JOSHUA TAYLOR SELSBY
CURRICULUM VITAE

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EDUCATION

1995 – 1999:	B.A.	College of Wooster, Wooster, Ohio. Biology Department: Biology Thesis: *Swim performance following creatine supplementation in Division III athletes.* Advisor: Michael Kern
1999 – 2001:	M.A.	The Ohio State University, Columbus, Ohio. College of Education: Exercise Physiology Thesis: *A Novel Mg-creatine chelate and a low dose creatine supplementation regimen improve work.* Advisor: Steven T. Devor
2001 – 2005:	Ph.D.	University of Florida, Gainesville, Florida. College of Health and Human Performance: Exercise Physiology Dissertation: *Does heat treatment facilitate muscle regrowth following hind limb immobilization?* Advisor: Stephen L. Dodd
2005 – 2008:	Post Doc	University of Pennsylvania, Philadelphia, PA School of Medicine, Department of Physiology: Muscle Physiology Advisor: H. Lee Sweeney

PROFESSIONAL APPOINTMENTS

2019 – Present	Professor, Department of Animal Science, Iowa State University
2018 – Present	Co-Founder, Extrave Bioscience, LLC
2018 – Present	Director of Graduate Education, Interdepartmental Genetics and Genomics Program
2014 – 2019	Associate Professor, Department of Animal Science, Iowa State University

2008 – 2014 Assistant Professor, Department of Animal Science, Iowa State University
Courtesy Appointments: Kinesiology (2008), Biomedical Sciences (2011)
Other Graduate Affiliations: Molecular, Cellular, and Developmental Biology (2008), Interdepartmental Program in Nutritional Sciences (2009), Neuroscience (2009), Genetics (2010)

2005 – 2008 Postdoctoral Fellow, Department of Physiology, School of Medicine, University of Pennsylvania
- Advisor: H. Lee Sweeney
- Muscle Physiology Lab

2003 – 2005 Graduate Student Research Assistant, Applied Physiology and Kinesiology, University of Florida
- Muscle Physiology Lab

2001 – 2003: Graduate Student Teaching Assistant, Applied Physiology and Kinesiology, University of Florida
- Physiology Lecture Manager
- Anatomy Lab
- Physiology Lab

1999 – 2001: Graduate Student Teaching Assistant, Exercise Physiology, The Ohio State University
- General Fitness and Wellness Instructor
- Body Composition Practicum
- Non-majors Exercise Physiology Survey Class Lab
- Junior Level Exercise Physiology Major Lab
- Senior Level Exercise Physiology Major Lab
- Kinesiology Lab

1999: Undergraduate Teaching Assistant, Biology Department, College of Wooster
- Pathogens

1998: Undergraduate Teaching Assistant, Physical Education, College of Wooster
- Elementary Physical Education

PUBLICATIONS

Summary *(Source: Google Scholar 5/18/2020)*

Total Peer-Reviewed Papers – 62	I-10 Index – 48
H Index – 25	Total Citations – 2,115

1. Ballmann C, Quindry JC, Spaulding HR, and **Selsby JT**. Therapeutic Potential of Quercetin in Cardiovascular and Neuromuscular Disorders. Conditioning Medicine. *In Press.*

2. Spaulding HR, Quindry T, Quindry JC, and **Selsby JT**. Nutraceutical and pharmaceutical cocktails did not preserve diaphragm muscle function or reduce muscle damage in D2-mdx mice. Experimental Physiology. *In Press*

3. Spaulding HR, Ludwig AK, Hollinger K, Hudson MB, and **Selsby JT**. PGC-1α overexpression increases transcription factor EB nuclear localization and lysosome abundance in dystrophin-deficient skeletal muscle. Physiological Reports. 8:e14383, 2020.

4. Spaulding HR, Ballmann C, Hudson MB, Quindry JC, and **Selsby JT**. Autophagy in the heart is enhanced and independent of disease progression in mus musculus dystrophinopathy models. JRSM Cardiovascular Disease. 8:2048004019879581, 2019.

5. Spaulding HR, Quindry T, Hammer K, Quindry JC, and **Selsby JT**. Nutraceutical and pharmaceutical cocktails did not improve muscle function or reduce histological damage in d2 mdx mice. Journal of Applied Physiology. 127:1058-1066, 2019.

6. Zhao L, McMillan R, Xie G, Won S, Baumgard L, El-Kadi S, **Selsby JT**, Ross JW, Gabler NK, Hulver M, and Rhoads R. Heat stress decreases metabolic flexibility in skeletal muscle of growing pigs. American Journal of Physiology – Regulatory, Integrative, and Comparative Physiology. 315:1096-1106, 2018.

7. Abuajamieh M, Kvidera SK, Moyorga EJ, Kaiser A, Lei S, Seibert JT, Horst EA, Sans Fernandez MV, Ross JW, **Selsby JT**, Keating AF, Rhoads RP, and Baumgard LB. The effect of recovery from heat stress on circulating bioenergetics and inflammatory biomarkers. Journal of Animal Science. 96:4599-4620, 2018.

8. Spaulding HR and **Selsby JT**. Is exercise the right medicine for dystrophic muscle? Medicine and Science in Sport and Exercise. 50:1723-1732, 2018.

9. Ganesan S, Brownstein A, Pearce S, Hudson M, Gabler NK, Baumgard L, Rhoads R, and **Selsby JT**. Prolonged environment-induced hyperthermia alters autophagy in oxidative skeletal muscle from Sus scrofa. Journal of Thermal Biology. 74:160-169, 2018.

10. Seelenbinder KM, Zhao LD, Hanigan MD, Hulver MW, McMillan RP, Baumgard LH, **Selsby JT**, Ross JW, Gabler NK, and Rhoads RP. Effects of heat stress during porcine reproductive and respiratory syndrome virus infaction on metabolic responses in growing pigs. Journal of Animal Science. 96:1375-1387, 2018.

11. Ganesan S, Pearce S, Gabler NK, Baumgard LH, Rhoads RP, and **Selsby JT**. Short-term heat stress results in increased apoptotic signaling and autophagy in oxidative skeletal muscle. Journal of Thermal Biology. 72:73-80, 2018.

12. Ganesan S, Summers CM, Pearce SC, Gabler NK, Baumgard LH, Rhoads RP, Valentine RJ, and **Selsby JT**. Short term heat stress altered metabolism and insulin signaling in skeletal muscle. Journal of Animal Science. 96:154-167, 2018.

13. Spaulding H, Kelly E, Quindry JC, Sheffield J, Hudson MB, and **Selsby J**. Autophagic dysfunction and autophagosome escape in the mdx mus musculus model of Duchenne muscular dystrophy. Acta Physiologica (Oxf). 222:1-11, 2018.

14. Hale BJ, Hager CL, Seibert JT, **Selsby JT**, Baumgard, LH, Keating AF, and Ross JW. Heat stress induces autophagy in pig ovaries during follicular development. Biology of Reproduction. 97:426-437, 2017.

15. Ganesan S*, Volodina O*, Pearce SC, Gabler NK, Baumgard LH, Rhoads RP, and **Selsby JT**. Acute heat stress activated inflammatory signaling in porcine oxidative skeletal muscle. Physiological Reports. 5:e13397, 2017.
    *Authors contributed equally to this work.

16. Ganesan, S, Summers C, Pearce SC, Gabler NK, Valentine RJ, Baumgard LH, Rhoads RP, and **Selsby JT**. Short term heat stress causes altered intracellular signaling in oxidative skeletal muscle. Journal of Animal Science. 95:2438-2451, 2017.

17. Brownstein AJ, Ganesan S, Summers CM, Pearce S, Hale BJ, Ross JW, Gabler N, Seibert JT, Rhoads RP, Baumgard LH, and Selsby, JT. Heat stress causes dysfunctional autophagy in oxidative skeletal muscle. Physiological Reports. 5:e13317, 2017.

18. Volodina O*, Ganesan S*, Pearce SC, Gabler NK, Baumgard LH, Rhoads RP, and **Selsby JT**. Short-term heat stress alters redox balance in porcine skeletal muscle. Physiological Reports. 8:e13267, 2017.
    *Authors contributed equally to this work.

19. Englund DA, Sharp RL, **Selsby JT**, Ganesan SS, and Franke WD. Resistance training performed at distinct angular velocities elicits velocity-specific alterations in muscle strength and mobility status in older adults. Experimental Gerontology. 91:51-56, 2017.

20. Ballmann C, Denney CT, Beyers R, Quindry T, Romero T, **Selsby JT**, and Quindry JC. Long term dietary quercetin enrichment as a cardioprotective countermeasure in mdx mice. Experimental Physiology. 102:635-649, 2017.
    *This paper was featured in an unsolicited ViewPoint from Experimental Physiology.

21. Ballmann C, Denney T, Beyers R, Quindry T, Romero M, Amin R, **Selsby JT**, and Quindry JC. Lifelong quercetin enrichment and cardioprotection in Mdx/Utrn$^{+/-}$mice. American Journal of Physiology: Heart and Circulation. 312:128-140, 2017.

22. Spaulding HR, Ballmann CG, Quindry JC, and **Selsby JT**. Long-term quercetin dietary enrichment partially protects dystrophic skeletal muscle. PLoS One. 11: e0168293, 2016.

23. **Selsby JT**, Spaulding H, Ballmann C, Ross JW, and Quindry JC. Oral quercetin administration transiently protects respiratory function in dystrophin deficient mice. Journal of Physiology. 594:6037-6053, 2016.

24. Ganesan S, Reynolds C, Hollinger K, Pearce SC, Gabler NK, Baumgard LH, Rhoads RP, and **Selsby JT**. Twelve hours of heat stress induces inflammatory signaling in porcine skeletal muscle. American Journal of Physiology. 310:1288-1296, 2016.

25. Quindry JC, Ballmann CG, Epstein EE, and **Selsby JT**. Plethysmography measurements of respiratory function in conscious unrestrained mice. Journal of Physiological Sciences. 66:157-164, 2016.

26. Johnson JS, Abuajamieh M, Sanz Fernandez VM, Seibert JT, Stoakes SK, Keating AF, Ross JW, **Selsby JT**, Rhoads RP, and Baumgard LH. The impact of in utero heat stress and nutrient restriction on progeny body composition. Journal of Thermal Biology. 53:143-150, 2015.

27. Hollinger K and **Selsby JT**. PGC-1α gene transfer improves muscle function in dystrophic muscle following prolonged disease progression. Experimental Physiology. 100:1145-1158, 2015.

28. **Selsby JT**, Ross JW, Nonneman D, and Hollinger K. Porcine models of muscular dystrophy. Institute for Lab Animal Research Journal. 56:116-126, 2015.

