

ABSTRACTS/ POSTERS

Abstracts are organized by session then alphabetically by the **submitting author's last name**. Abstract numbers below are also the poster numbers where they will be displayed in the Grand Ballroom.

Aging of Skeletal Muscle

- 1. Exercise prevents early aging-induced impairments in relaxation and MERCs in skeletal muscle**
Allen, Ryan; Kronemberger, Ana; Shi, Qian; Pope, Marshall; Cuadra-Munoz, Elizabeth; Son, Wangkuk; Song, Long-Sheng; Anderson, Ethan; Pereira, Renata; Lira, Vitor
- 2. Exercise-induced mitophagy in skeletal muscle is impaired with age and associated with loss of mitoAMPK**
Amiri, Niloufar; Willoughby, Orion; Brisendine, Matt; Drake, Joshua C.
- 3. Aging Induces a Robust Upregulation of the Cyclooxygenase Pathway and Cellular Senescence During Recovery from Disuse Atrophy**
Bourrant, Paul-Emile.; Yee, Elena M.; Fennel, Zachary J.; Ferrara, Patrick J.; Castro, Robert J.; de Hart, Naomi N.M.M.P.; Petrocelli, Jonathan J.; Fry, Christopher S.; Drummond, Micah J.
- 4. Physiological changes in Aging Male and Female Mice with Chronic Consumption of Alcohol**
Bridges, Blake; Tangen, Avery; Steiner, Jennifer
- 5. Administration of endogenous and synthetic exerkinins increases mitochondrial oxygen consumption in C2C12 myoblasts.**
Bubak, Matthew P.; Gimla, Mariola; Douglas, Zion; Miller, Benjamin F
- 6. The use of 3D engineered muscle tissue models to test age effects on muscle force and mitochondrial function in vitro**
Campbell, Matthew D.; Erker, Jayma; Paulos, Christian; Mack, David L.; Marcinek, David J.
- 7. Mapping the role of sex hormones in female skeletal muscle morphology, function, and gene expression across the ageing continuum**
Critchlow, Annabel; Gatto, Briana; Williams, Ross; Engman, Viktor; van Belleghem, Karel; Garnham, Andrew; Hiam, Danielle; Lamon, Séverine
- 8. The impact of serine and glycine availability on skeletal muscle cell composition following injury in aged mice**
Dannemiller, Ryan; Rorrer, Shelby; Ma, Wenxia; Tsoneva, Daria; Lavin, Kaleen; Najt, Charles; Alexander, Matthew; Thalacker-Mercer, Anna
- 9. Characterization of AMPK Activation by MK-8722 in Sarcopenic Skeletal Muscle**
Dickerson, P. Conley; Woolsey, Walker A.; Summers, Abigail E.; Kimball, Lauren; Thomson, David M.
- 10. mTORC1 inhibition to counteract proteostatic and mitochondrial dysfunction in aged skeletal muscle following disuse**
Fuqua, Jordan D.; Taylor, Michael E.; Olszewski, Szczepan S.; Smith, Loryn; Raymond-Pope, Christiana; O'Reilly, Colleen; Bubak, Matthew P.; Brecheen, Parker L.; Borowik, Agnieszka; Peelor, Frederick F. III; Miller, Benjamin F.
- 11. Effect of High Intensity Interval Training in Middle-Aged Male C57BL/6J**
Stephenson, Justin C.; Tran, Tuan; Dickerson, Ashby; Tripp, Lucas; **Graber, Ted G.**

- 12. Skeletal muscle PGC-1 α alleviates age-related declines in physical function by modulating L-kynurenine metabolism**
Kawaida, Mia Y.; Tice, Abigail L.; Alvarez, Samuel; Izaguirre, Benjamin; Lackey, Jacob A.; Wei-LaPierre, Lan; Hepple, Russell T.; Ryan, Terence E.
- 13. Characterizing sarcopenia in a preclinical mouse model: age-related changes in muscle mass, fiber diameter, and gene expression**
Langer, Henning Tim; Lempp, Charlotte; Holdenried-Krafft, Simon; Santhanam, Rakesh; Lam, Daniel; Zurkovic, Jelena; **Klepac, Katarina**
- 14. The transcriptomic signature of age and sex is not conserved in human primary myocytes**
Lamon, Severine; Soria, Megan; Williams, Ross; Critchlow, Annabel; Garnham, Andrew; Varshney, Akriti; Beillharz, Traude; Hiam, Danielle; Ziemann, Mark
- 15. Effects of Resistance Training on Redox Markers and Targeted Proteomic Changes in Middle-Aged Adults**
Lewis, Dustyn T.; Tiede, Dakota R.; Bittencourt, Diego; Michel, J. Max; Mattingly, Madison L.; Anglin, Derick A.; Ruple, Bradley A.; Roberts, Michael D.; Kavazis, Andreas N.
- 16. Impact of physical activity on physical function, mitochondrial energetics, ROS production, and Ca²⁺ handling across the adult lifespan in men**
Marcangeli, Vincent; Cefis, Marina; Hammad, Rami; Granet, Jordan; Gaudreau, Pierrette; Robitaille, Richard; Bélanger, Marc; Aubertin-Leheudre, Mylène; Morais, José A; Gouspillou, Gilles
- 17. Effects of aging and mechanical ventilation on diaphragm contractile function, collagen proteostasis, and mitochondrial bioenergetics**
Mesquita, Paulo H.C.; Halle, Jessica L.; Raymond-Pope, Christiana, J.; Stock, Amanda J.; Zehrunge, Hayden; Bubak, Matthew P.; O'Reilly, Colleen L.; Kwak, Seong Eun; Smith, Loryn; Peelor III, Frederick F.; Brown, Jacob L.; Miller, Benjamin F.
- 18. Augmented Muscle Mass Blunts Aging-Induced Cerebrovascular Oxidant Stress and Inflammation with Corresponding Expression of a Novel Myokine**
Nunan, Emily; McMahon, Trinity; Butler, Landon; Main, Amber; Butcher, Joshua T.
- 19. Are the beneficial effects of Metformin on healthspan context specific?**
O'Reilly, Colleen L.; Bubak, Matthew P.; Zehrunge, Hayden P.; Raymond-Pope, Christiana J.; Tuck, Joseph Q.; Murphy, Ashley M.; Kesler, Nicholas J.; Koch, Lauren G.; Miller, Benjamin F.
- 20. Tau protein drives microtubule changes in aging skeletal muscle**
Pinto, Kaylie; Ursitti, Jeanine; Shi, Guoli; Ward, Chris
- 21. Impact of disuse, reloading, and rapamycin on the extracellular matrix of aged tendon**
Raymond-Pope, Christiana; Fuqua, Jordan; Taylor, Michael; Kwak, Seong Eun; Smith, Loryn; Tuck, Joseph; Miller, Benjamin
- 22. Do aging-related post-transcriptional myosin modifications contribute to sarcopenia?**
Brown, Alon T.; Bernstein, Sanford I.; **Swank, Douglas M.**

23. A PRELIMINARY ASSESSMENT OF PHYSICAL FUNCTION AND TRANSCRIPTOME DYNAMICS IN AGED MICE WITH CONSTITUTIVE ACTIVATION OF THE ARYL HYDROCARBON RECEPTORS IN SKELETAL MUSCLE

Wimberly, Keon; Lackey, Jacob L; Tice, Abigail; Yang, Qingping; Luo, Xiaoping; LaPierre, Lan; Hepple, Russell T; Ryan, Terence E

24. Targeting the extracellular matrix to support aged muscle hypertrophy

Wohlgemuth, Ross P.; Keeble, Alexander R.; Owen, Allison M.; Thomas, Nicholas T.; Murach, Kevin A.; Fry, Christopher S.

