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
2016 – Present	Leadership of Interdepartmental Genetics and Genomics Program Director of Graduate Education (DOGE) – 2023-present Associate DOGE – 2020-2023 Past DOGE – 2020-2023 DOGE – 2018-2020 Associate DOGE – 2016-2018

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 Graduate 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

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, 2020-present:	American Society 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

2023:	American Society of Animal Science Animal Growth and Development Award
2023:	Research Mission Award of the ISU Chapter of Gamma Sigma Delta
2022:	Awardee, CALS Midcareer Research Excellence Award
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

FUNDING: GRANTS IN AID

Current Grants in Aid (first author is PI)

	Investigators	*Title*	*Amount*	*Source*	*Year*
1.	**J. Selsby,** L. Baumgard, R. Rhoads (Virginia Tech), S. White (Texas A&M)	Calcium regulation as a contributor to heat stress-mediated skeletal muscle dysfunction	$500,000	USDA 2020-02716	1/2021-12/2023
2.	**J. Selsby,** J Ross, L. Baumgard, B. Ramirez, L. Shulz, N. Serao, R. Rhoads (Virginia Tech), S. White (Texas A&M)	Basic and applied consequences of heat stress in barrows and gilts	$1,000,000	USDA 2020-68014-31954	7/2020-6/2024
3.	**J. Selsby,** R. Valentine, J. Walley	Obesity as a modifier of disease progression caused by dystrophin deficiency	$300,000	MDA 962344	9/2022-8/2025
4.	**R. Valentine*, J. Selsby*** *multiple PI grant	PKR as a therapeutic target for muscular dystrophy	$395.823	NIH R21 5R21AR080362	8/2022-7/2024
5.	**J. Selsby**	Obesity as a potentiator of heat stress-mediated muscle dysfunction	$9,000	ISU – Martin Fund	7/2023-6/2024

Completed Grants (chronological order)

	Investigators	*Title*	*Amount*	*Source*	*Year*
1.	**J. Selsby**	Swim performance following creatine supplementation in Division III athletes	$500	College of Wooster Copeland Memorial Fund	1998
2.	S. Dodd**, J. Selsby**	Can muscle heating attenuate atrophy caused by immobilization?	$89,000	National Football League	2003
3.	S. Dodd**, J. Selsby**	Can muscle heating attenuate atrophy caused by immobilization?	$93,000	National Football League (Competitive Renewal)	2004
4.	**J. Selsby**	Does catalase expression improve the function of muscles from mdx and LGMD mice?	Fellowship	NIH F32 5F32AR055005	5/2006-8/2008
5.	**J. Selsby**, S. Lonergan, E. Lonergan	What changes does PGC-1α treatment cause to dystrophic muscle	$25,000	CIAG	2008

6.	**J. Selsby**, S. Lonergan, E. Lonergan	How does PGC-1α attenuate dystrophic pathology	$8,000	CIAG	2008
7.	**J. Selsby**	Use of dystrophin deficient mice to develop novel therapies for Duchenne muscular dystrophy	$8,000	CIAG	2009
8.	**J. Selsby**	Effect of PGC-1α on miR expression in dystrophin deficient muscle	$2,500	Exiqon	2009
9.	**J. Selsby**	Use of dystrophin deficient mice to develop novel therapies for Duchenne muscular dystrophy	$8,000	CIAG	6/2010-6/2011
10.	**J. Selsby**	The effect of quercetin on the progression of Duchenne muscular dystrophy	$8,300	Martin Fund	6/2010-6/2011
11.	N. Gabler**,** S. Lonergan, **J. Selsby,** J. Dekkers	Evaluating the contribution of ion pumps and protein turnover towards feed efficiency in finisher pigs selected for low and high residual feed intake	$49,866	Iowa Pork Board 10-009	11/2010-11/2011
12.	**J. Selsby**, J. Reecy	mRNA expression in early dystrophin-deficiency	$9,500	CIAG	5/2011-6/2012
13.	**J. Selsby**	Using mdx mice to improve our understanding of Duchenne muscular dystrophy	$6,000	CIAG	5/2011-6/2012
14.	**J. Selsby**	Investigations into heat stress-mediated free radical injury and inflammation in porcine skeletal muscle	$36,566	Wise Burroughs Memorial Endowment	7/2011-7/2012
15.	**J. Selsby**, J. Reecy	Toward determining a quercetin-stimulated pathway in muscle cells.	$8,300	Martin Fund	6/2012-6/2013
16.	**J. Ross,** J. Selsby	Development of a novel porcine model of Duchenne muscular dystrophy	$407,000	NIH R21 RR030232	2/2010-2/2014
17.	**J. Selsby**, J. Ross, D. Nonneman (USDA)	Characterization of a novel translational model for Becker muscular dystrophy	$397,840	NIH R21 NS079603	8/2013-8/2016
18.	**J. Selsby**, J. Quindry (Auburn)	Measurement of in vivo respiratory and cardiac	$206,459	Duchenne Alliance	1/2013-12/2016