29. Ballmann C, Hollinger K, **Selsby JT**, Amin R, and Quindry JC. Histological and biochemical outcomes of cardiac pathology in mdx mice with dietary quercetin enrichment. Experimental Physiology 1:12-22, 2015.
*3rd most downloaded article in issue in first 3 months following publication

30. Hollinger K, Shanely RA, Quindry JC, and **Selsby JT**. Long-term quercetin dietary enrichment decreases muscle injury in mdx mice. Clinical Nutrition. 34:515-522, 2015.

31. Boddicker RL, Seibert JT, Johnson JS, Pearce SC, **Selsby JT**, Gabler NK, Lucy MC, Safrankski TJ, Rhoads RP, Baumgard LH, and Ross JW. Gestational heat stress alters postnatal offspring body composition indices and metabolic parameters in pigs. PLoS One: 10;9(11):e110859, 2014.

32. Fortunato MJ, Ball CE, Hollinger K, Patel NB, Modi JN, Rajasekaran V, Nonneman DJ, Ross JW, Kennedy EJ, **Selsby JT**, Beedle AM. Development of rabbit monoclonal antibodies for detection of alpha-dystroglycan in normal and dystrophic tissue. PLoS One. 9:e97567, 2014.

33. Montilla Rosado, SI, Johnson, TP, Pearce, SC, Gardan-Salmon, D, Gabler, NK, Ross, JW, Rhoads, RP, Baumgard, LH, Lonergan SM, **Selsby, JT**. Heat stress causes oxidative stress but not inflammatory signaling in porcine skeletal muscle. Temperature. 1:42-50, 2014.
    *This paper nominated by editors for 2014 Temperature Young Investigator Award for the Best Paper on Thermal Physiology in a Changing Thermal World.

34. Hollinger, K, Yang, CX, Nonneman, D, Ross, JW, **Selsby, JT**. Dystrophin insufficiency causes selective muscle injury and loss of dystrophin-glycoprotein complex assembly in pig skeletal muscle. FASEB Journal. 28:1600-1609, 2014.

35. Johnson, JS, Boddicker, RL, Sanz-Fernandez, MV, Ross, JW, **Selsby, JT**, Lucy, MC, Safranski TJ, Rhoads, RP, and Baumgard, LH. Effects of *in-utero* heat stress on mammalian post-natal thermoregulation. International Journal of Hyperthermia. 29:696-702, 2013.

36. **Selsby, JT*,** Acosta, P, Sleeper, M, Barton, ER, and Sweeney, HL. Long-term wheel running impairs diaphragm function in the mdx mouse model of DMD. Journal of Applied Physiology. 115(5):660-666, 2013.

37. Cruzen, SM, Harris, AJ, Hollinger, K, Punt, RM, Grubbs, JK, **Selsby, JT**, Gabler, NK, Lonergan, SM, Huff-Lonergan, E. Evidence of decreased muscle protein turnover in gilts selected for low residual feed intake. Journal of Animal Science. 91(8):4007-4016, 2013.

38. Hollinger, K. and **Selsby, J.T.** The therapeutic potential of protease inhibition as a treatment for DMD. Acta Physiologica. 208(3):234-44, 2013.

39. Hollinger, K., Gardan-Salmon, D., Santana, C., Rice, D., Snella, E., and **Selsby, J.T**. Rescue of dystrophic skeletal muscle by PGC-1α involves restored expression of dystrophin associated protein complex components and satellite cell signaling. American Journal of Physiology - Regulatory, Integrative and Comparative Physiology. 305:13-23, 2013.

40. Johnson, A, Gesing, L, Ellis, M, McGlone, J, Berg, E, Lonergan S, Fitzgerald, R, Karriker, L, Ramireza, A, Stalder, K, Sapkota, A, Kephart, R, **Selsby, J**, Sadler, L, and Ritter, M. The welfare of pigs on farm during the marketing process. Journal of Animal Science. 91:2481-2491, 2013.

41. **Selsby JT***, Morris CA*, Morris LD, and Sweeney HL. A proteasome inhibitor fails to attenuate dystrophic pathology in mdx mice. PLoS Currents: Muscular Dystrophy. 4:e4f84a944d893, 2012
    *Authors contributed equally to this work

42. **Selsby, JT**, Morine, K, Pendrak, K, Barton, E, Sweeney HL. Rescue of dystrophic skeletal muscle by PGC-1α involves a fast to slow fiber type shift in the mdx mouse. *PLoS One:* 7(1):e30063, 2012.

43. Gesing, LM, Johnson, AK, **Selsby, JT,** Feuerbach C, Hill H, Faga M, Whiley A, Bailey R, Stalder KJ, and Ritter MJ. Effects of Grow-Finish Group Size on Stress Responses at Loading and Unloading and the Impact on Transport Losses from Market Weight Pigs. Professional Animal Scientist. 27:477-484, 2011.

44. Gardan-Salmon D, Dixon J, Lonergan SM and **Selsby JT.** Proteomic assessment of the acute phase of dystrophin deficiency in mdx mice. European Journal of Applied Physiology, 111:2763-73, 2011.

45. **Selsby JT**. Increased catalase expression improves muscle function in mdx mice. Experimental Physiology (London), 96.2:194-202, 2011.

46. **Selsby JT**, Pendrak K, Zadel M, Tian Z, Pham J, Carver T, Acosta P, Barton ER, and Sweeney HL. Leupeptin based inhibitors do not improve the mdx phenotype. American Journal of Physiology – Regulatory, Integrative and Comparative Physiology, 299:1192-1201, 2010.

47. Morris CA*, **Selsby JT***, Morris LD, Pendrak K, and Sweeney HL. Bowman Birk inhibitor attenuates dystrophic pathology in mdx mice. Journal of Applied Physiology, 109:1492-1499, 2010.
*Authors contributed equally to this work.

48. Gesing, LM, Johnson, AK, **Selsby, JT**, Feuerbach, C, Hill, H, Faga, M, Whiley, A, Bailey, R, Stalder, KJ, and Ritter, MJ. Effects of pre-sorting prior to loading on stress responses at loading and unloading and transport losses from market weight pigs. Professional Animal Scientist, 26:603-610, 2010.

49. Morine KJ, Bish LT, **Selsby JT**, Gazzara JA, Pendrak K, Sleeper MM, Barton ER, Lee SJ, Sweeney HL. Activin IIB receptor blockade attenuates dystrophic pathology in a mouse model of Duchenne muscular dystrophy. Muscle Nerve, 42:722-730, 2010.

50. DiSilvestro, RA, **Selsby, JT**, and Siefker, K. A Pilot Study of Copper Supplementation Effects on Plasma $F_{2\alpha}$ Isoprostanes and Urinary Collagen Crosslinks in Young Adult Women. Journal of Trace Elements in Medicine and Biology. 24:165-168, 2010. Epub 2010 Mar 27.

51. Quindry, J, French, J, Hamilton, K, Lee, Y, **Selsby, JT**, and Powers, S. Exercise does not increase cyclooxygenase-2 myocardial levels in young or senescent hearts. The Journal of Physiological Sciences. 60(3):181-6, 2010. 2010 Jan 7. [Epub ahead of print]

52. Pipinos II, Judge AR, **Selsby JT**, Zhu Z, Swanson SA, Nella AA, Dodd SL. The myopathy of peripheral arterial occlusive disease: Part 2. Oxidative stress, neuropathy, and shift in muscle fiber type. Invited review: Vascular and Endovascular Surgery. 42:101-112, 2008.

53. Judge, AR, **Selsby, JT**, and Dodd, SL. Antioxidants attenuate oxidative damage in skeletal muscle during mild ischemia. Experimental Physiology. 93:479-485, 2008.

54. Pipinos II, Judge AR, **Selsby JT**, Zhu Z, Swanson SA, Nella, A, and Dodd SL. The myopathy of peripheral arterial occlusive disease: Part 1. Functional and histomorphological changes and evidence for mitochondrial dysfunction. Invited review: Vascular and Endovascular Surgery 41:481-489, 2008.

55. **Selsby, JT**, Rother, S, Tsuda, S, Pracash, O, Quindry, J, and Dodd, SL. Intermittent hyperthermia enhances skeletal muscle regrowth and attenuates oxidative damage following reloading. Journal of Applied Physiology 102:1702-1707, 2007. Epub ahead of print: doi:10.1152/japplphysiol.00722.2006.

56. Pipinos, II, Judge, AR, Zhu, Z, **Selsby, JT**, Swason, S, Johanning, J, Baxter, B, Lynch, T, and Dodd, SL. Mitochondrial defects and oxidative damage in skeletal muscle of patients with peripheral arterial disease. Free Radical Biology and Medicine 41:262-269, 2006.

57. Sellman, JE, Deruisseau, KC, Betters, JL, Lira, VA, Soltow, QA, **Selsby, JT**, and Criswell, DS. In vivo inhibition of nitric oxide synthase impairs up-regulation of contractile protein mRNA in overloaded plantaris muscle. Journal of Applied Physiology 100:196-203, 2006.

58. Dodd, SL, **Selsby, JT**, Payne, A, Judge, AR and Dott, C. Effects of Botulinum Neurotoxin type A (Dysport) on rat skeletal muscle myosin heavy chain composition. Toxicon 46:196-203, 2005.

59. **Selsby, JT** and Dodd, SL. Heat treatment reduces oxidative stress and protects muscle mass during immobilization. American Journal of Physiology – Regulatory, Integrative and Comparative Physiology 289(1):R134-139, 2005.

60. **Selsby, JT**, Judge, AR, Yimlamai, T, Leeuwenburgh, C, and Dodd, SL. Life long calorie restriction increases heat shock proteins and proteasome activity in soleus muscles of Fisher 344 rats. Experimental Gerontology 40:37-42, 2005.

61. **Selsby, JT**, DiSilvestro, R, and Devor, ST. A novel Mg-creatine chelate and a low dose creatine supplementation regimen improve work. Journal of Strength and Conditioning Research 18:311-315, 2004.

62. **Selsby, JT**, Beckett, KD, Kern, M and Devor, ST. Swim performance following creatine supplementation in Division III athletes. Journal of Strength and Conditioning Research 17:421-424, 2003.

POSTER PRESENTATIONS (98)

1. Rudolph T, Abeyta M, Rhoads RP, Baumgard LH, and **Selsby JT**. Sex complicates the effect and treatment of heat stress. Experimental Biology, San Diego, CA, April, 2020.

2. Krishna S, Quindry T, Hudson MB, Quindry JC, and **Selsby JT**. Defective Autophagic Degradation in Aged D2-mdx Diaphragms. Experimental Biology, San Diego, CA, April, 2020.