Bioenergetics and Metabolism

25. The transcriptional responses of metabolic regulatory genes in response to low androgens differ across limb muscles exhibiting high and low magnitudes of atrophy

Ayers-Creech, Wayne A.; Laskin, Grant R.; Steiner, Jennifer L.; Gordon, Bradley S.

26. The HOMET1D Trial – Skeletal muscle health changes in response to exercise training and disuse in Type 1 Diabetes

Brahmbhatt, Aditya; Bulyovsky, Kayla, Garribotti, Maddison; Morris, Brooke; Rana, Ihtisham; Khumbare, Dinesh; Rebalka, Irena; Perry, Christopher; Hawke, Thomas

27. Disruption in Metabolic Flexibility and Sex-Specific Responses following Volumetric Muscle Loss

Bruzina, Angela S.; Crum, Braydon A.; Call, Jarrod A.; Greising, Sarah M.

28. Magnetic Resonance Markers of Rotator Cuff Muscle Microvascular Function and Energetics Following Rotator Cuff Tears

Cooper, Kinyata J.; Forbes, Sean; Walters, Glenn; Banks, Scott; Jackson, Virginia; Farmer, Kevin; Pozzi, Federico

29. Inflammation, insulin resistance, and capillary rarefaction: A new pathway to type 2 diabetes in rheumatoid arthritis

Jude, B; Porra, U; Lanner, JT; **Ferreira, DMS**

30. Overexpression of non-cysteine-rich domains of Imcd1 in skeletal muscle reveals enhanced mitochondrial function and glucose handling

Dumont, K; Jannig, PR; Cheng, AJ; Agudelo, LZ; Porsmyr-Palmertz, M; Correia, JC; Cervenka, I; Martínez-Redondo, V; Pettersson-Klein, AT; Lanner, JT; Ruas, JL; **Ferreira, DMS**

31. Satellite cell mitochondria are transferred to muscle fibers in response to a hypertrophic stimulus

Goh, Jensen; Williams, Julia; Joshi, Jai K.; Scott, Logan N.; Ogle, Sarah E.; Thomas, Nicholas T.; Keeble, Alexander R.; Fry, Christopher S.; Ismaeel, Ahmed; McCarthy, John J.

32. Estradiol mediates mitochondrial ROS and antioxidant buffering following volumetric muscle loss injury

Heo, Junwon; Miller, David; Greising, Sarah; Call, Jarrod

33. Titin's P-zone segment plays roles in thick filament organization, muscle function, and metabolism

Hoover, Catherine; Kolb, Justin; Tonino, Paola; van der Pijl, Robbert; Granzier, Henk

- 34. Exploring a Microvascular Impact on Muscle Metabolic Dysfunction in Chronic Inflammation**
Jude, Baptiste; Tagadirt, Léa; Porra, Ulysse; Ferreira, Duarte; Santos Alves, Estela; Mader, Theresa; Rizo-Roca, David; Chibalin, Alexander V.; Ducommun, Serge; Jollet, Maxence; Zierath, Juleen R.; von Walden, Ferdinand; Krook, Anna; Ruas, Jorge L.; Lanner, Johanna T.
- 35. Metabolism-guided Isolation of Muscle Stem Cells to Improve Transplantation Efficacy**
Lee, DE; Vann, CG; Mckay, LK; Newgard, CB; Bain, JR; White, JP
- 36. Mitochondria-localized AMPK May Dictate Functional Capacity of the Total AMPK Pool in Skeletal Muscle**
Montalvo Ryan N; Many, Gina; Li, Xiaolu; Sagendorf, Tyler; Yu, Jane; Shen, Wenqing; Guan, Yuntian; Mao, Xuansong; Zhang, Mei; Qian, Wei-Jun; Yan, Zhen
- 37. Examining the relationship between body composition and muscle function following combined anti-obesity pharmacotherapy and nutritional intervention: A proposal**
Morris, Brooke A.; Khajehzadehshoushtar, Shahrzad; Rana, Ihtisham A.; Brahmabhatt, Aditya N.; Garibotti, Madison C.; Perry, Christopher G.R.
- 38. Mitochondrial oxidative stress alters adaptive stress response signaling to muscle contraction**
Ostrom, Ethan; Mattson-Hughes, Aurora; MacDonald, Jim; Bammler, Theo; Hagy, Bo; Humphries, Kenneth; Van-Remmen, Holly; Day, Nicholas; Gaffrey, Matthew; Qian, Wei-Jun; Marcinek, David
- 39. The human variant rs6190 unveils a blueprint to reconvert the glucocorticoid receptor into a muscle insulin sensitizer**
Prabakaran, Ashok Daniel; Durumutla, Hima Bindu; Akinborewa, Olukunle; Latimer, Hannah; McFarland, Kevin; Piczer, Kevin; **Quattrocelli, Mattia**
- 40. The Role of Protein Succinylation in Myogenesis**
Schmitt, Susan; Blum, Jamie; Yadav, Angad; Metallo, Christian; Thalacker-Mercer, Anna
- 41. A full-length single nuclei transcriptomic atlas of human skeletal muscle insulin resistance.**
Whytock, Katie L; Goodpaster, BG; Sparks, LM
- 42. Comparison of respiratory capacities of permeabilized muscle fibers and isolated mitochondria in exercising horses**
Williams, Brooke; Wesolowski, Lauren; DiSilvestro, Adrianna; Barshick, Madison; Mogge, Keely; Jolley, Emily; Kaniyamattam, Karun; Logan, Alyssa; Johnson, Sally; White-Springer, Sarah
- 43. Time-dependent Uik1(S555) regulation of skeletal muscle metabolism in response to energetic stress**
Willoughby, O., Nichenko, A., Brisendine, M., Amiri, N., Specht, K., McMillan, R., Zaitsev, A., Burrows, S., Najt, C., Craige, S., Warren, J., Drake, J.

Exercise and Systems Biology

- 44. Impact of EAA+BFR on Myonuclear Accretion & Muscle Memory**
Augienello, Kaitlyn; Megowan, Helia G.; Mancuso, Gabriel; Gaash, Nitai; Dreyer, Makayla; Luu, Madeline; Fries, Adam; Dreyer, Hans C.

