertility

WOMEN'S HEALTH > Reproductive Health Technologies

WOMEN'S HEALTH > Sex-related Differences in Chronic Diseases

WOMEN'S HEALTH > Other / Non-specified