3. Fausnacht D, Baumgard LH, **Selsby JT**, and Rhoads RP. Heat stress increases respiratory exchange ratio while reducing daily energy expenditure in growing pigs. Experimental Biology, San Diego, CA, April, 2020.

4. Mayorga EJ, Horst EA, Goetz BM, Rodriguez-Jimezez S, Abeyta MA, Al-Qaisi M, Lei S, **Selsby JT** and Baumgard LH. Effects of mitoquinol during acute heat stress exposure in growing pigs. Midwest American Dairy Science Association, Omaha, NE, March, 2020.

5. Mayorga EJ, Horst EA, Goetz BM, Rodriguez-Jimezez S, Abeyta MA, Al-Qaisi M, Lei S, **Selsby JT** and Baumgard LH. Effects of rapamycin during acute heat stress exposure in growing pigs. Midwest American Dairy Science Association, Omaha, NE, March, 2020.

6. Baumgard LH, Rhoads RP, Ross JP, Keating AF, Gabler NK, and **Selsby JT**. The intestinal, metabolic, inflammatory and production responses to heat stress. European Federation of Animal Science, Ghent, Belgium, August, 2019.

7. **Selsby JT**, Spaulding HR, Wilson B, Quindry JC, Hudson MB. Autophagy is altered in aged limb muscle from D2-mdx mice. Myology, Boudreaux, France, March, 2019.

8. Spaulding HR, Hammer KR, Hudson MB, Quindry JC, and Selsby JT. Increased muscle damage and inflammatory signaling in limb muscles of D2-mdx mice. Advances in Muscle Biology in Health and Disease. Gainesville, FL, March, 2019.

9. Shuler KT, Wilson BE, Munoz ER, Mitchell AD, **Selsby JT**, and Hudson MB. Peroxide-induced mitochondria dysfunction in muscle cells is restored by satellite cell-derived extracellular vesicles. Advances in Muscle Biology in Health and Disease. Gainesville, FL, March, 2019.

10. Wilson BE, Shuler KT, Mitchell AD, Munoz ER, **Selsby JT**, and Hudson MB. Impaired autophagic flux alters myotube extracellular vesicle release. Advances in Muscle Biology in Health and Disease. Gainesville, FL, March, 2019.

11. Mitchell AD, Munoz ER, Shuler KT, Wilson BE, **Selsby JT**, and Hudson MB. Extracellular vesicle-mediated skeletal and cardiac cell crosstalk. Advances in Muscle Biology in Health and Disease. Gainesville, FL, March, 2019.

12. Spaulding HR, Ludwig AK*, Hudson MB, and **Selsby JT**. PGC-1α Overexpression Increases Lysosome Abundance and Autophagy in Dystrophic Skeletal Muscle. Iowa Physiological Society, Des Moines, IA, September, 2018.

*indicates undergraduate student

13. Hammer KR*, Spaulding HR, Quindry JC, and **Selsby JT**. The effect of quercetin-based cocktails on dystrophic injury. Iowa Physiological Society, Des Moines, IA, September, 2018.
    *indicates undergraduate student

14. **Selsby JT**, Ganesan S, Pearce SC, Gabler NK, Hudson MB, Rhoads RP, and Baumgard LH. The impact of short-term heat stress on the calpain and proteasome systems in skeletal muscle from a large animal model. Military Health System Research Symposium. Kissimmee, FL, August, 2018.

15. Munoz E, Pautz CM, Wilson BE, Caban CT, Jeka JE, **Selsby JT**, and Hudson MB. Decreased Exosomal MicroRNA-7844-5p as a Potential Biomarker of Repetitive Head Impact. Military Health System Research Symposium. Kissimmee, FL, August, 2018.

16. Wilson BE, Munoz ER, Pautz CM, **Selsby JT**, and Hudson MB. Characterization and potential signaling of dystrophic muscle-released exosomes. New Directions in Skeletal Muscle Biology and Disease. New Orleans, June, 2018.

17. Spaulding HR, Quindry T, Quindry JC, and **Selsby JT**. Long-term quercetin and Lisinopril supplementation provides limited protection to dystrophic skeletal muscle from D2-mdx mice. New Directions in Skeletal Muscle Biology and Disease. New Orleans, June, 2018.

18. Ludwig AK*, Spaulding HR, Hudson MB, and **Selsby JT**. PGC-1α Overexpression Increases Lysosome Abundance and Autophagy in Dystrophic Skeletal Muscle. Experimental Biology, San Diego, April, 2018.
    *indicates undergraduate student

19. Spaulding HR, Quindry T, Quindry JC, and **Selsby JT.** Nutraceutical and Pharmaceutical Interventions Improve Fatigue Resistance in Dystrophic Skeletal Muscle. Experimental Biology, San Diego, April, 2018.

20. Quindry JC, Quindry T, Tiemessen K, **Selsby JT**. Cardiac, respiratory, and physical activity profiles in young D2-mdx mice. Experimental Biology, San Diego, April, 2018.

21. Baumgard LH, Horst EA, Mayorga Lozano EJ, Al-Qaisi MA, Shouse CS, Kvidera SK, Lei S, Seibert JT, Ramirez HA, Keating AF, Ross JW, **Selsby JT**, Appuhamy R, and Rhoads RP. Heat stress, consequences of gut barrier dysfunction. Midwest American Society of Animal Science, Omaha, NE, March, 2018.

22. Pautz C, Wilson BE, Jackson K, **Selsby JT**, Barerro CA, Merali S, Kelly EM, and Hudson MB. Exercise or reduced-calorie diet attenuates overnutrition-induced Glut4 carbonylations in adipose tissues. ACSM, Denver, June, 2017.

23. Hudson MB, Pautz CM, Barrero CA, Kelly EM, **Selsby JT**, and Wilson BE. Size profile and selective protein packaging of exosomes released from atrophying muscle cells. ACSM, Denver, June, 2017.

24. Spaulding H, Kelly EM, Sheffield JB, Quindry JC, Hudson MB, and **Selsby JT**. Impaired autophagic flux in dystrophic muscle augments extracellular autophagosome release. Advances in Skeletal Muscle Biology in Health and Disease. Gainesville, FL, March 8-10, 2017.

25. Spaulding H, Ross JW, Nonneman JD, and **Selsby JT**. Autophagy is independent of disease progression in the dystrophic myocardium in mouse and porcine dystrophinopathy models. FASEB, Chicago, April, 2017.

26. Spaulding H, Ross JW, Nonneman JD, and **Selsby JT**. Dystrophin insufficiency causes locomotor dysfunction in a spontaneously occurring pig model. FASEB, Chicago, April, 2017.

27. Hill S*, Lien S, Spaulding H, Nonneman D, Ross JW, and **Selsby JT**. Dystrophin insufficiency increases skeletal muscle damage. FASEB, Chicago, April, 2017.
    *indicates undergraduate

28. **Selsby JT**, Ganesan S, Brownstein AJ, Gabler NK, Pearce SC, Baumgard LH, and Rhoads RP. Prolonged heat stress altered autophagy signaling in oxidative skeletal muscle. FASEB, Chicago, April, 2017.

29. Quindry J, Quindry T, Ballmann C, and **Selsby JT**. Indices of autophagy are unaltered by quercetin consumption in hearts of Mdx/Utrn$^{+/-}$ mice. Experimental Biology, Chicago, April 22-26, 2017.

30. Hale BJ, Hager CL, **Selsby JT**, Baumgard LH, Keating AF, and Ross JW. Heat stress induces autophagy in pig ovaries during follicular development. Plant and Animal Genomics. San Diego, CA January, 2017.

31. Spaulding HR and **Selsby JT**, Autophagic dysfunction in dystrophic muscle is independent of disease progression. Iowa Physiological Society, Des Moines, IA, October 29th, 2016.

32. **Selsby JT**, Spaulding HR. Autophagic dysfunction in dystrophic muscle is independent of disease progression. New Directions in Biology and Disease of Skeletal Muscle. Orlando, FL, June 29-July 2, 2016.

33. Volodina OE, Ganesan S, Pearce SC, Gabler NK, Baumgard LH, Rhoads RP, and **Selsby JT**. Chronology of early heat stress mediated changes in oxidative skeletal muscle. FASEB, San Diego, CA April, 2016.

34. Brownstein A, Summers C, Ganesan S, Hale BJ, Pearce S, Gabler N, Ross JW, Rhoads RP, Baumgard LH, and **Selsby JT**. Heat stress causes autophagic stalling in oxidative skeletal muscle. FASEB, San Diego, CA April, 2016.

35. Spaulding H, Ballmann C, Quindry JC, and **Selsby JT**. Long-term quercetin treatment is unable to sustain elevated PGC-1α pathway activation in the mdx diaphragm. FASEB, San Diego, CA April, 2016.

36. Ganesan S, Summers C, Pearce S, Gabler N, Valentine R, Baumgard L, Rhoads R, and **Selsby JT.** Impaired mitochondrial clearance contributes to heat stress-mediated muscle dysfunction. FASEB, San Diego, CA April, 2016.

37. Ganesan S, Summers C, Pearce S, Gabler N, Valentine R, Baumgard L, Rhoads R, and **Selsby JT.** Heat Stress-induced insulin resistance in oxidative skeletal muscle. FASEB, San Diego, CA April, 2016.

38. Zhao LD, Zhang Z, Xie G, **Selsby JT**, Baumgard LH, and Rhoads RP. Activation of ubiquitin-proteasome system components in heat stressed pig skeletal muscle. FASEB, San Diego, CA April, 2016.

39. Beyers RJ, Ballmann C, **Selsby JT**, Salibi N, Quindry JC, and Denney TS. Whole-heart T2-mapping at 7T quantifies dystrophic myocardial pathology in mdx/utrn+/- mice. International Society for Magnetic Resonance in Medicine, Toronto, Ontario, Canada, May 30-31, 2015.

40. **Selsby JT**, Ballmann CG, and Quindry JQ. Long-term dietary quercetin enrichment improves muscle function in dystrophic skeletal muscle. FASEB, Boston, MA March, 2015.

41. **Selsby JT** and Sterle JA. Student perception of achievement influences student evaluation of teaching. FASEB, Boston, MA, March 2015.

42. Ballmann CB, Beyer R, Denney T, **Selsby JT** and Quindry JC. Effect of chronic dietary quercetin enrichment on cardiac function in dystrophic mice. FASEB, Boston, MA, March 2015.

43. Ballmann CB, Beyer R, Denney T, **Selsby JT** and Quindry JC. Effect of long term quercetin supplementation on dystrophic cardiac pathology in mdx/utrn$^{+/-}$mice. FASEB, Boston, MA, March 2015.

