## 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

2014 – Present 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 SweeneyMuscle 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

## **FUNDING: GRANTS IN AID**

## **Current Grants in Aid** (first author is PI)

	Investigators	Title	Amount	Source	Year
1.	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	1/15-1/16
2.	J. Selsby, J. Quindry (Auburn)	Determining the mechanisms whereby a quercetin enriched diet	\$163,598	Duchenne Alliance	10/2014- 12/2015

		interrupts disease processes in DMD			
3.	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
4.	J. Selsby, J. Ross, D. Nonneman (USDA)	Characterization of a novel translational model for Becker muscular dystrophy	\$397,840	NIH R21 NS079603	8/2013- 8/2015
5.	J. Selsby, J. Quindry (Auburn)	Measurement of in vivo respiratory and cardiac function during dietary quercetin enrichment in animal models of DMD	\$206,459	Duchenne Alliance 100065	1/2013- 12/2015
6.	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- 8/2014
7.	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	2011-2016

# 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	5/2006- 8/2008
5.	J. Selsby, S. Lonergan, E. Lonergan	What changes does PGC-1 $\alpha$ treatment cause to	\$25,000	CIAG	2008

		dystrophic muscle			
6.	<b>J. Selsby</b> , 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

## **PUBLICATIONS**

Summary (Source: Google Scholar 2/4/2015) Total Papers – 34 I-10 Index - 20H Index – 17 Total Citations – 800

- 1. 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.
- 2. 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.
- 3. Hollinger K, Shanely RA, Quindry JC, and Selsby JT. Long-term quercetin dietary enrichment decreases muscle injury in mdx mice. Clinical Nutrition. In Press.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. 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.

- 10. Hollinger, K. and **Selsby, J.T.** The therapeutic potential of protease inhibition as a treatment for DMD. Acta Physiologica. 208(3):234-44, 2013.
- 11. 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.
- 12. 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.
- 13. 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
- 14. Selsby, JT. Morine, K. Pendrak, K. Barton, E. Sweeney HL. Rescue of dystrophic skeletal muscle by PGC- $1\alpha$  involves a fast to slow fiber type shift in the mdx mouse. PLoS One: 7(1):e30063, 2012.
- 15. 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.
- 16. 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.
- 17. **Selsby JT**. Increased catalase expression improves muscle function in mdx mice. Experimental Physiology (London), 96.2:194-202, 2011.
- 18. 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.
- 19. 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.

- 20. 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.
- 21. 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.
- 22. 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.
- 23. 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]
- 24. 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.
- 25. Judge, AR, **Selsby, JT**, and Dodd, SL. Antioxidants attenuate oxidative damage in skeletal muscle during mild ischemia. Experimental Physiology. 93:479-485, 2008.
- 26. 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.
- 27. **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.
- 28. 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.
- 29. 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.

- 30. 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.
- 31. **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.
- 32. 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.
- 33. 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.
- 34. Selsby, JT, Beckett, KD, Kern, M and Devor, ST. Swim performance following creating supplementation in Division III athletes. Journal of Strength and Conditioning Research 17:421-424, 2003.

## MANUSCRIPTS IN REVIEW

- 1. Hollinger K and Selsby JT. PGC-1α gene transfer improves muscle function in dystrophic muscle following prolonged disease progression. Acta Physiologica.
- 2. Quindry JC, Ballmann CG, Epstein EE, and Selsby JT. Plethysmography measurement of respiratory function in conscious unrestrained mice. Acta Physiologica.
- 3. Selsby JT, Ross JW, Nonneman D, and Hollinger K. Porcine models of muscular dystrophy. ILAR.

## **ORAL PRESENTATIONS**

- 1. Nonneman D, Rohrer GA, Ross JW, Hollinger K, and Selsby JT. Dystrophin deficiencyinduced changes in porcine skeletal muscle. Reciprocal Meat Conference, Madison WI, June 15-18, 2014.
- 2. 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.
- 3. 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.