- 45. Partial Drp1 Ablation in Skeletal Muscle Attenuates Exercise-Induced Mitophagy Activation**
Berger, Nicolas; Olatunji, Adeola; He, Catherine; Manafi, Mahdiyeh; Galvez, Mark; Patel, Diti; Carey, Elizabeth; Rosen, H. Grace; Linden, Melissa; Zou, Kai
- 46. Exercise-induced Elevation of Fibroblast growth factor-1 Observed in MoTrPAC Data is Necessary for the Improved Glucose Tolerance in Mice**
Bhonsle, Hemangi S.; Zhang, Mei; Wang, Yuqi; Burgardt, Robb; Yan, Zhen
- 47. Detecting circadian clock function in cultured human primary muscle**
Bohmke, Natalie J; Zhang, Xiping; Esser, Karyn
- 48. Ladder climb resistance training promotes increased strength, hypertrophy, and changes in body composition regardless of age and sex in rats.**
De Sousa, Luis G.; Baehr, Leslie M.; Cicha, Michael; Kramer, Kyle.; Lira, Ana; Bodine, Sue C.
- 49. ABCB10 Mediates Exercise-Induced Protection Against Doxorubicin-Induced Respiratory Muscle Dysfunction**
Dowllah, Imtiaz; Nguyen, Branden; Babuschak, Jacob; Baumfalk, Dryden; Smuder, Ashley
- 50. Effects of Oxidation on Muscle Tissue-Level Passive Mechanics**
Ortiz-Delatorre, Julissa; Gulati, Rishi; Ricci, Austin; Callahan, Damien
- 51. Aerobic exercise improves cardiovascular health in a mouse model of DMD and is well tolerated in micro-dystrophin treated animals**
Hart, Cora; Lee, Matt; Hammers, David; Sweeney, Lee
- 52. Ribosomal protein L3-like (RPL3L) is not required for endurance capacity and adaptation in mice.**
Julien, Maxime; Jude, Baptiste; Cui, Minying; Edman, Sebastian; Lanner, Johanna; Wen, Yuan; von Walden, Ferdinand
- 53. Otud1 in Exercise-Induced Skeletal Muscle Metabolic Adaptations**
Krishnan, Velu; Wang, Yuqi; Pitzer, Christopher R.; Yan, Zhen
- 54. NOX4 Drives Exercise-Induced Mitophagy**
Mammel Rebecca; Specht, Kalyn; Nichenko, Anna; Addington, Adele; Bond, Jacob; Drake, Joshua; Craige, Siobhan
- 55. AMPKa2(Thr172) activation is essential for exercise-induced mitochondrial adaptations in skeletal muscle but not for improved exercise capacity**
Mao, Xuansong; Montalvo, Ryan; Shen, Grace; Zhang, Mei; Yu, Qing; Yan, Zhen
- 56. Temporal changes in the skeletal muscle nuclear proteome after acute exercise.**
Martin, Ryan A.; Viggars, Mark R.; Zhang, Xiping; Sanford, James A.; Adkins, Joshua N.; Douglas, Collin M.; Esser, Karyn A.
- 57. Developing an Automated Pipeline Method for Serial Image Analysis of Muscle Biopsies**
Megowan, Helia G.; Shuaib, Adam; Luu, Madeline; Augienello, Kaitlyn; Fries, Adam; Dreyer, Hans C.
- 58. Investigating Estrogen's Influence on Human Skeletal Muscle Mechanics Independent of Age**
Ortiz-Delatorre, Julissa; Ricci, Austin W.; Privett, Grace E.; Callahan, Damien M.

- 59. The core circadian clock factor, Bmal1, transduces sex-specific differences in both rhythmic and non-rhythmic gene expression in the mouse heart**
Procopio, Spencer B.; Zhang, Xiping; Ding, Haocheng; Semel, Maya G.; Schroder, Elizabeth A.; Viggars, Mark R.; Seward, Tanya S.; Du, Ping; Wu, Kevin; Johnson, Sidney R.; Prabhat, Abhilash; Schneider, David J.; Stumpf, Isabel G.; Rozmus, Ezekiel R.; Huo, Zhiguang; Delisle, Brian P.; Esser, Karyn A
- 60. Skeletal Muscle Microbiopsies in Children and Adults - Tolerability, Sample Yield and Analyzability**
Rydell Högelin, Emil; Edman, Sebastian; Löfgren, Axel; Janning R, Paulo; Thulin, Kajsa; Michno, Piotr; Norrbom, Jessica; Alkner A, Björn; von Walden, Ferdinand; Fornander, Lotta
- 61. 3-Dimensional Myonuclear Analysis on Single Muscle Fibers using Imaris**
Schroeder, Esben; Megowan, Helia G.; Fries, Adam; Godino, Lia; Sridhar, Mahathi; Gavaldon, Payton; Searcy, Jake; Dreyer, Hans C.
- 62. Exercise-induced elevation of Cxcl14 observed in MoTrPAC data is required to improve exercise capacity after 4 weeks of exercise training in mice**
Silver, Stewart; Burgardt, Robb; Yan, Zhen
- 63. Endurance Exercise Elevates Plasma Mature Brain-Derived Neurotrophic Factor in Youth and Adults, with Enhanced Effects in Adulthood**
Starck, Julia; Edman, Sebastian; Corell, Linnéa; Hangasjärvi, William; von Finkenstein, Amelie; Reimringer, Mikael; Reitzner, Stefan; Norrbom, Jessica; Moberg, Marcus; von Walden, Ferdinand
- 64. Stretch activation combats force loss from fatigue in fast-contracting mouse skeletal muscle fibers**
Swank, Douglas M.; Woods, Philip C.; Miller, Mark S.
- 65. Sympathetic modulation of skeletal muscle electrical activity, force, and fatigue**
Ward, Brittney; Ward, Patricia J.
- 66. Cisplatin administration drives the accumulation of senescent-like cells and myonuclei, contributing to anabolic resistance in exercise trained mice**
Wells, Jaden M.; Daredia, Jainil; Wiggs, Michael P.; Dungan, Cory M.

Muscle Atrophy and Associated Pathologies

- 67. Molecular signaling perturbations associated with skeletal muscle dysfunction in G93A*SOD1 overexpressing mouse model of ALS**
Aishwarya, Richa; Abdullah, Chowdhury S.; Remex, Naznin Sultana; Islam, Tamjid; Bhuiyan, Mohammad Alfrad Nobel; Bhuiyan, Md. Shenuarin
- 68. Mitochondrial impairment in the skeletal muscle of Fibromyalgia patients.**
Santos-Alves, Estela; Ekenstam, Karolina; Sandor, Katalin; Linderöth, Emilie; Starck, Julia; Shorter, Emily; Rosén, Annelie; von Walden, Ferdinand; Löfgren, Monika; Kosek, Eva; Svensson, I. Camilla; Lanner, T. Johanna
- 69. Fish Oil Supplementation Enhances Muscle Mass and Force Recovery in Old Rats Following Disuse Atrophy**
Baehr, Leslie M.; de Sousa, Luis G.O.; Bodine, Sue C.

70. WITHDRAWN-No Poster

71. GPx4 Overexpression Mitigates Cancer Cachexia.

Brown, Jacob

72. Female mice are preferentially protected against the skeletal muscle dysfunction that occurs with aging and obesity

Butler, Landon; Nunan, Emily; Butcher, Joshua

73. Identifying FKBP5 as a novel mediator of cancer cachexia

Cardona Polo, Felipe; Gonzalez Paola; Huot, R. Joshua

74. Evaluation of the Skeletal Muscle Transcriptome during the Remobilization Phase after Disuse

Choi, Sung Jun; Kao, Wei-Chun; Fliflet, Alex; Boppart, Marni

75. Myonuclear RelA and Stat3 cooperatively promote tumor growth and inflammation in tumor bearing mice

Counts, Brittany R; Correia, Rafael; Ostrowski, Michael; Guttridge, Denis; Koniaris, Leonidas; Zimmers, Teresa

76. Acute CHOP chemotherapy leads to lower muscle size and satellite cell abundance in a pediatric mouse model

Daredia, Jainil; Wells, Jaden M.; Nascimento, Carla M.C.; Dungan, Cory M.; Wiggs, Michael P.