		function during dietary quercetin enrichment in animal models of DMD		100065	
19.	**J. Selsby**, J. Sterle, A. Vander Zanden, L. Bestler	Linking student classroom performance to student behaviors and performance predictors	$5,000	Harman Teaching Endowment	11/2012-8/2016
20.	**J. Selsby**	Mechanisms and persistence of heat-stress-mediated factors that contribute to growth attenuation in swine: Graduate student support	$38,235	Wise Burroughs Fund	6/2015-12/2016
21	L. Baumgard, **J. Selsby**, N. Gabler, J. Ross, J. Patience, S. Lonergan, R. Rhoads (University of Arizona), J. Escobar (Virginia Tech), T. Sufranski (Missouri), Matt Lucy (Missouri)	The physiological impact of heat stress on pig metabolism and performance	$2,496,687	USDA 2011-6700330007	2/2011-2/2017
22	**J. Selsby**, J. Quindry (Auburn)	Determining the mechanisms whereby a quercetin enriched diet interrupts disease processes in DMD	$163,598	Duchenne Alliance 100071	10/2014-6/2017
23.	**J. Selsby**, L. Baumgard, S. Lonergan, J. Ross, R. Rhoads (Virginia Tech)	The effect of heat stresses on porcine skeletal muscle	$499,881	USDA 2014-67015-21627	1/2014-12/2017
24.	**J. Selsby,** J. Quindry (Montana)	Quercetin-based therapies with immediate application for dystrophic muscle	$200,000	Parent Project Muscular Dystrophy - 01297	6/2016-6/2019
25.	**J. Selsby,** J. Quindry (Montana)	Quercetin-based cocktails for the treatment of dystrophic muscle	$152,582	Ryan's Quest and Michael's Cause	9/2016-10/2019
26.	**J. Selsby**	Competitive scholarship to attend translational medicine training, Eureka Institute, Siracusa, Italy	Room, Board, Tuition	Parent Project Muscular Dystrophy	11/2019
27.	**J. Selsby**, J. Ross, J. Ward	Internal and external validation of a porcine dystrophinopathy model	$765,000	1R21NS106112-01	5/2018-8/2021
28.	**J. Selsby,** L. Baumgard, R. Rhoads (Virginia Tech)	Therapeutic approaches to heat stress: targeting mitochondria	$534,241* *Includes independent administrative supplement	USDA 2017-05931	1/2018-12/2021

29.	**J. Selsby**, J. Ross	Internal and external validation of a porcine dystrophinopathy model	$382,500	NIH R33 4R33NS106112	9/2021-9/2023

Contracts

	Investigators	*Title*	*Amount*	*Source*	*Year*
1.	**J. Selsby**	Evaluation of chromium supplementation	$19,593	Kemin Industries	3/2016-7/2016
2.	**J. Selsby,** J. Ross, J. Ward	A preliminary study of cardiac function in BMD pigs	$20,000	University of Washington	11/2017-5/2019

PUBLICATIONS

Summary *(Source: Google Scholar 3/19/2023)*
Total Peer-Reviewed Papers – 73 I-10 Index – 61
H Index – 36 Total Citations – 3,386

1. Krishna S, Spaulding HR, Koltes JE, Quindry JC, Valentine R, and **Selsby JT**. Indicators of increased ER stress and UPR in aged D2-mdx and human dystrophic skeletal muscles. Frontiers in Physiology. *In Press,* 2023.