- 4. 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.
- 5. **Selsby, J.T.** and Gardan-Salmon, D. Postnatal PGC-1α gene transfer attenuates acute injury in mdx mice. FASEB, Anaheim, April, 2010.
- 6. 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.
- 7. **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.

## **POSTER PRESENTATIONS** (52)

- 1. 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.
- 2. **Selsby JT**, Ballmann CG, and Quindry JQ. Long-term dietary quercetin enrichment improves muscle function in dystrophic skeletal muscle. FASEB, Boston, MA March, 2015.
- 3. **Selsby JT** and Sterle JA. Student perception of achievement influences student evaluation of teaching. FASEB, Boston, MA, March 2015.
- 4. 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.
- 5. Ballmann CB, Beyer R, Denney T, **Selsby JT** and Quindry JC. Effect of long term quercetin supplementation on dystrophic cardiac pathology in mdx/utrn<sup>+/-</sup>mice. FASEB, Boston, MA, March 2015.
- 6. 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.
- 7. 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 14<sup>th</sup>, 2015.

- 8. **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.
- 9. 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.
- 10. 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.
- 11. **Selsby JT**, Sterle JA, Zywicki CM. Participation in Supplemental Instruction improves students' academic performance in a physiology course. FASEB, San Diego, CA April, 2014.
- 12. Hollinger K, Barton ER, **Selsby JT**. PGC-1α gene transfer rescues dystrophic muscle from advanced disease progression. FASEB, San Diego, CA April, 2014.
- 13. **Selsby JT**, Ballman C, Quindry JC. Dietary quercetin enrichment improves respiratory function in mdx mice. FASEB, San Diego, CA April, 2014.
- 14. Quindry JC, Ballman C, and **Selsby JT**. Whole body plethysmography measurement of respiratory function of mice in vivo. FASEB, San Diego, April, 2014.
- 15. 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.
- 16. 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.
- 17. **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.
- 18. 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.
- 19. 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.

- 20. 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.
- 21. 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.
- 22. 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.
- 23. 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.
- 24. 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.
- 25. 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.
- 26. 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
- 27. **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.
- 28. 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
- 29. 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

- 30. **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.
- 31. 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
- 32. 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.
- 33. **Selsby, J.T.** and Gardan-Salmon, D. Postnatal PGC-1alpha gene transfer attenuates acute injury in mdx mice. FASEB, Anaheim, April, 2010.
- 34. **Selsby, J.T.** Release of short answer questions prior to an exam has a minimal impact on student performance. FASEB, Anaheim, April, 2010.
- 35. **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.
- 36. **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.
- 37. **Selsby, JT,** Tian, Z., Barton, E., and Sweeney, H.L. Catalase over-expression protects dystrophic skeletal muscle. FASEB, San Diego, April 5-9, 2008.
- 38. **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.
- 39. 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.
- 40. **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.
- 41. **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.

