<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>Registration and breakfast</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Welcome remarks: <em>Missy Morrow and Meghan Vidt</em></td>
</tr>
<tr>
<td>9:15 AM</td>
<td>Podium session 1: Rotator Cuff and Scapular Kinematics (5)</td>
</tr>
<tr>
<td>9:15 AM</td>
<td>The Coupled Mechanics of Scapulothoracic Upward Rotation</td>
</tr>
<tr>
<td>9:27 AM</td>
<td>Anterior and Posterior Supraspinatus Activation Differences During Elevation Tasks Using Indwelling Electromyography</td>
</tr>
<tr>
<td>9:39 AM</td>
<td>Shoulder Complex Kinematics Pre- and Post- Rotator Cuff Repair Surgery</td>
</tr>
<tr>
<td>9:51 AM</td>
<td>Muscle compensation helps maintain glenohumeral joint stability after rotator cuff tear: a simulation study</td>
</tr>
<tr>
<td>10:03 AM</td>
<td>Scapular Kinematics Following a Closed-Chain Rehabilitation Program in Patients with Rotator Cuff Tears</td>
</tr>
<tr>
<td>10:15 AM</td>
<td>Keynote 1: Lori Mischener, PhD, PT, ATC, SCS, FAPTA, University of Southern California</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Coffee break &amp; Visit Industry Exhibition</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Sponsor Presentations (3 minutes per sponsor, 12 minutes total)</td>
</tr>
<tr>
<td>11:45 AM</td>
<td>Podium session 2: Wheelchair (4)</td>
</tr>
<tr>
<td>11:45 AM</td>
<td>The effect of fatigue on applied forces during constrained wheelchair propulsion: Implications for shoulder loads</td>
</tr>
<tr>
<td>11:57 AM</td>
<td>Restoration of elbow flexion by tendon transfer: effect on wheelchair propulsion characteristics and shoulder load</td>
</tr>
<tr>
<td>12:09 AM</td>
<td>Shoulder impingement during free-living wheelchair propulsion</td>
</tr>
<tr>
<td>12:21 AM</td>
<td>Estimating supraspinatus proximity to the coracoacromial arch during unilateral reaching tasks in manual wheelchair users</td>
</tr>
<tr>
<td>12:35 PM</td>
<td>Lunch (provided)</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>Podium session 3: Athletics and Sports (5)</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>Kinematic assessment between wind-up and stretch pitching among upper extremity electromyographical evaluation</td>
</tr>
<tr>
<td>1:42 PM</td>
<td>Functional characteristics of softball pitchers with and without pain</td>
</tr>
<tr>
<td>1:54 PM</td>
<td>Returning to Cycling Following Shoulder Surgery</td>
</tr>
<tr>
<td>2:06 PM</td>
<td>Using a Four-Axis Humero-Thoracic System to Study Arm-Swing Techniques Used During the Volleyball Spike</td>
</tr>
<tr>
<td>2:18 PM</td>
<td>Relationship between upper limb extremity neuromuscular, moments and shoulder angle in overhead movement in badminton</td>
</tr>
<tr>
<td>2:30 PM</td>
<td>Coffee break &amp; Visit Industry Exhibition</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>Podium session 4: Arthroplasty (5)</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>Evaluation of Lateralized Reverse Shoulder Arthroplasty in Acute Proximal Humerus Fracture and Degenerative Cuff Arthropathy</td>
</tr>
<tr>
<td>3:12 PM</td>
<td>Testing of a robotic platform for the evaluation of prosthetic stability of the glenohumeral joint</td>
</tr>
</tbody>
</table>

*Sunday, August 12, 2018*
3:24 Biomechanical Comparison between Reverse Shoulder Arthroplasty and Total Shoulder Arthroplasty on Biconcave Glenoid
Xiang Chen

3:36 Pre-operative Reverse Total Shoulder Arthroplasty Shoulder Function: Using an Acromion Marker Cluster to Analyze Scapular Dynamics
Antonia Zaferiou

3:48 Overcorrected implants to avoid shoulder subluxation: a patient-specific finite element study
Yasmine Boulanaache

4:00 PM ISG meeting
5:00 PM Lab tour
6:30 PM Conference dinner (provided)