2. Roths M, Abeyta MA, Wilson B, Rudolph TE, Hudson MB, Rhoads RP, Baumgard LH, and **Selsby JT**. Effects of heat stress on markers of skeletal muscle proteolysis in dairy cattle. Journal of Dairy Science. In press, 2023.
*Included in Editor's Choice Collection.

3. Roths M, Freestone AD, Rudolph TE, Michael A, Baumgard LH, and **Selsby JT**. Environment-induced heat stress causes structural and biochemical changes in the heart. Journal of Thermal Biology. https://doi.org/10.1016/j.jtherbio.2023.103492, 2023.

4. Bundy J, Bowser A, Smalley S, and **Selsby JT**. The impact of the COVID-19 pandemic on undergraduate student performance. NACTA Journal. 2022. 66:265-277, 2022.

5. Rudolph TE, Roach CM, Baumgard LH, Ross JW, Keating AF, and **Selsby JT**. The impact of Zearalenone on heat-stressed skeletal muscle in pigs. Journal of Animal Science. I1;100(8):skac215, 2022.

6. Krishna S, Spaulding HR, Hudson MB, Quindry JC, Quindry TS, and **Selsby JT.** Indices of defective autophagy in whole muscle and lysosome enriched fractions from aged D2-mdx mice. Frontiers in Physiology. 12:691245, doi: 10.3389/fphys.2021.691245, 2021.

7. Moyorga EJ, Horst EA, Goetz B, Abeyta M, Al-Qaisi MA, Lei S, Rhoads R, **Selsby JT**, and Baumgard LH. Rapamycin administration during an acute heat stress challenge in growing pigs. Journal of Animal Science. 99(5):skab145, doi: 10.1093/jas/skab145, 2021.

8. Rudolph TE, Mayorga EJ, Rhoads RP, Baumgard L, and **Selsby JT**. The effect of MitoQ on heat stressed skeletal muscle, and the potential confounding effect of biological sex. Journal of Thermal Biology. 97:102900, doi: 10.1016/j.jtherbio.2021.102900, 2021.

9. Fausnacht DW, Kroscher KA, McMillan R, Davy DP, Baumgard LH, **Selsby JT**, Hulver MW, and Rhoads RP. Heat Stress Reduces Metabolic Rate While Increasing Respiratory Exchange Ratio in Swine. Animals. 11:215. doi: 10.3390/ani11010215, 2021.

10. Klionsky DJ, et al. Guidelines for the use and interpretation of assays for monitoring autophagy (4th edition). Autophagy. 1:1-382. doi: 10.1080/15548627.2020.1797280, 2020.

11. Shuler KT, Wilson BE, Munoz E, Mitchell A, **Selsby JT**, and Hudson MB. Satellite cell-derived extracellular vesicles reverse peroxide-induced mitochondrial dysfunction in myotubes. Cells. 12:2544, doi: 10.3390/cells9122544, 2020

12. Ballmann C, Quindry JC, Spaulding HR, and **Selsby JT**. Therapeutic Potential of Quercetin in Cardiovascular and Neuromuscular Disorders. Conditioning Medicine. 3:117-134, 2020.

13. 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. 105:989-999, 2020

14. 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.

15. 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.

16. 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.

17. 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.

18. 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.

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

20. 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.

21. 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.

22. 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.

23. 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.

24. 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.

25. 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.

26. 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.

27. 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.

28. 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.

29. 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.

30. 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.

31. 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.

32. 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.

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

34. **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.

35. 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.