- 42. **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.
- 43. **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.
- 44. **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.
- 45. **Selsby, JT** and Dodd, SL. Oxidative damage induced by immobilization is attenuated with heat treatment. FASEB, Washington, D.C. April 17-21, 2004.
- 46. **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.
- 47. 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.
- 48. 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.
- 49. **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.
- 50. 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.
- 51. 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.
- 52. **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**, Ballmann CG, and Quindry JQ. Long-term dietary quercetin enrichment improves muscle function in dystrophic skeletal muscle. FASEB, Boston, MA March, 2015.
- 2. Quercetin as a novel therapeutic approach for Duchenne muscular dystrophy. Drake University Science Collaborative Institute, Drake University, September 12, 2014.
- 3. 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.
- 4. PEDaling to victory. First Year Seminar 29, Drake University, October 28, 2013
- 5. PEDaling to victory: Advanced concepts. Biology 143 "Exercise Physiology", Drake University, October 28, 2013
- 6. PGC-1α pathway activation as a treatment for DMD. Auburn University, School of Kinesiology, Auburn, AL, May 9<sup>th</sup>, 2013.
- 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 11<sup>th</sup>, 2013.
- 8. Heat stress leads to free radical injury in porcine skeletal muscle. Effects of Heat Stress on Post-absorptive metabolism symposium. Ames, IA. April 4<sup>th</sup>, 2013
- 9. PGC- $1\alpha$  pathway activation as a treatment for DMD. College of Wooster, Wooster, OH. March 28, 2013.
- 10. Quercetin-mediated protection of dystrophic skeletal muscle: Next steps and future directions. Duchenne Alliance International Meeting. Boston, MA. March, 9<sup>th</sup>, 2013.
- 11. Early characterization of a novel porcine model of Becker muscular dystrophy. Pioneer Lunch and Learn. Johnston, IA, January 8, 2013
- 12. PGC- $1\alpha$  pathway activation as a treatment for DMD. RaceMD Forum. Portland, OR, December  $10^{th}$ , 2012.
- 13. Early characterization of a novel porcine model of Becker muscular dystrophy. NC 1184 Station report. Blacksburg, VA, October 26, 2012.

- 14. Early characterization of a novel porcine model of Becker muscular dystrophy. Muscular Dystrophy Association Fall Education Seminar. Des Moines, IA, October 13, 2012.
- 15. MDA Educational Seminar. Duchenne muscular dystrophy: What is it and what do we do about it? Muscular Dystrophy Association. Ankeny, IA, November 5<sup>th</sup>, 2011.
- 16. 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 16<sup>th</sup>, 2011.
- 17. 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 18<sup>th</sup>, 2011.
- 18. PGC-1α protects dystrophin-deficient muscle from acute eccentric injury. NC 1131/1184 Station report, College Station, TX, November 12<sup>th</sup>, 2010.
- 19. The role of microRNAs in early Duchenne muscular dystrophy. Iowa Physiological Society. Des Moines, IA, October 9<sup>th</sup>, 2010.
- 20. PGC-1α gene transfer is beneficial for Duchenne muscular dystrophy. TriBeta Honors Society. Ames, IA. September 21, 2010.
- 21. An 'omics approach to DMD. CIAG annual meeting. April 8<sup>th</sup>, 2010.
- 22. 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 6<sup>th</sup>, 2009.
- 23. An 'omics approach to DMD. Second Potentially Semi-Regular Iowa Nebraska Muscle Biology Get-Together August 7, 2009.
- 24. Potential therapies for Duchenne muscular dystrophy. University of Nebraska Medical Center, Omaha, NE. June 2, 2009.
- 25. A calpain inhibitor fails to rescue dystrophic skeletal muscle. University of Pennsylvania, Chalk Talk Series. Philadelphia, Pennsylvania. November 8<sup>th</sup>, 2007.
- 26. Can heating augment hypertrophy? (Turning up the heat on hypertrophy) Superhuman Radio hosted by Carl Lanore. WKJK 1080 AM, Louisville, Kentucky. August 11<sup>th</sup>, 2007.
- 27. Our current understanding of exercise claudication in rat soleus. University of Nebraska Medical Center. Omaha, Nebraska. July 13<sup>th</sup>, 2005.

- 28. The effect of heating on skeletal muscle remodeling. University of Pennsylvania. Philadelphia, Pennsylvania. June, 3<sup>rd</sup>, 2005.
- 29. Heating of immobilized muscle reduces oxidative stress and damage. National Football League Physicians Society. Indianapolis, Indiana. February 20<sup>th</sup>, 2004.

