

CURRICULUM VITAE

Anette Simble Loughran-Fjeldstad

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EDUCATION and WORK

Assistant Professor, August 2016-present
Kinesiology and Health Sciences
Virginia Commonwealth University
Richmond, VA

Assistant Research Fellow, August 2013- October 2015
University of Utah, Salt Lake City, UT
Department of Neurology
Imaging & Neurosciences Center at Research Park

Post-Doctoral Fellow, August 2011- August 2013
University of Utah, Salt Lake City, UT
Department of Neurology
Imaging & Neurosciences Center at Research Park

Post-Doctoral Fellow, August 2007 – August 2011
University of Utah, Salt Lake City, UT
Department of Internal Medicine, Division of Geriatrics
VA Medical Center-GRECC, Salt Lake City, UT
Vascular Biology, Blood Vessel Function

Doctor of Philosophy, August 2003 - August 2007.
University of Oklahoma, Norman, OK
Department of Health and Exercise Science
Cardiovascular Physiology, Blood Vessel Function and Inflammatory Markers

PhD Course Work, December 2000 – December 2002.
Virginia Commonwealth University, Richmond, VA
Department of Biomedical Engineering

Master of Science, May 2001
Virginia Commonwealth University, Richmond, VA
Department of Health, Physical Education and Recreation
Physical Education, Exercise Physiology

Bachelor of Science, December 1998
Virginia Commonwealth University, Richmond, VA
Department of Health, Physical Education and Recreation
Health Education, Exercise Physiology

EXPERIENCE

Internship at the VA Hospital, Richmond VA, August 1998-December 1998

One semester working full time at the VA Hospital in Richmond, Va. Worked in various therapy clinics, such as geriatrics, spinal cord injury, brain trauma, cardiovascular, aquatics, and orthopedics, aiding patients in various exercise and rehabilitation programs.

Graduate Research Assistant

Cardiovascular Laboratory, Department of Health and Exercise Science,
University of Oklahoma, Norman, August 2003-present.
General Clinical Research Center, Health Sciences Center,
University of Oklahoma, Oklahoma City. August 2003-May 2005.

Specific tasks:

1. Subject recruitment
2. One on one interviews
3. Physical activity measures, skin fold measures, forced expiratory volume measures, muscular strength measures, balance measures, assessing reactive hyperemic blood flow using strain-gauge plethysmography, central and peripheral blood vessel function test, ankle-brachial-index measures using Doppler analysis, Optic nerve measures using Optical Coherence Tomography.
4. Data collection
5. Data entry using Excel and SPSS
6. Analyses and interpretation of data using SPSS and Sigmaplot
7. Manuscript preparation

Teaching

August 2003-June 2007: HES 3813 Principles of Health and Fitness (Undergraduate 3hr class with Laboratory).

One semester teaching Strength Training (1 hr), and Summer class teaching Tennis (1hr).
Department of Health and Exercise Science, University of Oklahoma

Specific Laboratory tasks:

1. Body Composition Assessment (e.g. Anthropometrics, Skinfolds)
2. Strength Assessment (1-RM)
3. Cardiorespiratory Assessment (Bruce Protocol, YMCA Bicycle Protocol)
4. Aiding students in writing Exercise Prescription Protocols in these areas

PUBLICATIONS

1. Acree LS, Longfors J, **Fjeldstad AS**, Fjeldstad C, Shank B, Nickel KJ et al. *Physical activity is related to quality of life in older adults.* **Health and Quality of Life Outcomes** 2006, 4:37.
2. **Fjeldstad, AS**, Fjeldstad C, Acree LS, Nickel KJ et al. *The Relationship between arterial elasticity and metabolic syndrome features.* **Angiology, The Journal of Vascular Diseases.** 2007, 58: 5-10.