36. 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.

37. 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.

38. 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.

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

40. 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

41. 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.

42. 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.

43. 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.

44. 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.

45. 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.

46. 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.

47. **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.

48. 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.

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

50. 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.

51. 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.

52. **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

53. **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.

54. 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.

55. 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.

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

57. **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.

58. 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.

59. 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.

60. 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.

61. 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.

62. 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]

63. 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.

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POSTER PRESENTATIONS (122)

1. Yap S, Krishna S, Rudolph T, Roths M, Baumgard LH, and **Selsby JT.** Heat stress increases autophagic flux in mouse skeletal muscle. Advances in Skeletal Muscle Biology in Health and Disease. Gainesville, FL, March 14-17th, 2023.

2. Roths M, Rudolph TE, Krishna S, Adur MK, Kiefer ZE, Nonneman D, Ross JW, and **Selsby JT.** Locomotor dysfunction due to dystrophin deficiency in a Becker muscular dystrophy model. Advances in Skeletal Muscle Biology in Health and Disease. Gainesville, FL, March 14-17th, 2023.

3. Rudolph TE, Roths M, Freestone AD, Rhoads RP, Baumgard LH. and **Selsby JT**. Sex-specific alterations in mitochondrial dynamics following environment-induced heat stress. Advances in Skeletal Muscle Biology in Health and Disease. Gainesville, FL, March 14-17th, 2023.

4. Krishna S, Spaulding HR, Koltes JE, Quindry JC, Valentine RJ, **Selsby JT**. Evidence of increased ER stress and UPR in dystrophic skeletal muscles from aged D2-mdx mice and humans. Advances in Skeletal Muscle Biology in Health and Disease. Gainesville, FL, March 14-17th, 2023.

5. Roths M, Rudolph TE, Freestone AD, Baumgard LH, **Selsby JT**. Heat stress alters cardiac architecture and causes cellular dysfunction. IPIC/Iowa Pork Congress, Des Moines, IA, January 25-26, 2023.

6. Rudolph TE, Roths M, Freestone AD, Rhoads RP, Baumgard LH. and **Selsby JT**. The contribution of biological sex to heat stress-mediated production outcomes in growing pigs. IPIC/Iowa Pork Congress, Des Moines, IA, January 25-26, 2023.

7. Freestone AD, Rudolph TE, Roths M, Mayorga EJ, Abeyta MA, Goetz BM, Rodriguez-Jimenez S, Opgenorth J, **Selsby JT**, and Baumgard LH. Effects of mitoquinol during an acute heat stress in growing gilts. MWASAS, Madison, WI, March, 2023.

8. Roths M, Rudolph TE, Krishna S, Adur MK, Kiefer ZE, Nonneman D, Ross JW, and **Selsby JT**. Locomotor dysfunction due to dystrophin insufficiency in a Becker muscular dystrophy model. Iowa Physiological Society, Iowa City, November, 2022.

9. Krishna S, Spaulding HR, Koltes JE, Quindry JC, Valentine RJ and **Selsby JT**. Indicators of increased ER stress and UPR in aged D2-mdx and human dystrophic skeletal muscles. Iowa Physiological Society, Iowa City, November, 2022.

10. Rudolph TE, Roths M, Freestone AD, Rhoads RP, Baumgard LH, and **Selsby JT**. The impact of biological sex on skeletal muscle metabolism following heat stress. Iowa Physiological Society, Iowa City, November, 2022.

11. Krishna S, Montes C, Walley JW, Eo H, Valentine RJ, **Selsby JT**. Phosphoproteomics and reconstructed kinase signaling networks reveal unique consequences of diet-induced insulin resistance in dystrophic muscles. New Directions in Biology and Disease of Skeletal Muscle Conference, Ft. Lauderdale, Florida, June 2022.

12. Krishna S, Echevaria KG, Reed CH, Eo Hyeyoon, Valentine RJ, and **Selsby JT**. Altered activation of inflammatory signaling with diet-induced insulin resistance in the dystrophic diaphragm. Experimental Biology, Philadelphia, April, 2022.

