School of Kinesiology September 2017



AUBURN UNIVERSITY

Sports Medicine & Movement Laboratory

Pain History & Pitching Mechanics

From Spring 2016-2017, we were able to collect data on 90 plus collegiate pitchers. Data included 17 NCAA softball teams, representing 9 conferences, with 3 of the teams ranking in NCAA top 20 for consecutive years. During 2017 many were ranked in NCAA Top 20, with 3 in the top 10 of NCAA most victorious pitchers. Additionally, 2 were ranked in the NCAA top 20 for hits allowed, and 3 ranked in NCAA top 20 for strikeouts per 7 innings.

ESPN & PreThrowing Program

ESPN discussing Dr. Oliver's PreThrowing Program. https://youtu.be/CPRmDsZuPz0







Beyond the Bases

The Sports Medicine & Movement Lab with Dr. Oliver was featured on the SEC Network's Beyond the Bases with Jenny Dalton-Hill this past Spring. The piece highlighted Dr. Oliver's PreThrowing Program that she implements with the softball pitchers in an attempt to reduce their recovery time, decrease risk of injury and ultimately reduce injury susceptibility. To view the Beyond the Bases segment: http://www.secsports.com/video/19118573/auburn-pitching-lab



USA Softball in the Lab

The USA Softball Women's National Team pitchers visited the lab to participate in the on-going research regarding pain history and pitching mechanics as well as contributing to the normative data on softball pitching.

Sports Medicine & Movement Lab Support

Please consider supporting the continuous research with a monetary gift. To do so, please contact Gretchen Oliver, at golden delta del

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Publications

The Sports Medicine & Movement Lab is active in peer reviewed manuscript publications with 19 during 2016-2017. Of those, 11 were devoted to furthering the softball initiative through evidence based research:1.Oliver et al. J Strength Cond Res. 2017;doi: 10.1519/JSC.0000000000002036. 2.Oliver et al. J Strength Cond Res. 2017; doi: 10.1519/JSC.0000000000 001848 3. Washington et al. Med Sci Sport Exer. 2017;49,958. 4. Oliver et al. J Strength Cond Res. 2016; 30(11):3164-3154. **5.**Oliver et al. *Int* J Sports Phy Thera. 2016; 11(5):738. 6. Plummer et al. J Electro Kines. 2016: 29:107-112. **7.**Oliver et al. Int J Athl Thera Train. 2016; 21(3): 42-46. 8. Plummer et al. J Sports Phy Thera. 2016;11: 108-114. 9. Oliver et al. J Strength Cond Res. 2016; 30(2):425-420. **10.**Oliver et al. J Human Kine.. 2016 49:47-54. **11.**Oliver et al. *Int J Athl Train Thera*. 2016, 21(4): 30-33. https:// scholar.google.com/citations? user=ae6HxHqAAAAJ&hl=en



PreRiding Program for Youth Polo

Dr. Oliver traveled to Sheridan, WY to work with the United States Polo Association (USPA) Player Development. USPA is beginning to implement PreRiding programs, developed by Dr. Oliver, for their youth athletes. Additionally, work is being done on the effects of the PreRiding programs and their swing mechanics and riding posture.

Sports Medicine & Movement Lab Receives Gift in Support of Hitting Research

This August, Mr. Ronnie Rollings gave a gift commitment of \$25,000 for 2017 and \$25,000 for 2018 in support of the Sports Medicine & Movement Lab. Mr. Rollings is a huge advocate of youth participation in the baseball & softball injury prevention programs coming out of the lab.

Future Directions of the Sports Medicine & Movement Lab

Fall 2017 and Spring 2018 focus will continue to gather normative data for softball athletes (pitchers, catchers & position players) as well as continue to build on the pain history and pitching mechanics study. To date, we have had over 200 softball athletes come to the lab for throwing analysis. This year we will expand softball data with two hitting studies (softball hitting normative data, and a hitting intervention study) as well as begin to examine biceps tendonopathies through ultra sound imaging in softball pitchers. Additionally, Dr. Oliver will be looking to expand on her PreThrowing Program Development with exploration into hippotherapy and work with Auburn University Equestrian.

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