77. Estrogen-related receptors α/γ signaling in cancer cachexia and muscle atrophy

DeBruine, Anna; Poliakova, Svitlana; Kolonin, Mikhail; Kumar, Ashok; Narkar, Vihang

78. The impact of B-cell lymphoma 6 knockdown on skeletal muscle physiology

Desjardins, Krystal; Leduc-Gaudet, Jean-Philippe; Usmani, Shirine; Cefis, Marina; Marcangeli, Vincent; Capobianco, Anthony; Woo, Mina; Gouspillou, Gilles

79. Circadian transcriptomes in cardiorespiratory muscles are disrupted by KPC pancreatic cancer

Ducharme, Jeremy B; Schonk, Martin M; Gutierrez-Monreal, Miguel A; Huo, Zhiguang; Esser, Karyn A; Judge, Sarah M; Judge, Andrew R.

80. KPC pancreatic cancer disrupts the skeletal muscle circadian transcriptome in a FoxP1-dependent manner

Ducharme, JB; Neyroud, D; Schonk, MM; Gutierrez-Monreal, MA; Huo, Z; Tucker, HO; Esser, KA; Judge, SM; Judge, AR

81. Age as a driver of biological sex-specific adaptations to C26-induced cancer cachexia

Wells, Jaden M; Rodriguez, Rebecca; Dao, Allen; Daredia, Jainil; Nascimento, Carla; Murach, Kevin A.; Wiggs, Michael P.; Law, Michelle L.; Dungan, Cory M.

82. Investigating the role of Krüppel-Like Factor 10 (KLF10) in Pancreatic Ductal Adenocarcinoma (PDAC) associated cachexia

Epstein, Savannah A.; Dasgupta, Aneasha.; Gibbard, Daniel F.; Schmitt, Rebecca E.; Arneson-Wissink, Paige C.; Ducharme, Alexandra M.; Bruinsma, Elizabeth S.; Hawse, John R.; Jatoi, Aminah; Doles, Jason D.

- 83. Macrophage Metabolic Rewiring Alters Raman-Based Molecular Signatures and Functional Recovery Following Disuse Atrophy in Aged Mice**
Fennel, Zachary J.; Bourrant, Paul-Emile; Yee, Elena M.; Castro, Robert J.; Kurian, Anu S.; Palmer, Jonathan; Kosari, Nikki; Christensen, Morgan; Zhou, Anhong; Funai, Katsuhiko; O'Connell, Ryan M.; Drummond, Micah J.
- 84. Development of a Human Extracellular Vesicle Therapy to Recover Skeletal Muscle Following Disuse**
Fliflet, Alexander; Barnes, Takeshi; Tan, Yanqi; Burd, Nicholas; Sweedler, Jonathon; Boppart, Marni
- 85. Characterization of AICAR Effects on Muscle Regeneration in Cachectic Mice**
Funk, Zachary M.; Reid, Olivia G.; Brown, Jackson A.; Nichols, P. Grace; Foster, Daniel J.; Stark, Isaac S.; Thomson, David M.
- 86. A comparison of cardiac right and left ventricular hemodynamics in dystrophin-deficient D2.mdx mice during early-stage disease**
Garibotti, Madison C.; Morris, Brooke A.; Brahmabhatt, Aditya N.; Khajehzadehshoushtar, Shahrzad; Rana, Ihtisham A.; Thuhan, Arshdeep K.; Debi, Ryan; Lakin, Robert; Backx, Peter H.; Perry, Christopher G. R.
- 87. Interrogating the Myofiber-FAP GDNF-GFRA1 Signaling Axis to Maintain Neuromuscular Junction Integrity Following Injury**
Gonzalez-Velez, Sara; Keeble, Alexander R.; Thomas, Nicholas T.; Owen, Allison M.; Goh, Jensen; Johnson, Darren L.; Stone, Austin V.; Wen, Yuan; Noehren, Brian; Fry, Christopher S.
- 88. Molecular clock suppressors promote myotube atrophy in vitro with direct relevance to limb muscle atrophy in response to androgen deprivation**
Gordon, Bradley S.; Laskin, Grant R.; Steiner, Jennifer L.; Ayers-Creech, Wayne A.; Dunlap, Kirsten R.; Vied, Cynthia; Lee, Choogon
- 89. Prevention of Sarcopenic Obesity Restores Skeletal Muscle Regenerative Capacity Post Ischemic Injury**
Guilfoyle-Speese, Andrew C.; Rosewater, Cody L.; Padgett, Caleb A.; Sellars, Hunter; Mintz, James D.; Fulton, David J.; Stepp, David W.
- 90. Sex differences in skeletal muscle atrophy induced by UBR5 suppression: a role for nuclear hormone receptor turnover?**
Hughes, David C.; Baehr, Leslie M.; Pranay, Atul.; Waddell, David S.; Deane, Colleen S.; Humphries, Kenneth M.; Sharples, Adam P.; Bodine, Sue C.
- 91. Lung tumor-derived factors directly regulate circadian clock genes in cultured myotubes**
Jenkins, Tanner; Ramanathan, Chidambaram; Carson, James; Puppa, Melissa
- 92. Effects of Adeno-associated Virus-mediated Overexpression of ABCB8 on Doxorubicin-induced Myotoxicity**
Ka, Soonjo; Wendler, Christopher C; Nguyen, Branden L; Smuder, Ashley J
- 93. FOXO1-Driven Myonuclear Pathology in Chronic Kidney Disease Persists After Kidney Transplantation**
Keeble, Alexander R.; Gonzalez-Velez, Sara; Goh, Jensen Z.; Weiss, Helena C. King, Julia L.; Thomas Nicholas T.; Owen, Allison M.; Paredes, William; Duran, Sally; Zhang, Kehao; Abramowitz, Matthew K.; Fry, Christopher S.