44. Zhao L, McMillan RP, Xie G, Zhang Z, Baumgard L, **Selsby J,** Ross J, Gabler N, Hulver M, Rhoads RP. Effect of heat stress on porcine skeletal muscle metabolism. FASEB, Boston, MA, March 2015.

45. Abuajamieh M, Laughlin EJ, Lei SM, Stoakes SK, Mayorga EJ, Seibert JT, Nolan EA, Sanz Fernandez MV, Ross JW, **Selsby JT**, Rhoads RP, and Baumgard LB. The effects

of recovery time from heat stress on circulating bioenergetics variables and biomarkers of leaky gut. FASEB, Boston, MA March 2015.

46. Peters B, Ballmann C, **Selsby JT**, and Quindry J. Quercetin feeding and spontaneous activity in the aged mdx mouse. South East American College of Sports Medicine, Jacksonville, FL, February 14th, 2015.

47. Boddicker, RL, Koltes J, Fritz E, Johnson J, Seibert JT, Reecy JM, Nettleton D, Lucy MC, Safranski TJ, **Selsby JT**, Rhoads RP, Gabler NK, Baumgard LH, Ross JW. Alterations in body composition and transcriptional profile as the result of prenatal HS exposure in pigs. Plant and Animal Genome XXIII Conference. San Diego, CA, January 10-14, 2015.

48. **Selsby JT**, Kaiser A, Ross JW, Nonneman DJ, Johnson AK, and Stalder KJ. Dystrophin insufficiency causes locomotor dysfunction in a swine model of dystrophinopathy. New Directions in Biology and Disease of Skeletal Muscle, Chicago, IL, June 29-July 2, 2014.

49. Beedle AM, Ball CE, Hollinger K, Patel NB, Modi JN, Rajasekaran V, Nonneman DJ, Ross JW, Kennedy EJ, **Selsby JT** and Fortunato MF. Rabbit monoclonal antibodies for the detection of alpha-dystroglycan core protein. New Directions in Biology and Disease of Skeletal Muscle, Chicago, IL, June 29-July 2, 2014.

50. Johnson JS, Abuajamieh M, Sanz-Fernandez MV, Seibert JT, Stoakes SK, Keating AF, Ross JW, **Selsby JT**, Rhoads RP, Baumgard LH. The impact of *in utero* heat stress and nutrient restriction on progeny body composition. 2014 American Society of Animal Science Annual Meeting. Kansas City, Missouri July 20-24.

51. Ballmann C, Hollinger K, **Selsby JT**, Quindry JC. Effect of chronic quercetin supplementation on dystrophic cardiac pathology in *mdx* mice. FASEB, San Diego, CA April, 2014.

52. **Selsby JT**, Sterle JA, Zywicki CM. Participation in Supplemental Instruction improves students' academic performance in a physiology course. FASEB, San Diego, CA April, 2014.

53. Hollinger K, Barton ER, **Selsby JT**. PGC-1α gene transfer rescues dystrophic muscle from advanced disease progression. FASEB, San Diego, CA April, 2014.

54. **Selsby JT**, Ballman C, Quindry JC. Dietary quercetin enrichment improves respiratory function in mdx mice. FASEB, San Diego, CA April, 2014.

55. Quindry JC, Ballman C, and **Selsby JT**. Whole body plethysmography measurement of respiratory function of mice in vivo. FASEB, San Diego, April, 2014.

56. Rosado S, Johnson T, Pearce S, Gardon-Salmon D, Gabler N, Ross JW, Rhoads R, Baumgard L, Lonergan S, **Selsby JT**. Heat stress triggers an antioxidant response in porcine skeletal muscle. FASEB, Boston, MA April, 2013.

57. Hollinger K, Yang C, Ross JW, Rohrer G, Nonneman D, and **Selsby JT**. Dystrophin insufficiency causes a Becker muscular dystrophy-like phenotype in swine. FASEB, Boston, MA April 2013.

58. **Selsby JT**, Acosta P, Sleeper MM, Barton ER, Sweeney HL. Long-term wheel running improves cardiac function but has negative consequences for diaphragmatic function in the mdx mouse. FASEB, Boston, MA April 2013.

59. Johnson JS, Ross JW, **Selsby JT**, Boddicker RL, Lucy MC, Safranski TJ, Rhoads RP, and Baumgard LH. Effects of *in-utero* heat stress on post-natal thermoregulation. FASEB, Boston, MA April 2013.

60. Rosado Montilla SI, Pearce SC, Gardan-Salmon D, Gabler NK, Ross JW, Rhoads RP, Baumgard LH, Lonergan SM, and Selsby JT. The effect of heat stress on inflammatory signaling in porcine skeletal muscle. MWASAS, Des Moines, IA March 2013.

61. Hollinger K, Snella S, Shanely RA, **Selsby, JT**. A quercetin enriched diet slows disease progression in dystrophic skeletal muscle. IPS, Des Moines, IA, September, 29, 2012.

62. Cruzen SM, Harris AJ, Hollinger K, **Selsby JT**, Gabler NK, Lonergan SM, Huff-Lonergan E. Gilts selected for low residual feed intake have potential for decreased protein degradation. International Congress of Meat Science and Technology. Montreal, Canada, August 12-17, 2012. First place graduate student competition.

63. Boddicker RL, Boddicker NJ, Rhoades JN, Pearce S, Johnson J, Lucy MC, Safranski TJ, Gabler NK, **Selsby JT**, Patience J, Rhoads RP, Baumgard LH, and Ross JW. 2012. Heat stress experienced in utero alters postnatal body composition parameters in growing pigs. American Society of Animal Science Annual Meeting. Phoenix, AZ, July 15-19, 2012.

64. Won SGL, Xie G, Boddicker RL, Rhoades JN, Lucy MC, Safranski TJ, **Selsby JT,** Lonergan S, Baumgard LH, Ross JW, and Rhoads RP. 2012 Acute duration heat stress alters expression of cellular bioenergetic-associated genes in skeletal muscle of growing pigs. American Society of Animal Science Annual Meeting. Phoenix, AZ, July 15-19, 2012.

65. **Selsby JT***, Yang Cia-Xia, Hollinger K[1], Ross JW, Nonneman D. Initial characterization of a novel porcine model of Becker muscular dystrophy. New Directions in Skeletal Muscle Biology. New Orleans, LA, June 17-21, 2012.

66. Johnson JS, Boddicker R, Pearce S, Sanz-Fernandez V, Lucy M, Safransk, T, Gabler N, Rhoads R, Ross JW, Patience J, Lonergan S, Baumgard L, and **Selsby JT**. Gestational thermal environment alters postnatal response to heat stress. FASEB, San Diego, CA, April, 2012.

67. Hollinger K, Rice* D, Snella E, and **Selsby JT**. PCG-1α over-expression rescues dystrophic muscle by modifying gene expression. FASEB, San Diego, CA, April, 2012.

*indicates undergraduate; chosen for oral presentation

68. Hollinger K, Snella L, Shanely RA, and **Selsby JT**. Dietary quercetin supplementation alleviates disease related muscle injury in dystrophic muscle. FASEB, San Diego, CA, April, 2012.

69. Hollinger K[1], Snella E, Shanely RA, and **Selsby JT***. A quercetin enriched diet slows disease progression in dystrophic skeletal muscle. Advances in Skeletal Muscle Biology in Health and Disease. Gainesville, FL, February 22-24, 2012.

70. Hollinger K[1], Gardan-Salmon D[2], Santana C[3], Rice D[3], Snella E, and **Selsby JT***. PGC-1α gene transfer rescues dystrophin-deficient skeletal muscle from typical disease progression. Iowa Physiologic Society/ Nebraska Physiologic Society combined meeting, Des Moines, IA, October 22, 2011. *Oral Presentation.*

71. **Selsby JT**, Johnson K, Gardan-Salmon D, Hollinger K, Nearing M, Rhoads R, Lonergan S, Gabler N, Pearce S, and Baumgard L. Expression of MnSOD, CuZnSOD and catalase in response to chronic environmental hyperthermia in pigs. FASEB, Washington, D.C. April 2011.

72. Gardan-Salmon D, Hollinger K, Santana C*, and **Selsby JT**. PGC-1α over-expression rescues dystrophin-deficient skeletal muscle. FASEB, Washington, D.C. April, 2011.
*indicates undergraduate

73. Hollinger, K, Gardan-Salmon, D, Dixon*, J, Lonergan, S, and **Selsby, JT**. PGC-1α over-expression alters the proteome of dystrophin deficient skeletal muscle. FASEB, Washington, D.C. April, 2011.
*indicates undergraduate

74. Gesing, LM, Johnson, AK*, Stalder, KJ, **Selsby, JT**, Faga, M, Whiley, A, Abrams, S, Hill, H, Bailey, R, and Ritter, MJ. 2010. Effects of pen size on the stress response of market weight pigs during loading and unloading. Journal of Animal Science. 88(2):463. Also selected for oral presentation.

75. **Selsby, JT,** Gardan-Salmon, D, and Gealow, L. Postnatal PGC-1alpha over-expression reduces acute injury in mdx mice. New Directions in Muscle Biology. Ottawa, May, 2010.

76. Dixon*, J., Gardan-Salmon, D., Lonergan, S., and **Selsby, J.T.** Analysis of dystrophic muscle by two dimensional differential in-gel electrophoresis. FASEB, Anaheim, April, 2010.
*indicates undergraduate

77. Gardan-Salmon, D., Fritz, E.R., Nettleton, D., Reecy, J.M., and **Selsby, J.T**. Differentially expressed microRNAs in dystrophin-deficient muscle. FASEB, Anaheim, April, 2010.

78. **Selsby, J.T.** and Gardan-Salmon, D. Postnatal PGC-1alpha gene transfer attenuates acute injury in mdx mice. FASEB, Anaheim, April, 2010.

79. **Selsby, J.T.** Release of short answer questions prior to an exam has a minimal impact on student performance. FASEB, Anaheim, April, 2010.

80. **Selsby, J.T.**, Morine, K., Pendrak, K., Tian, Z., Blanco, E., Barton, E., and Sweeney, H.L. Postnatal PGC-1α over-expression improves muscle function in a mouse model of Duchenne muscular dystrophy. FASEB, New Orleans, April, 2009.

81. **Selsby, J.T.**, Morine, K., Pendrak, K., Tian, Z., Blanco, E., Barton, E., and Sweeney, H.L. Resveratrol feeding may be therapeutic for dystrophic skeletal muscle. FASEB, New Orleans, April, 2009.

