BME 2101 Open Poster Session

Tuesday, Dec 1, 2015

Student Union 304, Storrs Campus

9:30am - 1:00pm (core time: 9:30am - 10:45am) *Refreshments will be served*

The past, present and future of Biomedical Engineering

Presented By: BME sophomores

We have selected and studied 40 essential areas of contemporary biomedical engineering. In this poster session, we will not only describe academic research but also cover patents and commercially available products. The history, current key technologies, commercial opportunities and future of the technologies will be discussed.

Topics which will be discussed:

**Bioinformatics**: Computational Genomics, Computational Neuroscience, Computational Proteomics, Machine Learning, Metabolomics, Computational Biology

**Biomechanics**: Musculoskeletal Biomechanics for Regenerative Medicine, Musculoskeletal Biomechanics for Tendon Repair Surgery, Predictive Human Motion Analysis for Medical Implants, Human Motion Analysis for Rehabilitation, Motion Analysis in Sports, Surgery Robots, Prosthesis I (Limbs), Prosthesis II (Cardiovascular)

**Biomaterials**: Biomedical Implant, Biomedical Prosthesis, Biomaterials Selection for Medical Implant, Metal Prosthesis, Musculoskeletal Implantable Scaffolds, Implantable Scaffolds for Tissue Engineering, Human-Machine Interface, Nanoparticles for Biomedical Applications, Rapid prototyping (3D printing) for Biomedical Engineering, Regenerative Medicine 1 (Musculoskeletal), Regenerative Medicine 2 (Organs), Targeted Drug Delivery, Stem Cell Research, Cell Culture, Cloning/Genetic Engineering

**Bioinstrumentation**: Medical Imaging (MRI), Medical Imaging (CT), Neural Prosthetics (Brain), Visual Prosthetics, Optical Microscopy (fluorescence), Biosensor - Health Monitoring, Body Fluid Testing, Endoscope, Scanning Probe Microscopy, Cell Manipulation.