3. Acree, L.S., P.C. Comp, T.L. Whitsett, P.S. Montgomery, K.J. Nickel, **A.S. Fjeldstad**, C. Fjeldstad, and A.W. Gardner. *The influence of obesity on calf blood flow and vascular reactivity in older adults.* **Dynamic Medicine** 2007, 6:4.
4. **Fjeldstad, AS**, and Bemben, D. *Large and Small Arterial Elasticity in Healthy Active and Sedentary Premenopausal Women.* **Journal of Sports Science & Medicine** 2007, 6: 250-253.
5. Fjeldstad C, **Fjeldstad AS**, Acree LS, Nickel KJ, Gardner AW. *The influence of obesity on fall and quality of life.* **Dynamic Medicine** 2008, 7:4.
6. **Fjeldstad, AS**, Montgomery, P, and Gardner, AW. *Arterial Elasticity is Independent of Body Mass Index.* **Angiology, The Journal of Vascular Diseases.** 2008, 59: 454-458.
7. **Fjeldstad, AS**, Bemben, MG, and Bemben, DA. *Resistance Training Effects On Arterial Compliance In Premenopausal Women.* **Angiology, The Journal of Vascular Diseases.** 2009, 60: 750-756.
8. Fjeldstad, C, Frederiksen, C, **Fjeldstad, AS**, Bemben, MG, Pardo, G. *Arterial Compliance in Multiple Sclerosis: A Pilot Study.* **Angiology, The Journal of Vascular Diseases.** 2010, 61: 31-36.
9. McDaniel, J, **Fjeldstad, AS**, Ives, S, Hayman, M, Kithas, P, and Richardson, RS. *Central and peripheral contributors to skeletal muscle hyperemia: The response to passive limb movement.* **Journal of Applied Physiology.** 2010, 108: 76-84.
10. Fjeldstad, C, Brittain, DR, **Fjeldstad, AS** and Pardo, G. *Fatigue and thermo sensitivity affect physical activity in Multiple Sclerosis.* **The Journal of Applied Research.** 2010, 10:108-115.
11. Trinity, JD, Amann, M, McDaniel, J, **Fjeldstad, AS**, Barret-O'Keefe, Z, Runnels, S, Morgan, DN, Wray, DW and Richardson, RS. *Limb movement-induced hyperemia has a central hemodynamic component; evidence from a neural blockade study.* **AJP: Heart and Circ. Physiol.** 2010, 299: H1693-1700.
12. Hayman, MA, Nativi, J, Stehlik, J, McDaniel, J, **Fjeldstad, AS**, Ives, SJ, Wray, DW, Bader, F, Gilbert, EM, and Richardson, RS. *Understanding Exercise-induced Hyperemia: Central and Peripheral Hemodynamic Responses to Passive Limb Movement in Heart Transplant Recipients.* **AJP: Heart and Circ. Physiol.** 2010, 299: H1653-9.
13. McDaniel, J, Hayman, MA, Ives, SJ, **Fjeldstad, AS**, Trinity, JD, Wray, DW, and Richardson, RS. *Attenuated exercise induced hyperemia with age: Mechanistic insight from passive limb movement.* **J Physiol.** 2010, 588: 4507-17.
14. **Fjeldstad, AS**, McDaniel, J, Hayman, MA, Ives, SJ, Zhao, J, Rose, JW, Hannon, J, Wray, DW, and Richardson, RS. *Vascular function and Multiple Sclerosis.* **Journal of Neurology.** 2011, 258: 2036-42.
15. Wray, DW, Hayman, MA, Ives, SJ, McDaniel, J, **Fjeldstad, AS**, Trinity, JD, Conklin, J, Supiano, MA, and Richardson RS. *Progressive Handgrip Exercise: Evidence of Nitric Oxide-dependent Vasodilation and Blood Flow Regulation in Humans.* **AJP: Heart and Circ. Physiol.** 2011, 300: H1101-1107.
16. Trinity, JD, McDaniel, J, Venturelli, M, **Fjeldstad, AS**, Ives, SJ, Witman, MAH, Barrett-O'keefe, Z, Amann, M, Wray, DW, and Richardson, RS. *Impact of Body Position on Central and Peripheral Hemodynamic Contributions to Movement-Induced Hyperemia: Implications for Rehabilitative Medicine.* **AJP: Heart and Circ. Physiol.** 2011, 300: H1885-1891.
17. Amann, M, Runnels, S, Morgan, DE, Trinity, J, **Fjeldstad, AS**, Wray, DW, Reese, VR, and Richardson, RS. *On the Contribution of Group III and IV muscle afferents to the Circulatory Response to Rhythmic Exercise in Humans.* **J Physiol.** 2011, 589: 3855-66.
19. D. Walter Wray, Steven K. Nishiyama, Ryan A. Harris, Jia Zhao, John McDaniel, **Anette S. Fjeldstad**, Melissa A. Hayman, Stephen J. Ives, Zachary Barrett-O'Keefe, and Russell S. Richardson. *Acute Reversal of Endothelial Dysfunction in the Elderly Following Antioxidant Consumption.* **Hypertension**, 2012, 59: 818-24.
20. Venturelli, M, Amann, M, McDaniel, J, Trinity, JD, **Fjeldstad, AS**, and Richardson, RS. *Central and peripheral hemodynamic responses to passive-limb movement: the role of arousal.* **AJP: Heart and Circ. Physiol.** 2012, 302: H333-9.
21. Melissa A.H. Witman, John McDaniel, **Anette S. Fjeldstad**, Stephen J. Ives, Jia Zhao, Jose Nativi, Josef Stehlik, D. Walter Wray, and Russell S. Richardson. *A Differing Role of Oxidative Stress in the Regulation of Central and Peripheral Hemodynamics during Exercise in Heart Failure.* **AJP: Heart and Circ. Physiol.** 2012, 303: H1237-44.