- 94. The mitochondrial-targeted antioxidant SkQ1 prevents mitochondrial-induced apoptosis but not atrophy or necroptosis in skeletal muscle during ovarian cancer**
Khajehzadehshoushtar, Shahrzad; Delfinis, Luca J.; Rahman, Fasih A.; Garibotti, Madison C.; Gandhi, Shivam; Brahmabhatt, Aditya; Morris, Brooke A.; Garlisi, Bianca; Lauks, Sylvia; Aitken, Caroline; Zhang, Zhu-Xu; Simpson, Jeremy A.; Quadriatero, Joe; Petrik, Jim; Perry, Christopher G.R.
- 95. Elucidating the Role of IL-6 in Ventilator-Induced Diaphragmatic Dysfunction**
Lang, Ryann; Liang, Feng; Ding, Jun; Petrof, Basil
- 96. Characterization of DEPP1, a new player of autophagy that regulates skeletal muscle integrity**
Leduc-Gaudet, JP; Ayoub, MB; Cefis, M; Franco-Romero, A; Marcangeli, V; Maude, D; Wang, A; Sedraoui, S; Mayaki, D; Huck, L; Sandri M; Hussain, SNA; Gouspillou, G
- 97. Muscle-Specific TAS1R2 Deletion Mitigates Obesity- and Weight Loss-Induced Atrophy**
Link, Grace M.; Serrano, Joan; Kyriazis, George A.
- 98. Investigating the functions of mitochondrial phosphatase PPTC7 on maintaining skeletal muscle homeostasis**
Lochetto, Tessa; Menezes, Thiago; Ferey, Jeremie; Meyer, Gretchen A.; Niemi, Natalie M.
- 99. MITOCHONDRIAL PERMEABILITY TRANSITION CAUSES SKELETAL MUSCLE ALTERATIONS COMMON IN SARCOPENIA, CACHEXIA AND WASTING DISORDERS**
Lukasiewicz, Cole; Skinner, Sarah; Cohen, Michael; Wolan, Dennis; Semel, Maya; Hepple, Russell T.
- 100. The Effects of Leg Immobilization and Subsequent Resistance Training on Skeletal Muscle Adaptation in Trained vs. Untrained Adults**
Michel, J. Max; Godwin, Josh S.; Plotkin, Daniel L.; McIntosh, Mason C.; Mattingly, Madison L.; Agostinelli, Philip J.; Mueller, Breanna J.; Anglin, Derick A.; Kontos, Nicholas J.; Berry, Alexander C.; Vega, Marina Meyer; Pipkin, Autumn A.; Stock, Matt S.; Graham, Zachary A.; Baweja, Harsimran S.; Mobley, C. Brooks; Bamman, Marcas M.; Roberts, Michael D.
- 101. Cancer-conditioned Media Exposure Induces Muscle Clock Disruptions in Myotubes**
Morena, Francielly; Gutierrez Monreal, Miguel A.; Schonk, Martin; Judge, Andrew R., Esser, Karyn A.
- 102. Inflammation-Driven Transcriptional Signatures in Skeletal Muscle During Cancer-Cachexia**
Muhyudin, Ruqaiza; Morena da Silva, Francielly; Schrems, Eleanor R.; Cabrera, Ana Regina; Noga, Nicole N.; Washington, Tyrone A.; Greene, Nicholas P.
- 103. Human septic serum induces gene expression changes in C2C12 myotubes**
Muller, Diana C; Azam, Armina; Mejia, Nathaniel; Efron, Philip; Laitano, Orlando
- 104. Effect of neoadjuvant treatment on skeletal muscle mass in locally-advanced non-small cell lung cancer**
Neyroud, Daria; Becce, Fabio; Gonzalez, Miche; Baggish, Aaron L.; Forster Céline
- 105. Effects of Azoxymethane-Induced Colorectal-associated Cancer and Chemotherapy in a Murine Model of Cachexia: A Pilot Study**
Noga, Nicole N.; Schrems, Eleanor R.; Muhyudin, Ruqaiza; Ahmed, Izzeldin Y.; Cabrera, Ana Regina; Relich, Morghan; Muldoon, Timothy J.; Washington, Tyrone A.; Greene, Nicholas P.

- 106. Investigation of non-canonical NF- κ B activation in response to skeletal muscle injury and pathophysiology**
Olateju, BS; Windisch, T; Carrel, W; Parvatiyar, K; Gordon, BS; MS, Parvatiyar
- 107. Neuromuscular Dysfunction Precedes Muscle Atrophy and Bone Loss in Colorectal Cancer**
Ortiz Gonzalez, Paola Marie; Galiana-Melendez, Fabiola; Giffin, Davis B.; Clouse, Morgan; Pin, Fabrizio; Plotkin, Lilian; Huot, Joshua R.
- 108. Altered Collagen 1 Dynamics During Post-Sepsis Skeletal Muscle Dysfunction**
Granada-Correa, Oriana; Keeble, Alexander R.; Ritchey, Avery S.; Thomas, Nicholas T.; Bates, Zane T; Fry, Christopher S.; **Owen, Allison M.**
- 109. Tumor-derived Ctgf as an Indirect Driver of Pancreatic Cancer-Associated Cachexia**
Poole, Brittney; Calloway, Chandler; Schonk, Martin; Judge, Andrew R.; Judge, Sarah M.
- 110. Inflammatory Cell Infiltration and Fibrotic Remodeling in Skeletal Muscle of Septic Aged Mice**
Reis, Gisienne; Boeno, Francesco; Muller, Diana; Azam, Armina; Li, Zhuoxin; Ashley, Malaica; Mejia, Nathaniel; Moraes, Michele; Laitano, Orlando
- 111. Simulated Anorexia Nervosa in Rats Affects Muscles of Different Functional and Metabolic Phenotypes Differently**
Rosa-Caldwell, Megan E.; Breithaupt, Lauren; Kaiser, Ursula B.; Garland, Eliza; Pinkham, Sheridyn; Hancock, Madisyn; Rutkove, Seward B.
- 112. The effects of short-term environment-induced heat stress on muscle from male mice**
Roths, Missey; Vorwald, Morgan; Lee, Ji Heun; Selsby, Joshua
- 113. Identification of non-myogenic mesenchymal cell (NMMC) populations which contribute to massive rotator cuff muscle tear pathologies**
Helen Rueckert, Anthony J. Mirando, Abigail P. Leinroth, Juliana Ibarra, Matthew J. Hilton
- 114. Complement component C5-signaling mediates pancreatic cancer-induced muscle pathologies**
Schonk, Martin M.; Ducharme, Jeremy B.; Al Zaeed, Nour; Judge, Sarah M.; Atkinson, Carl; Judge, Andrew R.
- 115. Therapeutic targeting of mitochondrial permeability transition in a mouse model of pancreatic cancer cachexia**
Semel, Maya; Lukasiewicz, Cole; Mannings, Abbey; Austin, Rashad; Hepple, Russell T.
- 116. Sex differences in genes associated with metabolic signaling, structural components and RNA homeostasis in muscles as a response to atrophy and recovery**
Sklivas, Alexander B; Hettinger, Zachary R; Miller, Benjamin F; Dupont-Versteegden, Esther E
- 117. HDAC4 DNA binding disrupts muscle plasticity following joint injury and is rescued with muscle-specific Hdac4 deletion**
Thomas, Nicholas T.; Keeble, Alexander R.; Owen, Allison M.; Gonzalez-Velez, Sara; Brightwell, Camille R.; Johnson, Darren L.; Stone, Austin V.; Noehren, Brian; Wen, Yuan; Fry, Christopher S.
- 118. BNIP3-dependent muscle atrophy in cancer cachexia promotes PDAC progression**
Ware, Alexandra S.; Foster, Elizabeth CS; Kwon, Jason; Demonbreun, Alexis; Macleod, Kay F.