#### **Seminars**

- 1. Translating PGC-1alpha pathway activation to clinical application. Interdepartmental Genetics Seminar (Gen 691), October 5<sup>th</sup>, 2014.
- 2. PGC-1α-mediated protection of dystrophic skeletal muscle. TriBeta Seminar Feb. 13<sup>th</sup>, 2014.
- 3. PGC-1α-mediated protection of dystrophic skeletal muscle. Biological Science Club March 26<sup>th</sup>, 2014.
- 4. PGC-1α-mediated protection of dystrophic skeletal muscle: Update and future directions. IG Seminar November 11<sup>th</sup>, 2013.
- 5. Professional Speaking and Listening. George Washington Carver Internship Program, July 1, 2013.
- 6. Advances in the treatment of Duchenne muscular dystrophy. Animal Science Departmental Seminar April 27, 2013.
- 7. Harnessing the PGC-1α pathway to slow disease in dystrophin deficient skeletal muscle. Kinesiology Seminar, April 6<sup>th</sup>, 2012.
- 8. Harnessing the PGC-1α pathway to slow disease in dystrophin deficient skeletal muscle. Food Science and Human Nutrition Seminar, Feb 8<sup>th</sup>, 2012.
- 9. PGC-1α protects dystrophin deficient skeletal muscle. Interdepartmental Genetics Seminar (Gen 691), Dec 5<sup>th</sup>, 2011.
- 10. PGC- $1\alpha$  gene transfer protects dystrophic skeletal muscle. Biomedical Sciences Seminar. January  $27^{th}$ , 2011.
- 11. New approaches to DMD. Animal Science Departmental Seminar. April 16<sup>th</sup>, 2010.
- 12. Advances in DMD. Proceedings of the Neuroscience Faculty. September 25, 2009.
- 13. PGC-1α as a potential therapy for DMD. Veterinary Microbiology and Preventative Medicine and Veterinary Pathology seminar. February 16, 2009.

- 14. Using PGC-1α as a therapy for DMD. Muscle Biology and Meat Science Seminar Series. Iowa State University, Ames, IA. January 20<sup>th</sup>, 2009.
- 15. PGC-1α's therapeutic potential. Animal Nutrition Seminar. Iowa State University, Ames, IA. November 3<sup>rd</sup>, 2008.
- 16. Ergogenic Aids: Facts, Fiction, and Advertising. Presented to Personal and Family Health class: University of Florida. Gainesville, Florida. September 2002, January 2003, February 2003.
- 17. Dispelling Myths of the Gym. Presented to Personal and Family Health class: University of Florida. Gainesville, Florida. February 2003.
- 18. 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.
- 19. 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.
- 20. 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. 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.
- 2. **Selsby JT**. 17<sup>th</sup> annual meeting of the Iowa Physiological Society. The Physiologist, 57: 74-75, 2014.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 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.
- 8. Yang, C., Gardan-Salmon, D.<sup>2</sup>, **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.
- 9. 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.
- 10. 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.

# **MENTORSHIP**

#### **High School**

1. Andrea Moore – GWC Su'13

#### **Undergraduates**

- 1. Alyona Avdonina SWP Sp'09 1<sup>st</sup> 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 REU Su '09
- 6. Connie Santana REU Su '10
- 7. Drance Rice REU su '11
- 8. Maggie Robinson 490 Sp '12, summer '12, 490 Au '12
- 9. Hannah Opalko-REU Su'12
- 10. Cristina Mántaras-GWC Su'12
- 11. Robyn Montz URA Fall'12, Spring '13, Fall '13, Sp'14
- 12. Allison Richman REU Su'13
- 13. Katerina Herzberg 490 Sp '14, Au '14, Sp '15
- 14. Rose Robuccio 490 Sp'14, Au '14, Sp '15
- 15. Martin Curry REU Su'14

# 16. Sydney Hill – 490 Au '14, Sp '15

#### **Postdocs**

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

#### **Rotation Students**

- 1. Kirsten Johnson IG, Fall '10
- 2. Grace Huh IG, Sp '11
- 3. Sandra Rosado IG, Fall '11
- 4. Aditi Agrawal IG, Fall '11
- 5. Caitlyn Farris IG, Fall '12
- 6. Jessica Hendersen ImBio, Fall '13
- 7. Carmen Bustos IGPNS, Fall '13
- 8. Jermilia Charles MCDB, Spring '14
- 9. Hannah Spaulding MCDM, Spring '15