13. Rudolph TE, Harold K, Opgenorth J, Baumgard LH, and **Selsby JT**. Defining the role of endotoxemia during heat stress in oxidative skeletal muscle. Experimental Biology, Philadelphia, April, 2022.

14. Roths M, Rudolph TE, Freestone A, Baumgard LH, and **Selsby JT**. Heat stress-induced changes in the myocardium. Experimental Biology, Philadelphia, April, 2022.

15. Wesolowski LT, Semanchik PL, Simons JL, Rudolph ET, Roths M, **Selsby JT**, and Spring-White SH. Heat stress increases mitochondrial complex I capacity in female pigs but favors reliance on complex II in males. Experimental Biology, Philadelphia, April, 2022.

16. Semanchik P, Wesolowski LT, Simons SJ, Freestone A, Rudolph TE, Roths M, Rhoads RP, Baumgard LH, **Selsby JT**, and White-Springer SH. Heat stress more negatively impacts cardiac muscle mitochondria in female versus male pigs. Experimental Biology, Philadelphia, April, 2022.

17. Roths M, Rudolph T, Freestone A, Baumgard LH, and **Selsby JT**. Heat stress causes persistent multisystem dysfunction. MWASAS. Omaha, NE, March, 2022.

18. Rudolph TE, Roach CM, Baumgard LH, Keating AF, and **Selsby JT**. The interaction between heat stress and zearalenone toxicity in porcine skeletal muscle. MWASAS. Omaha, NE, March 2022.

19. Guy CP, Mayorga EJ, Rudolph TE, Freestone AD, Rhoads RP, Baumgard LH, **Selsby JT**, and White-Springer SH. Heat stress and MitoQ supplementation impact skeletal muscle mitochondrial capacities in pigs. ASAS. Louisville, KY, July, 2021.

20. Krishna S, Echevarria KG, Reed CH, Eo H, Valentine RJ, and **Selsby JT**. Diet-induced insulin resistance in mdx mice. New Directions in Skeletal Muscle Biology and Disease. Charleston, SC, June, 2021.

21. Bundy J and **Selsby JT.** Collective stresses of the COVID-19 pandemic impair the academic performance of freshmen and first-generation students from a College of Agriculture. NACTA, Virtual Meeting, June, 2021.

22. Bundy J and **Selsby JT.** COVID-19 pandemic-related stresses impair academic performance of students in a College of Agriculture. NACTA, Virtual Meeting, June, 2021.

23. **Selsby JT** and Bundy J. COVID-19 disproportionately impacts students in high-risk populations. Experimental Biology, Virtual Meeting, April, 2021.

24. **Selsby JT** and Bundy J. COVID-19-related changes impair student performance in a subset of students. Experimental Biology, Virtual Meeting, April, 2021.

25. 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.

26. 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.

27. 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.

28. 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.

29. 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.

30. 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.

31. **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.

32. 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.

33. 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.

34. 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.

35. 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.

36. 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

37. 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

38. **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.

39. 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.

40. 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.

41. 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.

42. 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

43. 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.

44. 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.

45. 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.

46. 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.

47. 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.

48. 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.

49. 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.

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

51. 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

52. **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.

53. 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.

54. 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.

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

56. **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.

57. 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.

58. 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.

59. 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.

60. 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.

61. 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.

62. 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.

63. 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.

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

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

66. 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.

67. 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.

68. 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.

69. 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.

70. 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.

71. 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.

72. **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.

73. 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.

74. 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.

75. 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.

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

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

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

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

80. 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.

81. 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.

82. **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.

83. 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.

84. 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.

85. 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.

86. 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.

87. 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.

88. 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.

89. **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.

90. 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.

91. 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

92. 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.

93. 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.

94. 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.*

95. **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.

96. 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

97. 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

98. 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.

99. **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.

100. 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

101. 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.

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

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

104. **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.

105. **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.

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

107. **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.