- 119. iPLA2: a novel intracellular Ca²⁺ regulator in triggering muscle weakness during denervation**
Xu, Hongyang; Bhaskaran, Shylesh; Thomason, Jessica; Kneuper, Kara; de Sousa, Gustavo; Brown, Jacob; Van Remmen, Holly
- 120. Transient deletion of Rapsyn alters neuromuscular function**
Xu, Jing; Huot, Joshua R

Muscle Diseases and Therapeutics

- 121. Handheld, ultrasound-guided skeletal muscle needle-biopsy technique facilitates measurement of human muscle architecture and biochemical properties: procedure, details, and application**
Barber, Addison; Willbanks, Amber; Meza, Guadalupe; Dayanidhi, Sudarshan; Arnold, David; Lieber, Richard L.; Roy, Ishan
- 122. RNA-sequencing and global proteomics of diaphragm weakness in female rats after myocardial infarction**
Baumfalk, Dryden R., Martinez, Jose C., McDonagh, Brian., Ferreira, Leonardo F.
- 123. Voluntary Wheel Running or Donepezil Delays Early Neuromuscular Dysfunction in a Mouse Model of Alzheimer's Disease**
Brisendine, Matthew; Willoughby, Orion; Brown, Jack; Braxton, Daniel; Henry, Shelby; Amiri, Niloufar; McCoin, Colin; Thyfault, John; Poelzing, Steven; Grange, Robert; Drake, Joshua
- 124. In silico analysis of conformational dynamics of the alpha-actinin-2 actin-binding domain in response to HCM and distal myopathy mutations**
Crawford, Rhiannon; Solís, Christopher
- 125. Acute ankle joint inflammation affects adjacent muscle and is associated with ribosome heterogeneity**
Cui, Minying; Jude, Baptiste; Lanner, Johanna; von Walden, Ferdinand
- 126. Differential pathology and susceptibility to MBNL loss across mouse muscles in a myotonic dystrophy model**
Davenport, Mackenzie L; Fong, Amaya; Montoya Vazquez, Gloria; Alves de Moura, Maria F; Bubenik, Jodi L; Swanson, Maurice S
- 127. Spiny mice are primed but fail to regenerate volumetric skeletal muscle loss injuries**
Davenport, Mackenzie L; Fong, Amaya; Albury, Kaela N; Henley-Beasley, C Spencer; Barton, Elisabeth R; Maden, Malcolm; Swanson, Maurice S
- 128. Mitochondrial Capacities in an Obesity Model of Duchenne Muscular Dystrophy Are Altered by Glucocorticoids**
DiSilvestro, Adrianna; Wesolowski, Lauren; Vorwald, Morgan; Roths, Melissa; Lee, Ji Heun; Selsby, Joshua; White-Springer, Sarah
- 129. Dock7 is an essential driver of Skeletal Muscle Health and Function**
English, Katherine G.; Samani, Adrienne; Karupassamy, Muthukumar; Becker, Kathleen; Alexander, Matthew S.
- 130. Retinoic acid drug delivery for muscle recovery from atrophy**
Cheung, Candice V.; Smuder, Ashley J.; **Gower, R. Michael**

- 131. Metabolic remodeling of dystrophic muscle in mouse models of Duchenne muscular dystrophy.**
Hardee, Justin; Trieu, Jennifer; Narayana, Vinod; Chee, Annabel; Swiderski, Kristy; Haber, Emily; Chung, Jin; Naim, Timur; Plenderleith, Stuart; De Souza, David; Lynch, Gordon
- 132. Immune responses in DMD gene therapy and investigation of rAAV transduction mechanisms**
Hobson, Orinda; Prima, Victor; Russ, Jenny; Sweeney, H. Lee; Hammers, David W.
- 133. Nonclinical Data for PGN-EDODM1 Demonstrated Mechanistic and Meaningful Activity for the Potential Treatment of DM1**
Gilbert, J.; Klein, A.; Lonkar, P.; Foy, J.; Yu, Shaoxia.; Furling, D.; **Holland, A.**
- 134. Single- and Repeat-Dose Nonclinical Data for PGN-EDO51 Demonstrated Favorable Pharmacology and Safety Profiles for the Treatment of DMD**
Sweeney, S.; Gilbert, J.; Lonkar, P.; Lamore, S.; Foy, J.; **Holland, A.**
- 135. Estrogen-related receptor alpha promotes muscle regeneration and mitigates myopathy in a pre-clinical model of Duchenne Muscular Dystrophy**
Huang, Sophia; Nguyen, Thi Thu Hao; Poliakova, Svitlana; Sopariwala, Danesh; Narkar, Vihang
- 136. Drug repurposing evaluation of lead autophagic antagonists in a novel XMEA mouse model**
Karuppasamy, Muthukumar; English, Katherine; Lopez, Michael; Huang, Lily; Dowling, James; Alexander, Matthew
- 137. Time Release Ion Matrix Enhances Skeletal Muscle Following Injury**
Kendra, Jacob; Golpasandi, Shadi; Naman, Alexandra; Goble, Seth; Sudhagar, Nikitha; Morton, Aaron
- 138. Long-term imoxin treatment did not ameliorate inflammation, ER stress or improve muscle function in dystrophic diaphragm**
Lee, Ji Heun; Vorwald, Morgan; Roths, Missey; Selsby, Joshua; Valentine, Rudy
- 139. Skeletal muscle dysfunction and histopathology in a rat model of Duchenne muscular dystrophy**
Lee, Young il; Hart, Cora C.; Henley-Beasley, C. Spencer; Herr, Jeffrey S.; Walter, Glenn A.; Wiseman, Robert W.; Hammers, David; Barton, Elisabeth R.; Sweeney, H. Lee
- 140. Elucidating mechanisms of kinesin-dependent RNA localization in mouse muscle**
Li, Zhuangyue; Valero, Carmen; Muscato, Derek; Olafson, Hailey; Niazi, Cameron; Davey, Emily; Wang, Eric T
- 141. RKER-065, a novel ActRII ligand trap, reduced harmful inflammation and decreased markers of fibrosis in a mouse model of Duchenne muscular dystrophy**
Linzey, Michael; Zhen, Gehua; Nathan, Remya; Cahill, Morgan; Delong, Raine; Daman, Tyler; Macaluso, Savanna; Todorova, Radina; Grenha, Rosa; Lachey, Jenn; Lerner, Lorena; Seehra, Jasbir; and Fisher, Ffolliott Martin
- 142. Conserved Roles of MCA-1 and PMCA in Regulating Early Calcium Dynamics in Muscle**
Marchiafava, Damiano; Fazyl, Adina; Engelke, Martin; Stein, Wolfgang; Vidal-Gadea, Andres
- 143. Dystrophin Isoform Expression and Muscle Plasticity in C. elegans: Implications for DMD**
Marchiafava, Damiano; Fazyl, Adina; Vidal-Gadea, Andres

