

# Poster Presentations- Evens

## Track 1- Cells Tissue Biomechanics

### Bone

- |   |                           |   |
|---|---------------------------|---|
| 2 | Martinez, Jerahme         | Profiling the composition of osteocyte pericellular matrix (PCM) in vivo and in vitro           |
| 4 | Parthasarathy, Sucharitha | Effects of Perlecan/HSPG2 Deficiency on mRNA Changes in Mechanically Loaded B                   |
| 6 | Vrathasha, Vrathasha      | Develop an active fluorescently-tagged CK2.3 peptide to analyze its bone inducing capabilities. |

### Cartilage/IVD/Ligament/Tendon

- |    |                  |  |
|----|------------------|--|
| 8  | Alghamdi, Nabeel | Validity and Reliability of Ultrasound Imaging for Evaluating Achilles Tendon Insertion        |
| 10 | Graham, Brian    | Lasers and lubrication: shedding light on how cartilage really works.                          |
| 12 | Lee, Andrea      | Investigating Mechanisms of Tendon Damage of Rat Plantaris Tendon at Multiscale                |
| 14 | Morre, Axel      | The role of interfacial sliding in mediating the functional performance of articular cartilage |

### Cells/Biomaterials/Others

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|----|----------------|---|
| 16 | Duong, Kaitlyn | The effects of turmeric extract on PC12 cell attachment |
| 18 | Horner, Jeff   | Connecting Human Blood Rheology to Physiology           |

## Track 2- Clinical Biomechanics

### Cartilage/IVD/Ligament/Tendon

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|----|---------------|--|
| 20 | Corrigan, Pat | Barriers for Remaining Physical Active in Patients with Midportion Achilles Tendinopathy   |
| 22 | Meadows, Kyle | MRI Quantification of In Vivo Human Disc Diurnal Compression and Induced Flexion/Extension |

### Gait

- |    |                      |  |
|----|----------------------|--|
| 24 | Christensen, Michael | INTER-JOINT COMPENSATIONS WHILE WALKING WITH ANKLE RESTRICTION   |
| 26 | Johnson, Jessica     | Male Athletes who walk with gait asymmetries report similar function to those who walk symmetrically<br>1 year after ACL reconstruction                        |
| 28 | Linkins, Jehnae      | Rheological Applications of Shear Thickening Fluids(STF) for Transtibial Prostheses  |
| 30 | Master, Hiral        | A clinically feasible assessment of physical function as a “stress test” to identify people with knee osteoarthritis<br>who are unable to be physically active |

### Neuromuscular Modeling & Training

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|----|------------------|--|
| 32 | Landman, Melissa | PlaySkin Air: A Building Block to Better Mobility                |
| 34 | Adams, Zach      | Motor Unit Rate Coding and Recruitment in Elbow Flexion Agonists |

### Stroke and Brain

- |    |                    |  |
|----|--------------------|--|
| 36 | Bakhshipour, Elham | Using fNIRS to investigate motor planning and executive function in children with Autism Spectrum Disorder                 |
| 38 | Farrens, Andria    | The effect of split-belt treadmill training on resting state functional connectivity within the cortico-cerebellar pathway |