82. **Selsby, JT,** Tian, Z., Barton, E., and Sweeney, H.L. Catalase over-expression protects dystrophic skeletal muscle. FASEB, San Diego, April 5-9, 2008.

83. **Selsby, JT**, Tian, Z, Pendrak, K, Ellmer, J, Zadel, M, Acosta, P, Barton, E, and Sweeney, HL. A calpain inhibitor fails to rescue dystrophic skeletal muscle. FASEB, Washington, D.C., April 28-May 2, 2007.

84. Quindry, J, French, J, Hamilton, K, Lee, Y, **Selsby, JT**, and Powers, S. Cyclooxygenase-2 is unaltered by exercise in the young and old heart. ACSM, Denver, May 31-June 3, 2006.

85. **Selsby, JT**, Rother, S, Tsuda, S, Pracash, O, Quindry, J, Dodd, SL. Heating enhances muscle regrowth rate and reduces oxidant stress. FASEB, San Francisco, April 1-5, 2006.

86. **Selsby, JT,** Rother, S, Tsuda, S, Pracash, O, Quindry, J, and Dodd, SL. Heating enhances skeletal muscle regrowth rate and may increase IGF-1 pathway activation. FASEB, San Francisco, April 1-5, 2006.

87. **Selsby, JT**, Rother, S, Tsuda, S, Pracash, O, Quindry, J, Dodd, SL. Heating enhances muscle regrowth rate and reduces oxidant stress. Pennsylvania Muscle Institute Annual Meeting, Philadelphia, November 8, 2005.

88. **Selsby, JT**, Judge, AR, and Dodd, SL. Vitamins C and E attenuate oxidative damage and neutrophil infiltration into skeletal muscle following contractile-induced claudication. FASEB/IUPS, San Diego, March 31-April 6, 2005.

89. **Selsby, JT** and Dodd, SL. The protective effect of heating on skeletal muscle atrophy is not conveyed through native antioxidant enzymes. American Society for Gravitational and Space Biology, New York City, November 9-12, 2004.

90. **Selsby, JT** and Dodd, SL. Oxidative damage induced by immobilization is attenuated with heat treatment. FASEB, Washington, D.C. April 17-21, 2004.

91. **Selsby, JT**, Judge, AR, Yimlamai, T and Dodd, SL. Caloric restriction increases heat shock proteins in aging skeletal muscle. FASEB, Washington, D.C. April 17-21, 2004.

92. Judge, AR, **Selsby, JT**, and Dodd, SL. IL-1β, IL-6, and TNFα are not elevated in skeletal muscle following contractile claudication. FASEB, Washington, D.C. April 17-21, 2004.

93. Criswell, DS, **Selsby, JT**, Sellman, JE, Betters, JL. Nitric oxide synthase activity is necessary for induction of IFG-1 mRNA in overloaded skeletal muscle. ACSM, San Francisco, May 28-31, 2003.

94. **Selsby, JT**, Payne, AM, Judge, AR, and Dodd, SL*. Myosin heavy chain distribution in Botulinum neurotoxin treated animals. SEACSM, Atlanta, Jan 31-Feb 2, 2003.

95. **Selsby, JT**, DiSilvestro, R, and Devor, ST. A novel Mg-creatine chelate and a low dose creatine supplementation regimen improve work. ACSM, St Louis, May 29-June 1, 2002.

96. Payne, AM, **Selsby, JT** and Dodd, SL. Local heat stress increases expression of heat shock protein 72. ACSM, St. Louis, May 29-June 1, 2002.

97. Payne, AM, Judge, AR, **Selsby, JT**, Smith, IJ, and Dodd, SL. Contractile properties of Botulinum Neurotoxin A-treated skeletal muscle. SEACSM, Atlanta, Jan 31-Feb 2, 2002.

98. **Selsby, JT**, Beckett, KD, Devor, ST, and Kern, M. Swim performance following creatine supplementation in Division III athletes. ACSM, Baltimore, May 30-June 2, 2001.

INVITED PRESENTATIONS and SEMINARS

Invited Presentations

1. **Selsby JT**. Autophagic dysfunction in dystrophic skeletal muscle. Luther College, Decorah, IA 2/20/20.

2. **Selsby JT**. Autophagic dysfunction in dystrophic skeletal muscle. Grinnell College, Grinnell, IA 11/25/19.

3. **Selsby JT**, Ganesan S, Rhoads RP, and Baumgard LH. The heat is on: heat stress induces *radical* change in skeletal muscle. American Society of Animal Scientists, Austin, TX, July, 2019.

4. Spaulding HR, Ludwig AK*, Hudson MB, and **Selsby JT**. PGC-1α Overexpression Increases Lysosome Abundance and Autophagy in Dystrophic Skeletal Muscle. Iowa Physiological Society, Des Moines, IA, September, 2018.
   *indicates undergraduate student
   Selected for oral presentation based on abstract

5. **Selsby JT**, Ganesan S, Brownstein AJ, Volodina O, Gabler NK, Rhoads RP, and Baumgard LH. The effects of progressive heat stress on muscle dysfunction. American Dairy Science Association. Knoxville, TN, June, 2018.

6. Selsby JT, Baumgard LH, and Rhoads RP. Therapeutic approaches to heat stress: Targeting mitochondria. Project Director's meeting. Washington, D.C., June, 2018.

7. Ludwig AK*, Spaulding HR, Hudson MB, and **Selsby JT**. PGC-1α Overexpression Increases Lysosome Abundance and Autophagy in Dystrophic Skeletal Muscle. Experimental Biology, San Diego, April, 2018.
   *indicates undergraduate student; Selected from submitted abstracts

8. Baumgard LH, Horst EA, Mayorga EJ, Al-Qaisi M, Shouse CS, Kvidera SK, Lei S, Siebert JT, Ramirez-Ramirez HA, Appuhamy JADRN, Keating AF, Ross JW, **Selsby JT**, and Rhoads RP. Heat stress, consequences of gut barrier dysfunction. Mid-West ADSA, Omaha, NE 3/12/18-3/13/18.

9. Selsby JT. The effect of heat stresses on porcine skeletal muscle. Project Director's meeting. Baltimore, MD, 7/13/17.

10. Turning down the heat: How heat stress affects muscle growth and limits pork production. Iowa Swine Day, Ames, IA, 6/29/17.

11. Spaulding H, Kelly EM, Sheffield JB, Quindry JC, Hudson MB, and Selsby JT. Impaired autophagic flux in dystrophic muscle augments extracellular autophagosome release. Advances in Skeletal Muscle Biology in Health and Disease. Gainesville, FL, March 8-10, 2017.
    *Note: Talk was awarded based on abstract (1/16 selected from ~120 submitted)

12. Baumgard L., SK Kvidera, EA Horst, MJ Dickson, JA Ydstie, CS Shouse, EJ Mayorga, M Al-Qaisi, S Lei, KL Bidne, JT Seibert, BJ Hall, AF Keating, JW Ross, **JT Selsby** and RP Rhoads. Consequences of leaky gut on the immune system, metabolism, physiology and animal performance. American Dairy Science Association. 2017.

13. Wilson BE, Kelly EM, Barrero CA, **Selsby JT**, and Hudson MB. Size Profile and Selective Protein Packaging of Exosomes Released from Atrophying Muscle Cells. MARC ACSM. Nov. 2016.

14. Pautz CM, Wilson BE, Jackson K, **Selsby JT**, Barerro CA, Merali S, Kelly EM, and Hudson MB. Exercise or reduced calorie diet attenuates overnutrtion-induced GLUT4 carbonylations in adipose tissue. MARC ACSM Regional Meeting. Nov. 2016.

15. Spaulding HR and **Selsby JT**, Autophagic dysfunction in dystrophic muscle is independent of disease progression. Iowa Physiological Society, Des Moines, IA, October 29th, 2016.

16. The possibility of autophagic disruption in dystrophic skeletal muscle. NC1184, Manhattan, KS, 10/14/16

17. Success, failure, and serendipity in Duchenne muscular dystrophy research. Biological Science Club, 8/31/16

18. Selsby JT. The effect of heat stresses on porcine skeletal muscle. Project Director's meeting. Salt Lake City, UT 7/19/16

19. Keynote Address: Is exercise safe for muscular dystrophy patients? American College of Sports Medicine (World Congress of Exercise is Medicine, World Congress on the Basic Science of Energy Balance), Boston, MA, June, 2016.

20. It's getting hot in herre: heat stress mediated changes in skeletal muscle. Virginia Tech, Blacksburg, VA, March 16th, 2016.

21. It's getting hot in herre: Heat stress-mediated changes in skeletal muscle. University of Maryland. College Park, MD, December 8th, 2015.

22. Heat stress mediated changes in skeletal muscle. Heat Stress Symposium, Iowa State University, Ames, IA, April 17th, 2015.

23. Preparation of the portfolio: The faculty experience. CALS, Iowa State University, Ames, IA, April 22nd, 2015.

24. Ballmann CB, Beyer R, Denney T, **Selsby JT** and Quindry JC. Effect of long term quercetin supplementation on dystrophic cardiac pathology in mdx/utrn$^{+/-}$mice. FASEB, Boston, MA, March 2015.

25. **Selsby JT**, Ballmann CG, and Quindry JQ. Long-term dietary quercetin enrichment improves muscle function in dystrophic skeletal muscle. FASEB, Boston, MA March, 2015.

26. Quercetin as a novel therapeutic approach for Duchenne muscular dystrophy. Duchenne Alliance International Meeting, March 6th, 2015.

27. Quercetin as a novel therapeutic approach for Duchenne muscular dystrophy. Drake University Science Collaborative Institute, Drake University, September 12, 2014.

28. Baumgard LH, Ross JW, Gabler NK, Lonergan SM, Keating AF, **Selsby JT**, Rhoads RP Metabolic and health consequences of heat stress: Knowledge gaps and opportunities. 2014 American Society of Animal Science Annual Meeting. Kansas City, Missouri July 20-24.

29. Nonneman D, Rohrer GA, Ross JW, Hollinger K, and **Selsby JT**. Dystrophin deficiency-induced changes in porcine skeletal muscle. Reciprocal Meat Conference, Madison WI, June 15-18, 2014.

30. PEDaling to victory. First Year Seminar 29, Drake University, October 28, 2013

31. PEDaling to victory: Advanced concepts. Biology 143 "Exercise Physiology", Drake University, October 28, 2013

32. PGC-1α pathway activation as a treatment for DMD. Auburn University, School of Kinesiology, Auburn, AL, May 9th, 2013.

33. Characterization of a novel porcine model of Becker muscular dystrophy: An early time point. University of Iowa, Department of Molecular Physiology and Biophysics and the Wellstone Muscular Dystrophy Cooperative Research Center, Iowa City, IA. April 11th, 2013.