108. 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.

109. **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.

110. **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.

111. **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.

112. **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.

113. **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.

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

115. **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.

116. 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.

117. 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.

118. **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.

119. **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.

120. 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.

121. 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.

122. **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. Some like it hot!!! The impact of biological sex on heat stress-mediated outcomes. Iowa Swine Day. Ames, IA, June, 2023.

2. Achy Breaky Heart: The impact of environment-induced heat stress on the myocardium. PIC Veterinary Health Assurance Rounds. Virtual. 3/1/23.

3. Some like it hot!!! The impact of biological sex on heat stress-mediated outcomes. PIC Veterinary Heath Assurance Rounds. Virtual. 1/4/23.

4. Roths M, Rudolph TE, Krishna S, Adur MK, Kiefer ZE, Nonneman D, Ross JW, and **Selsby JT**. Locomotor dysfunction due to dystrophin insufficiency in a Becker muscular dystrophy model. Iowa Physiological Society, Iowa City, November, 2022.

5. Rudolph TE, Roths M, Freestone AD, Rhoads RP, Baumgard LH, and **Selsby JT**. The impact of biological sex on skeletal muscle metabolism following heat stress. Iowa Physiological Society, Iowa City, November, 2022.

6. **Selsby, JT**. NC1184 Iowa Station Report. University of Wisconsin. 9/29/22.

7. Krishna S, Montes C, Walley JW, Eo H, Valentine RJ, **Selsby JT**. Phosphoproteomics and reconstructed kinase signaling networks reveal unique consequences of diet-induced insulin resistance in dystrophic muscles. New Directions in Biology and Disease of Skeletal Muscle Conference, Ft. Lauderdale, Florida, June 2022.

8. **Selsby, JT**. NC1184 Iowa Station Report. University of Georgia. 10/30/2021.

9. Guy CP, Mayorga EJ, Rudolph TE, Freestone AD, Rhoads RP, Baumgard LH, **Selsby JT**, and White-Springer SH. Heat stress and MitoQ supplementation impact skeletal muscle mitochondrial capacities in pigs. ASAS. Louisville, KY, July, 2021.

10. Krishna S, Echevarria KG, Reed CH, Eo H, Valentine RJ, and **Selsby JT**. Diet-induced insulin resistance in mdx mice. New Directions in Skeletal Muscle Biology and Disease. Charleston, SC, June, 2021. Selected for Data Blitz.

11. **Selsby JT** and Bundy J. COVID-19 disproportionately impacts students in high-risk populations. Experimental Biology, Virtual Meeting, April, 2021.

12. Feelin' hot hot hot: Heat stress-mediated changes in skeletal muscle. University of Florida, Animal Science Department, Gainesville, Florida 2/19/2021.

13. ASAS Webinar: Helping New Investigators Navigate the USDA NIFA grant process: a panel discussion. 12/16/2020.

14. **Selsby, JT**. NC1184 Iowa Station Report. University of Connecticut. Virtual. 10/22/2020.

15. **Selsby JT** and Hudson MB. Extrave: Our Start Up Experience. University of Vermont: iTREP program, 8/18/20.

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

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

18. **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.

19. 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

20. **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.

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

22. 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

23. 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.

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

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

26. 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)

27. 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.

28. 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.

29. 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.

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

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

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

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

34. 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.

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

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

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

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

39. 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.

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

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

43. 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.

44. 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.

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

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

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

48. 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.

49. 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

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

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

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

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

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

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

56. 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.

57. 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.

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

59. 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.

60. 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.

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

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

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

64. 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.

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

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

67. 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.

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

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

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

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

72. 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.

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

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

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

76. **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. A sex effect of heat stress. Lab Animal Resources seminar 11/10/22.

2. A sex effect of heat stress. Interdepartmental Genetics and Genomics Seminar. 11/7/22.

3. Feelin' Hot Hot Hot: Heat stress-mediated changes in skeletal muscle. Meat Science Seminar, Iowa State; 2/8/2022.

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

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

6. 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

30. 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.