- 144. Orchestrated sarcomeric protein regulation in donor-derived skeletal muscle microphysiological system**
Mariani, Vinicius M.; Caples, Karly A.; Barton, Elisabeth R.; Malany, Shiobhan.
- 145. Investigation of statin ryanodine receptor 1 activation on mitochondrial function and amino acid balance in skeletal muscle**
Marlatt, Matthew; McCue, Meghan; Shaheed, Mena; MacLean, David; Hawke, Thomas; Rebalka, Irena
- 146. Investigating the role of CD38 in spinal and bulbar muscular atrophy**
Davis, Gabrielle; Nissley, Elyse; Lozzi, Caroline; Ojo, Adetola; Goldsmith, Mariah; Ruck, Allison; Raubenstine, David; Goeckel, Fiona; Pennuto, Maria; **Montie, Heather**
- 147. Targeting IMAT through small molecule therapeutics**
Noble, Christian D.; Appu, Ambili Bai; Liu, Xinyue; Palzkill, Victoria R.; Ryan, Terence; Kopinke, Daniel
- 148. Tissue-specific Alternative splicing to Regulate GENE Therapy (TARGET) for X-linked myotubular myopathy**
O'Brien, Alana P; Scotti, Marina M; Jennings, Ethan T; Olafson, Hailey R; Valero, Carmen M; Adams, Leanne M; Muscato, Derek R; Wang, Xiaoxiao; Wang, Eric T
- 149. Regulation of Sarcoplasmic Reticulum Calcium Leak in Skeletal Muscle**
Yee, Rachel; Lee, Chang Seok; Jung, Sung Yun; Yousif, Omar; Cavazos, Courtney; Chang, Ting; Hamilton, Susan L.; **Rodney, George G.**
- 150. Mitochondrial dysfunction precedes decline in muscle contractile function in respiratory muscle of SOD1G93A ALS mice**
Rua, Michael; Kunz, Eric; Zhong, Renjia; Harris, Erin; Kim, Kyoungrae; Kapur, Kunal; Lim, Jace; Ryan, Terrence; Seven, Yasin; Wei-LaPierre, Lan
- 151. AAV induced overexpression of IGFBP-3 is sufficient and necessary to promote skeletal muscle wasting via TGF- β dependent signaling in mice**
Sechrist, Zachary; Cole, Calvin
- 152. Structural dynamics of slow skeletal myosin binding protein-C's N-terminus**
Seffrood, Morgan; Bunch, Tom; Lepak, Torie; Colson, Brett
- 153. Functional, molecular, and histological characterisation of skeletal muscle in a murine model of peripheral artery disease**
Shorter, Emily.; Zhengye, Liu.; Santos Alves, Estela.; Vilhelmiina Kivimäki, Saima.; Cui, Minying.; Michaela Xanthopoulou, Emmanouella.; Jude, Baptiste.; Edman, Sebastian.; von Walden, Ferdinand.; Lanner T, Johanna
- 154. Spatial Transcriptomics Analysis of Becker and Duchenne Muscular Dystrophy to Uncover Histopathological Changes in Dystrophinopathies**
Heezen, Laura GM; Mao, Qirong; Nicolau, Stefan; Novella Raussel, Claudio; van der Weerd, Julia; Kueckelhaus, Jan; Gokul Nath, Rasya; Manera-Diaz, Jordi; Kan, Hermien; Niks, Erik; van Putten, Maaike; Aartsma-Rus, Annemieke; Flanigan, Kevin; Mahfouz, Ahmed; **Spitali, Pietro**

- 155. In silico analysis of conformational dynamics of the alpha-actinin-2 actin-binding domain upon phosphorylation**
Tigro, Helene; Salinas, Tiffany; Solís, Christopher
- 156. In silico analysis of the desensitization mechanisms in the cardiac troponin complex by Tnl phosphorylation and drug binding**
Tigro, Helene; Solis, Christopher
- 157. Short term daily deflazacort decreases membrane permeability and increases maximum force in mdx mice**
Turner, K.D.; Qian, Y.; Claflin, D. R.; Newell-Stamper, B.L.; Peter, A.K.; Michele, D.M.; Russell, A.J.; Brooks, S.V.
- 158. Chronic inflammation in skeletal muscle induces ER Stress and activation of the IRE1 α pathway**
van Deventer, Alexander; Santos Alves, Estela; Ferreira, Duarte MS; Lanner, Johanna T
- 159. Harnessing Endogenous Dystrophin Isoforms to Ameliorate Duchenne Muscular Dystrophy**
Vidal-Gadea, Andres; Marchiafava, Damiano; Fazy, Adina; Jones, Mackenzie; Gomez, Margarita
- 160. Isoform Interventions: Harnessing Endogenous Dystrophin Variants to Restore Muscle Function**
Vidal-Gadea, Andres; Marchiafava, Damiano; Fazy, Adina; Jones, Mackenzie; Gomez, Margarita
- 161. Glucocorticoid treatment further promoted metabolic dysregulation caused by DMD and insulin resistance**
Vorwald, Morgan E.; Lee, Ji Heun; Roths, Melissa; Valentine, Rudy J.; Selsby, Joshua T
- 162. Inducible, Muscle-Specific Gene Editing in vivo: Combining myoAAV and Tet-ON Cas9**
Walton, Bonnie J; Coburn, Peyton T; Depa, Lauren A; El-Amouri, Salim; Peck, Bailey D; McCarthy, John J; Wen, Yuan
- 163. Impact of B12 supplementation on mitochondrial biology in aged female mice**
Williamson, Abigail; Ma, Wenixa; Rorrer, Shelby; Field, Martha; Thalacker-Mercer, Anna
- 164. Therapeutic interventions to reduce muscle decrements associated with anti-obesity treatments**
Zerpa, Eli; Ramick, Anton; Febo Tirado, Julian; Hammers, David W.
- 165. RKER-065 demonstrated broader anti-inflammatory effects than prednisolone in a Duchenne muscular dystrophy (DMD) mouse model**
Zhen, Gehua; Linzey, Michael; Nathan, Remya; Cahill, Morgan; Daman, Tyler; Macaluso, Savanna; Todorova, Radina; Grenha, Rosa; Lachey, Jenn; Lerner, Lorena; Seehra, Jasbir; Fisher, Ffolliott Martin
- 166. Muscle-specific reduction of ORAI1-dependent store-operated calcium entry in calpain-3 deficient mice ameliorates intracellular calcium signaling and improves muscle contractile function**
Zhong, Renjia; Villani, Katelyn; Henley-Beasley, Spencer; Griffis, Madisen; Barton, Elisabeth; Wei-LaPierre, Lan

Muscle Hypertrophy and Regeneration

- 167. Site-1 Protease Controls Skeletal Muscle Differentiation**
Hanners, Katelyn; Rai, Yasmin; Canga, Emma; Suarez Lopez Gallo, Rodrigo; Brookheart, Rita T