Monday, August 13, 2018

8:00 AM Registration and breakfast
8:30 AM Keynote 2: Katherine Saul, PhD, North Carolina State University
9:15 AM Podium session 5: Functional Assessment & Pain (6)
  9:15 Composite Injury Risk Measure for Sign Language Users
      Gretchen Roman
  9:27 Biomechanical and Patient-Reported Functional Outcomes of the Shoulder Following Mastectomy and Breast Reconstruction
      Joshua Leonardis
  9:39 Measuring posterior shoulder tightness: the influence of posterior capsule and humeral retroversion
      Dayana Patricia Rosa
  9:51 A pilot study for characterizing dual-task shoulder capability in chronic moderate/severe stroke
      Joseph Kopke
  10:03 Clinical predictors can better explain shoulder function in comparison to pathoanatomical findings
      Rodrigo Py Goncalves Barreto
  10:15 Temporal summation of pain is altered in patients with shoulder pain
      Melina Haik
10:30 AM Coffee break & Visit Industry Exhibition

11:00 AM Podium session 6: Wheelchair (4)
  11:00 4-axis net joint moment power distribution
      Ian Russell
  11:12 Shoulder muscle activity in individuals with spinal cord injury using geared manual wheelchairs during start-up
      Omid Jahanian
  11:24 The effect of increased rolling resistance on shoulder kinematics and impingement during manual wheelchair propulsion
      Joseph Mozingo
  11:36 A Comparison of Forwards versus Backwards Wheelchair Propulsion
      Martin Warner
11:48 AM Lunch (provided)

12:45 PM Podium session 7: Methods/Modeling (5)
  12:45 Scapular orientation estimation performance of the acromion marker cluster in a clinical population during arm elevation
      Angelica Lang
  12:57 Finite element model of the supraspinatus tendon during simulated functional reach
      John Looft
  1:09 The Evolution of Postoperative Monitoring: Continuously Capturing Shoulder Elevation with Inertial Measurement Units
      Ryan Chapman
  1:21 Kinematics and Utility of Shoulder Joint Laxity Tests as Diagnostic Criteria in Multidirectional Instability
      Justin Staker
1:33 Comparison of Simple and Complex Shoulder Exoskeleton Models for Musculoskeletal Dynamic Simulation
Patrick Hall

1:45 PM Coffee break & Visit Industry Exhibition

2:15 PM Podium session 8: Muscle (6)

2:15 The influence of hand location and exertion direction on electromyographic signals in maximal efforts
Jacquelyn Maciukiewicz

2:27 Upper Extremity Usage in Adults with Traumatic Brachial Plexus Injuries
Christina Webber

2:39 Three-dimensional Assessments of Strength for Clarifying Shoulder Capabilities
Emma Baillargeon

2:51 Biomechanics of lower trapezius and latissimus dorsi transfers in rotator cuff deficient shoulders
Andreas Kontaxis

3:03 Electromyography activation of shoulder muscles during open and closed chain exercises for the upper extremity
Federico Pozzi

3:15 Hand and Plane of Movement Influence Shoulder Muscle Recruitment
Tea Lulic

3:30 PM Session 9: Posters (12) & reception (Wine & cheese)

3:30-3:45 1 Minute Podium Introduction for all Posters

1 Shoulder, Elbow, and Wrist Joint Excursions for Touchscreen Gestures
Deanna Asakawa

2 Bilateral Scapular kinematics, asymmetries and shoulder pain in wheelchair users
Barry Mason

3 The impact of scapulothoracic exercise training on individuals with shoulder pain: An EMG and kinematic Investigation
Gaura Saini

4 Feasibility of using the HTC Vive for Upperlimb Kinematic data collection
Kate Spitzley

5 Relationship between myofascial trigger points and shoulder mobility and muscle strength in subjects with unilateral subacromial
Catarina de Oliveira Sousa

6 Shoulder tendon macromorphology and impairments in dental hygienists
Catarina de Oliveira Sousa

7 Relative activity of sub-regions of supraspinatus and infraspinatus during dynamic tasks performed with free weights
Soo Kim

8 Contribution and activity patterns of sub-regions of supraspinatus and infraspinatus during isokinetic activities
Soo Kim

9 Shoulder Muscle Activation Changes in Patients Receiving Subacromial Injection and Physical Therapy
Jennifer Cooper

10 A Quantitative Approach to Clinical Glenohumeral Laxity Assessment
Constantine Nicolozakes

11 Development of a pediatric shoulder model to evaluate obstetric brachial plexus palsy
Bhushan Borotikar

12 Influence of shoulder peak value of moment on kinematics variables in overhead motion in elite and non-elite badminton players
Hamidreza Barnamehei

5:00pm Award Ceremony & reception continued

5:30pm Closing remarks