34. Heat stress leads to free radical injury in porcine skeletal muscle. Effects of Heat Stress on Post-absorptive metabolism symposium. Ames, IA. April 4th, 2013

35. PGC-1α pathway activation as a treatment for DMD. College of Wooster, Wooster, OH. March 28, 2013.

36. Quercetin-mediated protection of dystrophic skeletal muscle: Next steps and future directions. Duchenne Alliance International Meeting. Boston, MA. March, 9th, 2013.

37. Early characterization of a novel porcine model of Becker muscular dystrophy. Pioneer Lunch and Learn. Johnston, IA, January 8, 2013

38. PGC-1α pathway activation as a treatment for DMD. RaceMD Forum. Portland, OR, December 10th, 2012.

39. Early characterization of a novel porcine model of Becker muscular dystrophy. NC 1184 Station report. Blacksburg, VA, October 26, 2012.

40. Early characterization of a novel porcine model of Becker muscular dystrophy. Muscular Dystrophy Association Fall Education Seminar. Des Moines, IA, October 13, 2012.

41. Cruzen SM, Harris AJ, Hollinger K, **Selsby JT**, Gabler NK, Lonergan SM, Huff-Lonergan E. Gilts selected for low residual feed intake have potential for decreased protein degradation. International Congress of Mean Science and Technology. Montreal, Canada, August 12-17, 2012.

42. Hollinger K, Snella L, Shanely RA, and **Selsby JT**. Dietary quercetin supplementation alleviates disease related muscle injury in dystrophic muscle. FASEB, San Diego, CA, April, 2012.

43. MDA Educational Seminar. Duchenne muscular dystrophy: What is it and what do we do about it? Muscular Dystrophy Association. Ankeny, IA, November 5th, 2011.

44. The Becker muscular dystrophy model: A case study for using a swine herd has a reservoir for biomedical models. Institute of Animal Science, CAAS (part of IAS-ISU Ensminger Bilateral Academic Exchanges on Animal Science). Beijing, China, October 16th, 2011.

45. The Becker muscular dystrophy model: A case study for using a swine herd has a reservoir for biomedical models. Huazhong Agricultural University (Part of HZAU-ISU Ensminger Bilateral Academic Exchanges on Animal Science). Wuhan, China, October 18th, 2011.

46. PGC-1α protects dystrophin-deficient muscle from acute eccentric injury. NC 1131/1184 Station report, College Station, TX, November 12th, 2010.

47. The role of microRNAs in early Duchenne muscular dystrophy. Iowa Physiological Society. Des Moines, IA, October 9th, 2010.

48. PGC-1α gene transfer is beneficial for Duchenne muscular dystrophy. TriBeta Honors Society. Ames, IA. September 21, 2010.

49. Gesing, L., Johnson, A., Stalder, K., **Selsby, J.T.**, Faga, M., Abrams, S., Hill, H., Whiley, A., Bailey, R., and Ritter, M. Effects of pen size on the stress response of market weight pigs during loading and unloading. American Society of Animal Science, Denver, July 2010.

50. **Selsby, J.T.** and Gardan-Salmon, D. Postnatal PGC-1α gene transfer attenuates acute injury in mdx mice. FASEB, Anaheim, April, 2010.

51. An 'omics approach to DMD. CIAG annual meeting. April 8th, 2010.

52. Pediatric muscle disease and porcine reproductive biotechnology: Part of the biomedical research portfolio in the Department of Animal Science. Presented to Dean and Provost. November 6th, 2009.

53. An 'omics approach to DMD. Second Potentially Semi-Regular Iowa Nebraska Muscle Biology Get-Together August 7, 2009.

54. Potential therapies for Duchenne muscular dystrophy. University of Nebraska Medical Center, Omaha, NE. June 2, 2009.

55. A calpain inhibitor fails to rescue dystrophic skeletal muscle. University of Pennsylvania, Chalk Talk Series. Philadelphia, Pennsylvania. November 8th, 2007.

56. Can heating augment hypertrophy? (Turning up the heat on hypertrophy) Superhuman Radio hosted by Carl Lanore. WKJK 1080 AM, Louisville, Kentucky. August 11th, 2007.

57. Pipinos, II, Judge, AR, **Selsby, JT**, Johanning, JM, Lynch, TG, Baxter, BT, and Dodd SL. The skeletal muscle of patients with peripheral arterial disease has evidence of inefficient antioxidant defenses and significant oxidative damage. Academic Surgical Congress, San Diego, February 7-11, 2006.

58. Our current understanding of exercise claudication in rat soleus. University of Nebraska Medical Center. Omaha, Nebraska. July 13th, 2005.

59. The effect of heating on skeletal muscle remodeling. University of Pennsylvania. Philadelphia, Pennsylvania. June, 3rd, 2005.

60. Heating of immobilized muscle reduces oxidative stress and damage. National Football League Physicians Society. Indianapolis, Indiana. February 20th, 2004.

61. **Selsby, JT**, Payne, AM, Judge, AR, and Dodd, SL. Myosin heavy chain distribution in Botulinum neurotoxin treated animals. SEACSM, Atlanta, Jan 31-Feb 2, 2003.

Seminars

1. Autophagic dysfunction in dystrophic skeletal muscle. Interdepartmental Genetics and Genomics Seminar 9/2019.

2. Eat it!: Autophagic dysfunction in dystrophic skeletal muscle. Biomedical Sciences Departmental Seminar. November 1st, 2018.

3. Visiting Lecturer, University of Delaware. Will lead a discussion regarding muscle injury and therapy. KAAP 605 - Pathoetiology of Musculoskeletal Injuries (3cr.). Invited by Matthew Hudson. October 17th, 2018.

4. The heat is on: Heat stress-mediated changes in skeletal muscle. Meat Science Seminar. Iowa State University, 2/6/18.

5. "He's virtually worthless": An objective evaluation of student evaluation of teaching. Animal Science Departmental Seminar, 1/26/18.

6. The heat is on: Heat stress-mediated changes in skeletal muscle. Modern Views of Nutrition Seminar Series. Iowa State University, 9/20/17.

7. It's getting hot in here: Heat stress-mediated changes in skeletal muscle. TriBeta Seminar 4/4/17.

8. Success, failure, and serendipity in Duchenne muscular dystrophy research. Genetics Seminar, 8/29/16.

9. "He's virtually worthless": alternative approaches to student evaluation of teaching. Plant Pathology and Microbiology Seminar. February 9, 2016

10. Translating PGC-1alpha pathway activation to clinical application. Interdepartmental Genetics Seminar (Gen 691), October 5th, 2014.

11. PGC-1α-mediated protection of dystrophic skeletal muscle. TriBeta Seminar Feb. 13th, 2014.

12. PGC-1α-mediated protection of dystrophic skeletal muscle. Biological Science Club March 26th, 2014.

13. PGC-1α-mediated protection of dystrophic skeletal muscle: Update and future directions. IG Seminar November 11th, 2013.

14. Professional Speaking and Listening. George Washington Carver Internship Program, July 1, 2013.

15. Advances in the treatment of Duchenne muscular dystrophy. Animal Science Departmental Seminar April 27, 2013.

16. Harnessing the PGC-1α pathway to slow disease in dystrophin deficient skeletal muscle. Kinesiology Seminar, April 6th, 2012.

17. Harnessing the PGC-1α pathway to slow disease in dystrophin deficient skeletal muscle. Food Science and Human Nutrition Seminar, Feb 8th, 2012.

18. PGC-1α protects dystrophin deficient skeletal muscle. Interdepartmental Genetics Seminar (Gen 691), Dec 5th, 2011.

19. PGC-1α gene transfer protects dystrophic skeletal muscle. Biomedical Sciences Seminar. January 27th, 2011.

20. New approaches to DMD. Animal Science Departmental Seminar. April 16th, 2010.

21. Advances in DMD. Proceedings of the Neuroscience Faculty. September 25, 2009.

22. PGC-1α as a potential therapy for DMD. Veterinary Microbiology and Preventative Medicine and Veterinary Pathology seminar. February 16, 2009.

23. Using PGC-1α as a therapy for DMD. Muscle Biology and Meat Science Seminar Series. Iowa State University, Ames, IA. January 20th, 2009.

24. PGC-1α's therapeutic potential. Animal Nutrition Seminar. Iowa State University, Ames, IA. November 3rd, 2008.

25. Ergogenic Aids: Facts, Fiction, and Advertising. Presented to Personal and Family Health class: University of Florida. Gainesville, Florida. September 2002, January 2003, February 2003.

26. Dispelling Myths of the Gym. Presented to Personal and Family Health class: University of Florida. Gainesville, Florida. February 2003.

27. A novel Mg-creatine chelate and a low dose creatine supplementation regimen improve work. Presented to EDU PAES 886 – Student Colloquium: The Ohio State University. Columbus, Ohio. May 2001.

28. A comparative analysis of a creatine supplementation regimen and a magnesium supplementation regimen – a research proposal. Presented to EDU PAES 886 – Student Colloquium: The Ohio State University. Columbus, Ohio. March 2000.

29. Swim performance following creatine supplementation in Division III athletes. Presented to EDU PAES 886 – Student Colloquium: The Ohio State University. Columbus, Ohio. February 2000.

NON-REFEREED PUBLICATIONS

1. Rudolph T, Rhoads R, Baumgard L, and **Selsby JT**. Why we should sweat heat stress. National Hog Farmer. December, 2019 news letter and published again in NHF January, 2020.
   https://www.nationalhogfarmer.com/animal-health/why-we-should-sweat-heat-stress

2. **Selsby JT.** Light versus dark – the color of the meat is due to the job of the muscle. The Conversations. 11/21/19.
   55,532 reads (2/17/2020)

3. **Selsby, JT**. Heat stress has effect on muscle growth, limits pork production. Feedstuffs. September 5th, p26-27, p32, 2017.

4. Rands ML, Bestler L, Butin E, Chan JCK, Genschel U, Hartman BL, **Selsby JT**, Whitehead R. Active learning classrooms faculty task force final report. Center for Excellence in Learning and Teaching, Iowa State University. 8/2016

5. Nonneman D, Rohrer G, Ross JW, Hollinger K, and **Selsby JT**. Dystrophin deficiency-induced changes in porcine skeletal muscle. Conference Proceedings, Reciprocal Meats Conference, June, 2014.

6. **Selsby JT**. 17th annual meeting of the Iowa Physiological Society. The Physiologist, 57: 74-75, 2014.

