Science2013
Pittsburgh, PA. 2013: October 2-4.

Bioengineering UG students are underlined. Presenter is in bold.

**Albert D**, Witte F.
Three magnesium-rare earth alloys as biomaterials.

**Aneizi A**, Du Z, Cui XT.
Assessing trigger amplitude as a conserved parameter for controlled electrochemical drug release from microwires.

**Beck A**, Lin H, Tuan RS.
The optimization of visible light-activated hyaluronic acid/gelatin scaffolds for cartilage repair.

**Bekow K**, Gustafson J, Debski R, Farrokhi, S.
Repeatability of knee kinematics and contact mechanics: an in vitro study for finite element model validation.

**Bosin J**, Osburn AR, Parekh PK, Logan RW, McIlung CA.
Alterations in nucleus accumbens activity on affective properties of ethanol.

**Brecheisen G**, Thorhauer E, Tashman S.
In vivo three dimensional kinematics of the knee during downhill running.

**Bruk L**, Fullriede H, Grade S.
Antibacterial effects and cytotoxicity of varied silica nanoparticles.

**Calvert J**, Torres-Oviedo G.
Human subjects experiencing smaller perturbations learn more.

**Christie A**, Oesterreich S.
Comparison of estrogen receptor signaling in 2D and 3D culture.

**Collins C**, Oza CS, Lee J, Giszter S.
Changes in trunk motor cortex after robot rehabilitation of adult spinalized rats with active stepping compared to those with passive hindlimbs.

**Cugini A**, Little S.
Using MSC-conditioned media to reconstruct glucorticoid damaged trabecular meshwork cytoskeleton.

**Day J**, Marra K.
Using an in vivo imaging system to image stem cells during soft tissue reconstruction.

**Day K**, Bizzi E.
Automation of a reach-and-grasp behavior paradigm in rodents to more efficiently study motor acquisition.

**Dziki JL**, Sciari BM, Dearth CL, Badylak SF.
Degradation products of biologic scaffolds promote a constructive macrophage phenotype.

**Finn M**, Arazawa D, Kimmel J, Federspiel WJ.
Hfm enzyme immobilization enhances carbon dioxide removal in artificial lung applications.

**Gorman S**, Smith H, Sklar S, Quinn L, Chambers A.
Oral dynamometer – solution to dysphagia.

Ergonomic analysis of microlaryngoscopy using surface electromyography.

**Hapach L**, Turner R.
Neurophysiological microelectrode recording tracker.

**Higuchi Y**, Mukundan S, Hartley R, Sant S.
Fabrication of collagen mimicking hydrogel fibers.


**Kendell P**, Farrokhi S.
OpenSim and the biomechanics of walking in patients with knee osteoarthritis.

**Kennedy J**, Brown BN.
Evaluation of macrophage phenotype in the pathogenesis of endometriosis.

**Kita S**, Uttam S, Liu Y.
Improving cancer detection performance of quantitative phase microscopy through image registration.

**Macgregor A**, Cui XT.
Automated impedance modeling to streamline analysis of neural electrode implantation.

**Mooney R**, Kameneva M.
Evaluation of functionality of modified red blood cells for intravascular drug delivery.

**Nguyen F**, Fisher J, Unadkat J, Little S.
Sustained release tacrolimus films for preventing composite tissue transplant rejection.

**Owens G**, Trout J, Baker N, Chambers A.

**Pedersen D**, Wagner WR.
Characterizing real-time platelet deposition onto clinically relevant surfaces.

**Pelkey D**, Huppert T, Beluk N.
Creation of a handheld NIRS imaging device for infants.

**Pomiecko K**, Tsamis A.
Three-dimensional reconstruction of aortic elastin and collagen fibers from multi-photon micrographs.

**Rhindress B**, Hua N, Walton L, Lee JK.
Optimization of tin oxide nanowire synthesis on solid substrate for improved energy harvesting.
Simon T, Davidson L.
  The development and morphology of the heart in xenopus laevis embryos.

Thiyagarajan D, Zhao G, Wang JH-C.
  Application of substance P (Sp) enhances traction forces by tendon cells.

Thompson T, Chandler J, Zimmerman M, Lagasse E.
  PRL-3 mediates colony formation of mouse tumor cells in vitro.

Weston E, Vijayraghavan D, Weaver C, Cui XT, Davidson L.
  PRL-3 mediates colony formation of mouse tumor cells in vitro.

Wong C, Stetten G.
  Anatomical structure definition by a medial based approach.

Yeager J, Barone W, Moalli P, Abramowitch S.
  Improving the performance of a biaxial device to mechanically test highly compliant planar tissues.

Zhang L, Weaver C, Cui XT.
  PEDOT/GO carbon fiber microelectrodes for dopamine sensing.