31. 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.

32. 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 and OTHER MEDIA

1. Swine X podcast, Season 3, Episode 10, March, 2023.

2. **Selsby JT** and Baumgard LH. An aha moment in heat stress research. Iowa Pork Producers Association Magazine. February, 2023.

3. Romoser M., **Selsby J**, and Ramirez B. Heat stress and minimizing the impact. National Hog Farmer. June, 2022.

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

5. **Selsby JT.** Light versus dark – the color of the meat is due to the job of the muscle. The Conversations. 11/21/19.
   70,252 reads (11/13//2022)

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

7. 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

8. 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.

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

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

15. 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.

16. 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.

17. 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).

4. Extracellular vesicles as biomarkers and therapeutics for neuromuscular disorders. U.S. Patent Application number 17/270,674 filed Feb 23, 2021. Filed by MB Hudson (University of Delaware) and **JT Selsby** (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, Au'20, Sp '21, Su '21, Au '21, Sp '22, Au '22
    a. Melampy Award for Undergraduate Research
30. Kylene Harold – Sp'21, Au'21, Sp '22, Su '22
31. Emma Kelley – Au '21, Sr. Honors project Sp'22, Au '22, Sp '23
32. Morgan Vorwald – Sp '23, Su '23
33. Nashaun Bryant – Sp '23

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
18. Allison Trimble – Rotation Student IGG Au'21
19. Sau Qwan Yap – Rotation Student IGG Au'21
20. Sourav Roy – Rotation Student IGG Au'23

Current Graduate Students

1. Tori Rudolf – PhD student Sp'19-present IGG

American Physiological Society Caroline tum Suden/Frances Hellebrandt Professional Opportunity Award 2019
USDA Predoctoral Fellowship ($180,000) 2021

2. Missey Roths – MS student Sp'20-present IGG

3. Morgan Vorhold – PhD student Au'23 – present

4. Ji Heun Lee – PhD student Au'23 – present Kinesiology
His PI left ISU and I now his major professor

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 – Sp '19
   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

7. Swathy Krishna – PhD student IGG Sp'19 – Sp'23
   Finalist, 3-Min Thesis Competition (ISU) 2021
   APS Cell and Molecular Physiology Section Research Recognition Award 2022

8. Sau Qwan "Cavannah" Yap – MS student IGG Sp'22 – Sp'23

Program of Study Committees

Leah Guessing	Animal Science	Au' 11 – Sp'11
Paul Khoo	Kinesiology	Au' 11 –
Muhammet Ay	Biomedical Science	Sp' 12 – Sp' 16
Davis Englund	Kinesiology	Au' 13 – Sp' 15
Vivek Lawana	Biomedical Science	Au'14 – Au'18
Administratively appointed head of POSC		
Corey Summers	Kinesiology	Sp'15 – Sp'18
Jahyun Kim	Kinesiology	Au'16 – Sp'20
Stephanie Lindbolm	Animal Science	Su'16 – Sp'17
Allison Birnbaum	Genetics and Genomics	Au'16 – Sp'20
Max Schmarzo	Kinesiology	Au'16 – Su'17
Katherine Van Valin	Animal Science	Sp '17 – Sp'19
Katherine Oliver	Animal Science	Sp '17 - present
Jessica Alley	Kinesiology	Au'17 – Sp'21
Hyeyoon Eo	Kinesiology	Sp'18 – Sp'21
Carl Frame	Animal Science	Au'17 – Su'20
Katherine Hochmuth	Animal Science	Su'19 – Su'20
Tamara Moretti	Mol. Cell. Devel. Boi.	Su'19 – Au'22
Alyssa Hohman	Genetics and Genomics	Au'19 – present
Vasuki Silva	Animal Science	Au'19 – Sp'21
Victoria Wilson	Animal Science	Sp' 20 – Sp'21
Carter Reed	Kinesiology	Sp' 20 – Sp'23