7. Kaiser A, Johnson A, **Selsby JT**, and Stalder KJ. Independent Study 490A: Positive Reinforcement Training Piglets to Stand in a Container and Follow a Human. AS-Leaflet-R2914.pdf, 2014.

8. Ross JW, **Selsby JT**, Nonneman DJ. Genetic Modification of Pigs: Expanding their Utility as Biomedical Models. National Breeders Roundtable Annual Conference, Conference Proceedings, pp 32-38, 2013.

9. Johnson, J.S., M. Abuajamieh, M.V. Sanz-Fernandez, J.T. Seibert, S.K. Stoakes, J.W. Ross, **J.T. Selsby**, N.K. Gabler, H. Xin, M.C. Lucy, T.J. Safranski, R.P. Rhoads, and L.H. Baumgard. 2013. Heat stress alters energy metabolism during pre- and postnatal development. XXIII International Reunion on Production of Meat and Milk in Hot Climates. Mexicali, Mexico. Pp. 38-50.

10. Johnson, J, Ross, JW, **Selsby, JT**, Boddicker, R, Sanz-Fernandez, V, and Baumgard, L. 2013. Effects of In-utero Heat Stress on Porcine Post-natal Thermoregulation. Animal Industry Report R2826.

11. Johnson, J., Boddicker, R., Sanz-Fernandez, V., Ross, J.W., Baumgard, L., and **Selsby, J.T***. 2012. Gestational thermal environment alters postnatal response to heat stress. Animal Industry Report. R2738.

12. Yang, C., Gardan-Salmon, D.[2], **Selsby, J.T**., and Ross, J.W. 2012. Utility and efficiency of homologous recombination for introducing targeted modifications to the pig genome. Animal Industry Report. R2742.

13. Gesing, L., A. Johnson, **J. Selsby**, K. Stalder, A. Whiley, H. Hill, R. Bailey, and M. Ritter. 2011. Effect of pen size on the stress presponse at laoding and unloading and transport losses from market weight pigs. Animal Industry Report R2642.

14. Gesing, L., A. Johnson, **J. Selsby**, K, Stalder, M. Faga, C. Feuerbach, H. Hill, R. Bailey and M. Ritter. 2010. Effects of pre-sorting prior to loading on transport losses of the market weight pigs during loading and unloading. Animal Industry Report. R2551.

INTELLECTUAL PROPERTY and COMMERCIALIZATION

1. Muscle-Derived Extracellular Vesicles, and Composition, and Methods of Using the Same for Detection, Screening, and Liquid Biopsy. U.S. Provisional Patent Application No. 62/715,311, filed August 7, 2018, approval pending. Filed by: Hudson, MB (University of Delaware) and **Selsby JT** (Iowa State University).

2. Extracellular vesicles as biomarkers and therapeutics for neuromuscular and neurological disorders and pathology. U.S. Provisional Patent Application No. 62/722,331, filed August 24, 2018, approval pending. Filed by: Hudson, MB (University of Delaware) and **Selsby JT** (Iowa State University).

3. Extracellular vesicles as biomarkers and therapeutics for neuromuscular and neurological disorders and pathology. International application (PCT). Filed August 23, 2019, approval pending. Filed by: Hudson, MB (University of Delaware) and **Selsby JT** (Iowa State University).

   These patents pertain to the isolation of muscle- or neuron-derived vesicles for use as biomarkers of tissue injury. In addition, these patents protect production and delivery of biologically relevant molecules to recipient cells and tissues.

MENTORSHIP

High School

1. Andrea Moore – George Washington Carver (GWC) program Su'13
2. Amelia Velazquez – GWC Su'16

Undergraduates

1. Alyona Avdonina – Science with Practice (SWP) Sp'09 – 1st place poster competition, Independent study Au '09, Independent Study Sp '10, lab member Sp '10
2. Lauren Gealow – SWP Sp'09, Independent study Au '09, Honors project mentor Sp '10
3. Kayla Nielsen – work study Sp'09
4. Jenna Dixon – Women in Science and Engineering Su'09, Undergraduate Research Assistantship Au '09, Honors project mentor Sp '10, Undergraduate Research Assistantship Au '10
5. Audrey Pinto – NSF REU Su '09
6. Connie Santana – NSF REU Su '10
7. Drance Rice – NSF REU su '11
8. Maggie Robinson – 490 Sp '12, summer '12, 490 Au '12
9. Hannah Opalko – NSF REU Su'12
10. Cristina Mántaras – GWC Su'12
11. Robyn Montz – URA Fall'12, Spring '13, Fall '13, Sp'14
12. Allison Richman – NSFREU Su'13
13. Katerina Herzberg – AnS 490 Sp '14, Au '14, Sp '15, Au'15
14. Rose Robuccio – AnS 490 Sp'14, Au '14, Sp '15
15. Martin Curry – NSF REU Su'14
16. Sydney Hill – Au'14 – Sp'17
17. Stuart Lein – Au'15 – Sp'17
18. Olivia Weaver – Sp'16
19. Thomas Wilgenbusch – Au '16 – Sp'18
20. Clara Young – Sp'17 (1st year honors student), Au'17, Au'18
21. Amanda Ludwig – Su'17
    a. American Physiological Society summer fellowship awardee
    b. Abstract selected for oral presentation at EB'18
    c. American Physiological Society Barbara A. Horwitz and John M. Horowitz Undergraduate Research Award (Sp'18)
22. Blake Root - Au '17
23. Alex Roney - Au '17

24. Megan Gard - Sp ’18, Au’18
25. Charlotte Halley - Sp ‘18
26. Kayleen Hammer – Sp’18, Su’18, Au’18
27. Megan Gard – Sp’18, Au’18
28. Cece Gregg – Science with Practice Sp’19
29. Emily Gress – Honors 290 Sp’20
    a. Melampy Award for Undergraduate Research

Rotation Students

1. Katrin Hollinger – IG, Summer ‘10
2. Kirsten Johnson – IG, Fall ‘10
3. Grace Huh – IG, Sp ‘11
4. Sandra Rosado – IG, Fall ‘11
5. Aditi Agrawal – IG, Fall ‘11
6. Caitlyn Farris – IG, Fall ‘12
7. Jessica Hendersen – ImBio, Fall ‘13
8. Carmen Bustos – IGPNS, Fall ‘13
9. Jermilia Charles – MCDB, Spring ‘14
10. Hannah Spaulding – MCDM, Spring ‘15
11. Corey Summers – ImmunoBio, Spring ‘15
12. Alexandria Brownstein – IG, Spring ‘15
13. Olga Volodina – IG, Summer ‘15
14. Mike Murphy – IGG Au’18
15. Tori Rudolf – Rotation Student IGG Sp’19
16. Alyssa Hohman – Rotation Student IGG Sp’19
17. Swathy Krishna – Rotation Student IGG Sp’19

Current Graduate Students

1. Tori Rudolf – PhD student Sp’19-present IGG
   American Physiological Society Caroline tum Suden/Frances Hellebrandt Professional Opportunity Award 2019

2. Swathy Krishna – PhD student Sp’19 IGG

Former Graduate Students

1. Katrin Hollinger – Graduate student Fall ’10-Sp’14
   Thesis: “Evaluating the PGC-1 alpha pathway and a new preclinical model to advance treatment options for dystrophinopathies”
   Employment after graduation – Post doc Jeff Chamberlain’s group, University of Washington
   Graduate and Professional Student Senate Peer Research Award 2014
   IPS Outstanding Graduate Student 1st Prize poster Presentation 2013
   Teaching Excellence Award 2013
   GPSS Peer Teaching Award 2013
   Dean Klecker Global Agriculture Graduate Scholarship 2013
   APS Physiologists in Ind. Comm. Predoctoral Novel Disease Model Award 2013

Professional Advancement Grant to attend Experimental Biology 2013
Fung Travel Awards to attend Experimental Biology 2013, Boston MA 2013
ISU-HHMI Graduate Teaching Fellowship 2012
IPS Outstanding Graduate 2nd Prize poster Presentation Award 2012
Graduate Award for Outstanding Teaching 2012
Agriculture Global Funding for Graduate Students 2012
Ester and Richard Willham Graduate Scholarship in Animal Science 2012
Professional Advancement Grant to attend Experimental Biology 2012
Fung Travel Awards to attend Experimental Biology 2012
GPSS Peer Teaching Award, Iowa State University 2011
Professional Advancement Grant to attend Experimental Biology 2011
Professional Advancement Grant to attended RNA 2009, Madison WI 2009

2. Sandra Rosado – Masters student (IG) Spring '12-Fall '13
   Employment after graduation – Research Associate, Vanderbilt
   Nominated by editors for *Temperature* Young Investigator Award
   for the Best Paper on Thermal Physiology in a Changing Thermal World 2014
   Multicultural Liaison Officer (MLO) Outstanding Student Award, CALS 2013
   GPSS Travel Award 2013
   Sui Tong Chan Fung Travel Award 2013

3. Alexandria Brownstein – M.S. student IG; March, 2015 – Su'16
   Employment after graduation – Research Associate, Rachelle Crosbie-Watson's lab, UCLA

4. Olga Volodina – M.S. student IG; August, 2015 – Su'16
   EEP's Military Physiology Predoctoral Research Award 2016

5. Vivek Lawana – PhD student Au'18 Toxicology
   I was named as the emergency PI and am the signatory of his final, submitted dissertation

6. Hannah Spaulding – Ph.D. student MCDB; January, 2015 – present
   EEP's Partnership for Clean Competition Predoctoral Research Award 2016
   IPS Outstanding Graduate 1st Prize Poster Presentation 2016
   Abstract selected for oral presentation (New Directions, Gainesville) 2017
   Finalist, 3 minute abstract competition, ISU 2017
   American Physiological Society Caroline tum Suden/Frances Hellebrandt
   Professional Opportunity Award 2018

Program of Study Committees

Leah Guessing (AnS) – 2011
Paul Khoo (Kinesiology) – 2011-present
Muhammet Ay (BMS) – 2012- Sp '16
Vivek Lawana (BMS) - Au'14-Au'18
Administratively appointed head of POSC
Davis Englund (Kinesiology) – 2013-2015

Corey Summers (Kinesiology) – Sp'15 – Sp'18
Jahyun Kim (Kinesiology) – Au'16-Sp'20
Stephanie Lindbolm (Animal Science) – Su '16- Sp'17
Allison Birnbaum (IG2) – Au'16-Sp'20
Max Schmarzo (Kinesiology) – Au'16-Su'17
Katherine Oliver (AnS) – Sp '17-present
Jessica Alley (Kinesiology) – Au'17-present
Hyeyoon Eo (Kinesiology) – Sp'18-present
Carl Frame (AnS) – Au'17-present
Katherine Hochmuth (AnS) – Su'19-present
Tamara Moretti (MCDB) – Su'19-present
Alyssa Hohman (IGG) – Au'19-present
Vasuki Silva (AnS) – Au'19-present
Victoria Wilson (AnS) – Sp'20-present
Carter Reed (Kin) – Sp'20-present