## **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"

Graduate and Professional Student Senate Peer Research Award	2014
IPS Outstanding Graduate Student 1 <sup>st</sup> 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 2 <sup>nd</sup> 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

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

#### PROFESSIONAL SOCIETIES

Member, 2011 – present: American Societies of Animal Science

Member, 2010 – present: Iowa Physiological Society 9/2011-9/2012 President Elect President

9/2013-9/2014 Past President

Member, 2002 – present: American Physiological Society
3/2013 – present MyoBio Planning Committee

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**

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
 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 Animal Genetics

Nutrition American Journal of Physiology – Reg

Physiological Genomics Journal of Protein Research

Muscle Nerve European Journal of Applied Physiology

Current Medicinal Chemistry Clinical Nutrition

Molecular and Cellular Biochemistry Free Radical Biology and Medicine

Human Molecular Genetics Journal of Applied Physiology

Proteomics American Journal of Physiology - Endocrine

American Journal of Physiology – Cell Journal of Animal Science

Journal of Physiology Toxicon

FASEB Journal Proteomics Clinical Applications

Acta Physiologica AGE
Medicine and Science in Sport and Exercise PLoS One

## **Service and Committee Membership**

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Intern	2110n	2
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Reviewer – AFM gra	ants (French Muscular	Dystrophy Association	) 8/2014
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Scientific Committee: Molecular & physiopathological basis of

muscular dystrophies

Reviewer – Duchenne Alliance grants	7/2013
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Reviewer – Bard Grants (USA – Israel grants) 12/2012-1/2013 Reviewer – Bard Grants (USA – Israel grants) 11/2011-1/2012

External reviewer for dissertation, Victoria University 8/2011

## **National**

Muscle diseases: Recent advances in disease mechanisms
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Session co-chair, FASEB '15, Boston	4/2015
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NC1184 project renewal committee 8/2014-present

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-present

Supported Kristin Robertson (Ferrum University, Ferrum, VA)

in establishing an AnS 214-like class at Ferrum College 8/2012-12/2012

#### Regional

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

F	Reviewer –S	ymposiur	n on l	Undergrad	luate R	lesearch	& (	Creative
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Expression.	3/2014
Reviewer Borlaug prize poster competition	10/2013
Judge GMAP Symposium	5/2013

Reviewer –Symposium on Undergraduate Research & Creative Expression. Reviewer Borlaug prize poster competition Reviewer –Symposium on Undergraduate Research & Creative Expression. Attendee – Pi Beta Phi academic awards presentation and dinner	2/2013 10/2012 2/2012 2/2009
College Modern Views of Nutrition planning committee IG Admissions committee Griffith Award Committee (Nutritional Sciences Council) Grant reviewer Martin Fund (Nutritional Sciences Council)	5/2014-present 8/2012-present 4/2012 6/2011
Departmental Standing Committees Curriculum Committee Curriculum and Assessment Committee Electronic Teaching Materials, Facilities and Equipment Committee Social Committee Chair: 2011-2012 academic year Chuck Wagon Committee	8/2014-present 8/2013-8/2014 8/2010-6/2013 8/2009-8/2014 8/2008-present
Departmental Ad Hoc Committees  Zumwalt Station Renovation committee  Committee to create lab animal option  Committee to find validated teaching evaluation tool  LN Hazel award selection  Collaborator Status Review Committee for Colin Guy Scanes  Physiology Group Preparation for External Review Committee  Reviewer – CIAG Personnel Support grants  Reviewer – Block and Bridle scholarship selection	2012-2014 2011-present 4/2011-8/2011 4/2011 2010 8/2010-8/2011 6/2009 4/2009