Kenneth Echevarria	Kinesiology	Sp ’20 – Su ‘22
Andrew Mitchell	Kinesiology (UDel)	Sp ’21-Su ‘21
Alyssa Freeman	Animal Science	Sp ’22 – Au’23
Kayla Elmore	Animal Science	Sp ’21 – Sp‘23
Alexandra Keller	Genetics and Genomics	Sp ’23 – present

Postdocs

1. Delphine Gardan – post doc 2/2009-10/210
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

2. Karl Kerns, Iowa State University, Department of Animal Science

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

Comparative Biochemistry and Physiology-part A Life Sciences	Journal of Therma Biology Journal of Neuromuscular Disease

Service and Committee Membership

<u>International</u>	
Ad hoc reviewer – Netherlands Organization for Scientific	8//2018
External reviewer for dissertation, Victoria University	12/2016
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, 4/2021
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>	
External Reviewer, P&T, Virginia Tech, Human Nutrition, Foods, and Exercise	8/2021
Panel manager, USDA/NIFA IDEA grants	4/2021-12/2021
Ad hoc reviewer, Virginia Tech Pratt Animal Nutrition Grants	8/2020
Panel manager, USDA/NIFA IDEA grants	2/2020-1/2021
Ad hoc reviewer, USDA/NIFA Conference grants, Animal Health and Production and Animal Products: Improved Nutritional Performance, Growth, and Lactation of Animals	12/2019
Panel member, USDA/AFRI Foundation Awards, Animal Nutrition, Growth, and Lactation Program	12/2018
Jett Foundation Scientific Advisory Board	5/2018-present
The Hot Zone: Skeletal 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

Abstract judge Iowa Physiological Society	10/2022
Reviewer for Iowa Space Consortium undergraduate grants	7/2020
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

Judge, ISU Outstanding Post Doc Award	Su ‘22
User group, Metabolomics Core	9/2021-present
Identification of courses for online graduate instruction	Sp ‘20
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	6/2015-6/2018
Student Conduct 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 and Genomics	
DOGE	7/2023-present
Past DOGE	7/2020-7/2023
Associate DOGE	7/2020-7/2023
DOGE	7/2018-7/2020
Associate DOGE	7/2016-7/2018
Executive committee	8/2015-present
Admissions committee	8/2012-2015

<u>College</u>

CALS search committee for Dean of Research support person (Au '21)
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 '22
Modern Views of Nutrition seminar planning committee	Summer '21
Modern Views of Nutrition seminar planning committee	Summer '20
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>

Animal Science Facilities and Safety Committee	8/2023 – present
Promotion and Tenure Committee (elected)	6/2023 – present
Associate chair: 6/2023 - present	
Library Liaison	8/2021 – present
Faculty Governance Committee	8/2020 – 8/2021
Awards Committee	8/2020 – 8/2023
Graduate Affairs Committee	8/2021 – 8/2022
	8/2016-8/2018
Seminar Committee	8/2016 – present
Chair 8/2017-8/2023	
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	8/2022-present
Chair: 8/2022-present	

Chuck Wagon Committee Chair: 8/2015-8/2016	8/2008-8/2016

Departmental Ad Hoc Committees

Post Tenure Review Committee (Joan Cunnick)	Sp ‘23
Post-tenure review committee (Elisabeth Lonergan)	Sp ‘22
Promotion Evaluation Committee (Mariana Rossoni-Serao, 3 yr review)	Sp ‘21
Search committee, Physiology and Entrepreneurship	Sp ‘21
Promotion Evaluation Committee (Aileen Keating, full)	Au ‘20
Promotion Evaluation Committee (Nick Serao, 3 yr review)	Sp ‘20
Search committee chair, physiology teaching/research	Sp ‘20-Su ‘20
Search committee, Physiology teaching/research	Au’19 – Su ‘20
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	Sp ‘17
Summative evaluation of Cheryl Morris	Sp ‘17
Search committee chair, Physiology faculty member	Sp ’16-Au ‘16
Search committee Physiology Technician	Su ‘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