Postdocs

1. Delphine Gardan – post doc 2/2009-10/2010
2. Shanthi Ganesan – post doc 12/2014-12/2016

Junior Faculty

1. Matthew Hudson, Temple University/University of Delaware
   Mentor for DOD grant
   "Identification of a unique molecular signature in skeletal muscle released exosomes as a biomarker for DMD." July, 2017
   Invited for full submission
   Scored 2nd percentile but not funded
   Mentor for NIH COBRE grant
   "Identification and characterization of extracellular vesicles released from dystrophin-deficient hearts." August, 2017
   Funded in full - $50,000

PROFESSIONAL SOCIETIES

Member, 2010 – present:	Iowa Physiological Society
9/2011-9/2012	President Elect
9/2012-9/2013	President
9/2013-9/2014	Past President
Member, 2002 – present:	American Physiological Society
3/2013 – present	MyoBio Planning Committee
Member, 2011 – 2014:	American Societies of Animal Science
Member, 2004 – 2005:	American Society for Gravitational and Space Biology
Member, 2000 – 2003:	American College of Sports Medicine
Member, 2001 – 2003:	South-East American College of Sports Medicine

Member, 2000 – 2001: Mid-West American College of Sports Medicine

HONORS and AWARDS

2017:	Invitee and attendee Alpha Delta Pi Faculty Dinner
2016:	Invitee and attendee Pi Beta Phi academic honors dinner
2015:	Invitee, Pi Beta Phi academic honors dinner
2014:	Outstanding Faculty Member – Greek Community
2013 – 2014:	Past President Iowa Physiological Society
2012:	Awardee, CALS Early Excellence in Advising Award, Iowa State University
2012 – 2013:	President of Iowa Physiological Society
2011 – 2012:	President Elect of Iowa Physiological Society
2009:	Invitee and attendee Pi Beta Phi academic honors diner
2007:	NRSA Fellow, National Institute of Health
2006:	Peter B. Weisman Fellow, Parent Project Muscular Dystrophy
2004:	First runner up in The American Society for Gravitational and Space Biology graduate student poster competition, Animal Division. New York, Nov 11, 2004
2001 – 2002:	LaPradd Fellow, University of Florida
2001:	First runner up in Edward F. Hayes Graduate Research Forum, The Ohio State University
1995 –1999:	Achievement Award, College of Wooster Academic Achievement Award, College of Wooster

SERVICE

Ad Hoc Reviewer

Applied Physiology, Metabolism, and Nutrition
Physiological Genomics
Muscle Nerve
Current Medicinal Chemistry
Molecular and Cellular Biochemistry
Animal Genetics
American Journal of Physiology – Reg
Journal of Protein Research
European Journal of Applied Physiology
Clinical Nutrition
Free Radical Biology and Medicine
Human Molecular Genetics
Proteomics
American Journal of Physiology – Cell
Journal of Physiology
FASEB Journal
Acta Physiologica
Medicine and Science in Sport and Exercise
Journal of Applied Physiology
American Journal of Physiology - Endocrine
Journal of Animal Science
Toxicon
Proteomics Clinical Applications
AGE
PLoS One
European Journal of Histochemistry
Pathophysiology Journal
Journal of Nutrition
Nutrients
The FEBS Journal
American Journal of Physiology - Renal
Cell and Molecular Life Sciences
Journal of Medical Genetics
Autophagy

JOSHUA TAYLOR SELSBY
CURRICULUM VITAE

Service and Committee Membership

<u>International</u>	
Ad hoc reviewer – Netherlands Organization for Scientific	8//2018
External reviewer for dissertation, Victoria University	12/16
Ad hoc reviewer – Duchenne Alliance grants	2/2016, 3/2016
Ad hoc reviewer – AFM grants (French Muscular Dystrophy Association)	
Scientific Committee: Molecular & physiopathological basis of muscular dystrophies	8/2014, 11/2015, 3/2020
Ad hoc reviewer – Duchenne Alliance grants	7/2013, 11/2015
Ad hoc reviewer – Bard Grants (USA – Israel grants)	12/2012-1/2013
Ad hoc reviewer – Bard Grants (USA – Israel grants)	11/2011-1/2012
External reviewer for dissertation, Victoria University	8/2011
<u>National</u>	
Panel manager, USDA/NIFA IDEA grants	2/2020-present
Ad hoc reviewer, USDA/NIFA Conference grants, Animal Health and Production and Animal Products: Improved Nutritional Performance, Growth, and Lactation of Animals	12/2019
Study section member, USDA/AFRI Foundation Awards, Animal Nutrition, Growth, and Lactation Program	12/2018
Jett Foundation Scientific Advisory Board	5/2018-present
The Hot Zone: Skeltal muscle change caused by hyperthermia and heat stres. Session Chair, FASEB ’17, Chicago	4/2017
Ryan’s Quest Scientific Advisory Board	6/2016-present
Ad hoc reviewer Strength, Science, and Stories of Inspiration/MDA fellowship program	6/2017
Attended FDA Eteplirsen Advising Committee at request of Jett Foundation	4/2016
Submitted a scientific evaluation of the FDA Eteplirsen response at the request of Jett Foundation	1/2016
Ad hoc reviewer, USDA/NIFA Exploratory Program	5/2015
Duchenne Alliance Scientific Advisory Board	3/2015-6/2016
Interact with Team Joseph leadership	1/2015
Duchenne Alliance Scientific Panel	3/2015
Muscle diseases: Recent advances in disease mechanisms	
Session co-chair, FASEB ’15, Boston	4/2015
NC1184 project renewal committee	8/2014-2015
Study section member, AFRI Fellowships Panel (B)	5/2014
Project leader and meeting host NC1184 project	10/2013-10/2014
Organizing Committee, APS Muscle Biology Group	3/2013-present
Study section member, AFRI Fellowships Panel (B)	5/2013
Secretary NC1184 project	10/2012-10/2013
Invited participant RaceMD Forum	12/2012

Interaction/Strategy session with RaceMD	11/2012
Member, Chapter Advisory Committee, APS	10/2012-10/2014
Supported Kristin Robertson (Ferrum University, Ferrum, VA) in establishing an AnS 214-like class at Ferrum College	8/2012-12/2012

Regional

Poster judge Iowa Physiological Society	9/15/2018
Provided testimony to Iowa Medicaid board regarding Exondys 51	4/2018
Provided testimony to Iowa Medicaid board regarding Exondys 51	4/2017
Poster judge Iowa Physiological Society	10/2016
Delivered Lunch and Learn for Pioneer	1/2013
Interaction with parents with neuromuscular diseases	6/2012
MDA Fall Educational Seminar, Des Moines, IA	10/2012
Judge – State Science and Technology Fair of Iowa	3/2012
MDA Fall Educational Seminar, Des Moines, IA	11/2011

University

Interdepartmental Graduate Program External Review Taskforce	Summer ‘19
Session moderator ISU UG research symposium	4/17/19
Internal Department Review of Office of Student Conduct	9/2018-1/2019
Session moderator ISU UG research symposium	4/10/18
Interdepartmental Graduate Program Review Taskforce	1/2018-9/2018
Faculty Senate Committee on Appeals	6/2015-present
All University Judicial Committee	1/2015-present
Center for Learning and Teaching: Active Learning Space Task Force	9/2015-6/2016
Search committee, Judicial Affairs Associate	Summer ‘15
Panel member, Peer Evaluation of teaching: Perspectives of the reviewed and the reviewer	2/2015
Reviewer –Symposium on Undergraduate Research & Creative Expression.	3/2014
Reviewer Borlaug prize poster competition	10/2013
Judge GMAP Symposium	5/2013
Reviewer –Symposium on Undergraduate Research & Creative Expression.	2/2013
Reviewer Borlaug prize poster competition	10/2012
Reviewer –Symposium on Undergraduate Research & Creative Expression.	2/2012
Interdepartmental Genetics	
DOGE	7/2018-present
Associate DOGE	7/2016-7/2018
Executive committee	8/2015-present
Admissions committee	8/2012-2015

College

CALS selection committee for Grants Coordinator position 11-12/18
CALS search committee for Grants Specialist position 11-12/18
Interdepartmental Graduate Program of Nutritional Sciences

Modern Views of Nutrition seminar planning committee	Summer ‘19
Modern Views of Nutrition seminar planning committee	Summer ‘18
Modern Views of Nutrition seminar planning committee	Summer ‘17
Modern Views of Nutrition seminar planning committee	Summer ‘14
Griffith Award Committee (Nutritional Sciences Council)	4/2012
Grant reviewer Martin Fund (Nutritional Sciences Council)	6/2011

<u>Departmental Standing Committees</u>

Graduate Affairs Committee	8/2016-8/2018
Seminar Committee	8/2016-present
Chair 8/2017-Present	
Outcomes Assessment Committee	8/2016-8/2017
Curriculum Committee	8/2013-8/2018
Electronic Teaching Materials, Facilities and Equipment Committee	8/2010-8/2013
Social Committee	8/2009-8/2014
Chair: 8/2011-8/2012	
Chuck Wagon Committee	8/2008-8/2016
Chair: 8/2015-8/2016	

<u>Departmental Ad Hoc Committees</u>

Promotion Evaluation Committee (Nick Serao for 3 yr review)	Sp ‘20
Search committee chair, physiology teaching/research	Sp’20-present
Search committee, Physiology teaching/research	Au’19-present
Promotion Evaluation Committee (Jodi Sterle for Full)	Au’19
Post-tenure review committee (Peggy Miller)	Sp’19
Continuing appointment of a term faculty member	11/2018
Summative evaluation of AnS 352 (Nick Serao)	Au’18
Search committee chair, Animal Science Teaching	Spring ‘17
Summative evaluation of Cheryl Morris	Spring ‘17
Search committee chair, Physiology faculty member	Spring-Fall ‘16
Search committee Physiology Technician	Summer ‘15
Zumwalt Station Renovation committee	2012-2014
Committee to create lab animal option	2011- 2016
Committee to find validated teaching evaluation tool	4/2011-8/2011
LN Hazel award selection	4/2011
Collaborator Status Review Committee for Colin Guy Scanes	2010
Physiology Group Preparation for External Review Committee	8/2010-8/2011
Reviewer – CIAG Personnel Support grants	6/2009
Reviewer – Block and Bridle scholarship selection	4/2009