- 168. Widespread Rewiring of the DNA Methylome and Transcriptome with Decelerated Methylation Age After Regeneration in Aged Skeletal Muscle**
Chambers, Toby; Wells, Jaden; Koopmans, Pieter Jan; Morena, Francielly; Malik, Zain; Greene, Nicholas; Brooke, Robert; Milčiūtė, Milda; Gordevičius, Juozas; Horvath, Steve; Wen, Yuan; Dungan, Cory; Murach, Kevin
- 169. Impact of subacute cervical spinal cord injury on diaphragm vascular density**
Diller, Alexandra; Rana, Sabhya; Deegan, Kyle; Gonzalez, Isabelle; Thakre, Prajwal; Fuller, David
- 170. Annexin A2 orchestrates myofiber-macrophage crosstalk to direct muscle regeneration**
Dobis, Mia; Bittel, Daniel C.; Jaiswal, Jyoti K.
- 171. Depletion of Fam210a in Satellite Cells Impairs Muscle Strength and Perfusion Recovery in a Female Mice with Hindlimb Ischemia**
Dong, Gengfu; Li, Yufen; Wang, Yubo; Choi, Jaewon; Russel, Jennifer; Yue, Feng; Ryan, Terence E.
- 172. A Transient Ribosomal Protein Parologue Switch Accompanies Ribosome Biogenesis in Skeletal Muscle Regeneration**
Edman, Sebastian; Cui, Minying; Nilsson, Abraham; Jude, Baptiste; Koopmans, Pieter Jan; Chambers, Toby; Jannig, Paulo; Shorter, Emily; Lanner, Johanna; Sejersen, Thomas; Pontén, Eva; Murach, Kevin; Schilcher, Jörg; von Walden, Ferdinand
- 173. Digging for Desert Hedgehog: Identifying the source of the Hedgehog ligand during Skeletal Muscle Regeneration**
Fierman, Kiara; Kopinke, Daniel
- 174. Muscle-specific TIF-1A deletion does not restrict basal rDNA transcription but impairs ribosome production and hypertrophy**
Godwin, Joshua; Guo, Bin; Nader, Gustavo
- 175. The Ubiquitinomics of Skeletal Muscle Hypertrophy**
Goodman, Craig A.; Du, Wayne; Blazej, Ronnie; Saunders, Alastair A.E.; McNamara, James W.; Molendijk, Jeff; Leeming, Michael G.; Lewis, Christopher T.A.; Ochala, Julien; Parker, Benjamin L.; Gregorevic, Paul
- 175B. Dissecting Nuclear Speckles and RNA Splicing Dynamics in Single Muscle Stem Cells with Integrative Transcriptomics**
Guzman, Steve; Duran Pamela; Xiao, Yu, He, Chuan; Aguilar, Carlos
- 176. The Utilization of Developmental Muscle Precursors in Volumetric Muscle Loss**
Hennigan, Andrew; Schmitt, Rebecca; Dasgupta, Aneesha; Gibbard, Daniel; Doles, Jason
- 177. The Temporal Nature of Regions Of Active Remodeling (ROARs) in Skeletal Muscle After a Bout of Resistance Exercise**
Hibbert, Jamie E.; Meinhold, Marius; Lindley, Garrison T.; Melka, Kiley; Flynn, Corey G.K.; Zhu, Wenyan G.; Jorgenson, Kent W.; Hornberger, Troy A.
- 178. The Influence of Pulsatile MYC Overexpression on the Skeletal Muscle Proteome**
Jones III, Ronald; Walters, Ruth; Borowik, Agnieszka; Taylor, Michael; Miller, Benjamin; Murach, Kevin

- 179. Caudatin regulated the processes of muscle regeneration and fat accumulation via Hedgehog signaling in skeletal muscle**
Kim, Jin Tae; Zhou, Yimeng; Zhan, Xiaoman; Ghimire, Alina; Son, Hui Mang; Lee, Kang Hyuk; Lee, Hong Jin
- 180. Integrated Transcriptomic Analysis of the Skeletal Muscle Response to an Acute Hypertrophic Stimulus in Adult and Aged Mice Reveals a miR-1 Regulatory Signature**
Koopmans, Pieter J.; Morena, Francielly; Jones III, Ronald G.; Greene, Nicholas P.; Murach, Kevin A.
- 181. B cell translocation gene 1 (BTG1) is required for the self-renewal and homeostatic maintenance of muscle stem cells and muscle regeneration**
Li, Yufen; Ren, Junxiao; Chu, Leah; Zhou, Yumei; Nuzhat, Temima; Wang, Yubo; Yue, Feng
- 182. Primary Cilia in FAPs: Mediators of Hedgehog Signaling for Muscle Health**
Liu, Xinyue; Kopinke, Daniel
- 183. Muscle resident mesenchymal stem cells are required for muscle mass maintenance but not neuromuscular junction integrity**
Luo, Yangyi E.; Lee, Young il; Abe-The, Zoe; Wei-LaPierre, Lan; Barton, Elisabeth R.
- 184. The role of fibroadipogenic progenitor cell mitochondrial transfer in skeletal muscle following ischemia-reperfusion injury**
Montenegro, Cristhian; Sang, Luke; Liu, Xuhui; Feeley, Brian; Davies, Michael
- 185. Estrogen-Related Receptors α and γ in Muscle Stem Cells are required for muscle regeneration**
Nguyen, Thi Thu Hao; Poliakova, Svitlana; Huang, Ya Xiang; Narkar, Vihang A
- 186. Serine/Glycine Availability Impacts Skeletal Muscle Stem Cell Proliferation**
Odom, Lauren; Ma, Wenxia; Rorrer, Shelby; Dannemiller, Ryan; Yadav, Angad; Thalacker-Mercer, Anna
- 187. Suppression of Intramuscular Adipose Tissue Improves Limb Outcomes in Mice with Hindlimb Ischemia**
Palzkill, Victoria; Moparthy, Divyansha; Kopinke, Daniel; Ryan, Terence
- 188. Single Nucleus Multi-Omics Reveal Changes in Transcriptional and Epigenetic Regulation in Skeletal Muscle Following Open Revascularization in Chronic Limb-Threatening Ischemia: A Pilot Study**
Pass, Caroline G.; Fazzzone, Brian; Kim, Kyoungrae; Yang, Qingping; He, Yong; Cai, Guoshuai; O'Malley, Kerri A.; Scali, Salvatore T.; Berceli, Scott A.; Ryan, Terence E.
- 189. Neutrophils in muscle regeneration and dystrophy: a double-edged sword**
Johnson, Kirsty A.; Jones, Fiona K.; Clarke, Christopher J.; Stonadge, Amy; **Pisconti, Addolorata**
- 190. Improving Regeneration of Traumatic Muscle Injuries through a Primed Muscle Graft**
Quint, Jacob P.; Hoffman, Daniel B.; Lillquist, Thomas J.; Greising, Sarah M.
- 191. CRTCs regulate muscle stem cell homeostasis via FAHD2A-mediated metabolism**
Ren, Junxiao; Li, Yufen; Chu, Leah; Zhou, Xin; Zhou, Yumei; Wang, Yubo; Wu, Lizi; Yue, Feng

- 192. ULK1/2 INHIBIT SKELETAL MUSCLE PROTEIN SYNTHESIS IMPACTING FIBER SIZE**
Son, Wangkuk; Jordan Fuqua, Jordan; Harris, Matthew P.; Allen, Ryan; Kronemberger, Ana; De Sous, Luís G.; Bodine, Sue C. Miller, Benjamin F.; Zingman, Leonid; Lira, Vitor A.
- 193. Isolation of a persistently quiescent muscle satellite cell population.**
Steele, Alexandra P; Syroid, Anika L; Mombo, Cassandra; Raveetharan, Shathana; Rebalka, Irena A; Hawke, Thomas J
- 194. Isolation and Characterization of Porcine and Human Satellite Cell Populations**
Syroid, Anika L; Steele, Alexandra P; Hawke, Thomas J.
- 195. The Relationship Between Exercise Induced Myosin Heavy Chain Fragmentation, Heat Shock Proteins, and Muscle Proteolysis.**
Tiede, Dakota R; Bittencourt, Diego F; Plotkin, Daniel L; Michel, J. Max, Mattingly, Madison L; Anglin, Derick A; Graham, Zachary A; Bamman, Marcas M; Roberts, Michael D
- 196. Glutamine deficiency increases nuclear localization of mitochondrial-TCA-cycle enzymes, restricting myogenesis**
Yadav, Angad; Schmitt, Susan; Rorrer, Shelby; Ma, Wenxia; Thalacker-Mercer, Anna