22. Melissa A.H. Witman, **Anette S. Fjeldstad**, John McDaniel, Stephen J. Ives, Jia Zhao, Zachary Barrett-O'Keefe, Jose Nativi, Josef Stehlik, D. Walter Wray, and Russell S. Richardson. *Vascular Function and the Role of Oxidative Stress in Heart Failure, Heart Transplant, and Beyond*. **Hypertension**, 2012, 60: 659-68.
23. **Fjeldstad, AS**, Carlson, NG, and Rose JW. *Optical Coherence Tomography as a Biomarker in Multiple Sclerosis*. **Expert Opinion on Medical Diagnostics**, 2012, 6: 593-604.
24. Zachary Barrett-O'Keefe, Melissa A. H. Witman, John McDaniel, **Anette S. Fjeldstad**, Joel D. Trinity, Steve J. Ives, Jamie D. Conklin, Sean Runnels, David E. Morgan, Mikael Sander, Russell S. Richardson, and D. Walter Wray. *Angiotensin II Potentiates Alpha-Adrenergic Vasoconstriction in the Elderly*. **Clinical Science**, 2013, 124: 413-22.
25. Venturelli, M, Amann, M, McDaniel, J, Trinity, JD, **Fjeldstad, AS**, Ives, SJ, Yonnet, GJ, and Richardson, RS. *Passive leg movement-induced hyperemia with a spinal cord lesion: Evidence of preserved vascular function*. **Acta Physiol (Oxf)**, 2013, 210: 429-439.
26. Yonnet, GJ, **Fjeldstad, AS**, Carlson, NG and Rose, JW. *Advances in the management of neurogenic detrusor overactivity in multiple sclerosis*. **International Journal of MS Care**, 2013, 15: 66-72.
27. McDaniel, J, Askew, W, Bennett, D, Mihalopoulos, J, Anantharaman, S, **Fjeldstad, AS**, Rule, DC, Nanjee, NM, Harris, RA and Richardson, RS. *Bison meat has a lower atherogenic risk than beef in healthy men*. **Nutrition Research**, 2013, 33: 293-302.
28. Stephen J. Ives, Ryan Harris, Melissa A.H. Witman, **Anette S. Fjeldstad**, Ryan S. Garten, John McDaniel, D. Walter Wray, and Russell S. Richardson. *Vascular dysfunction and chronic obstructive pulmonary disease: The role of redox balance*. **Hypertension**, 2014, 63: 459-67.
29. Fjeldstad, C., **Fjeldstad, AS**, Joseph P. Wier and Pardo, G. *Association of Vitamin D deficiency with RNFL thickness in MS individuals without history of optic neuritis*. **Multiple Sclerosis and Related Disorders** 2014, 3; 489-93.
30. Fjeldstad, C., **Fjeldstad, AS.**, and Pardo, G. *Use of accelerometers to measure real-life physical activity in ambulatory MS individuals: A pilot study*. **International Journal of MS Care** 2015, 17: 215-220.
31. **Loughran-Fjeldstad, AS.**, Carlson, NG, Husebye, CD, Cook, LJ, and Rose, JW. *Retinal nerve fiber layer sector-specific compromise in relapsing and remitting multiple sclerosis*. **eNeurological Sciences**, 2015, 1: 30-37.

ORAL CONFERENCE PRESENTATIONS

1. **Fjeldstad, AS.** Multiple Sclerosis, Oxidative Stress and Vascular Function. Advances in Multiple Sclerosis Research 2008, 30 minute Oral Presentation. The Brain Institute at the University of Utah, Salt Lake City, UT, December 2008.
2. **Fjeldstad, AS.** Multiple Sclerosis, Oxidative Stress and Vascular Function. Multiple Sclerosis Research Symposium. **Multiple Sclerosis Society, Utah Chapter, Salt Lake City, UT**, March 2009. Sclerosis Research 2009, 30 minute Oral Presentation. University of Utah, Salt Lake City, UT, December 2008.
3. **Fjeldstad, AS**, Brittain, DR, Fjeldstad, C, and Pardo, G. Physical Activity According to Thermosensitivity and Fatigue in Individuals with Multiple Sclerosis. 30 minute Oral Presentation **American College of Sports Medicine Annual Meeting**, Baltimore, MD, June 2010.
4. **Fjeldstad, AS.** Multiple Sclerosis and Exercise. **Multiple Sclerosis Research Symposium**. 30 minute Oral Presentation. University of Utah, Salt Lake City, UT, September 2010.
5. **Fjeldstad AS.** Multiple Sclerosis and Exercise. **MS Educational Research Seminar**. 45 min oral presentation. University of Utah, September 2010.
6. **Fjeldstad AS.** Multiple Sclerosis and Exercise. **National MS Society, Utah-Southern Idaho Chapter, Annual Meeting**. 30 min oral presentation. Salt Lake City, UT, January 2011.
7. **Fjeldstad AS.** Multiple Sclerosis and Service Animals. **National MS Society, Utah-Southern Idaho Chapter, Annual Meeting**. 30 min oral presentation. Salt Lake City, UT, January 2011.
8. **Fjeldstad AS.** Social Support in Chronic Illness: Exercise, Postural Balance and Therapy Animals. **Social Work Leadership in Health Care**. 60 min oral presentation. Salt Lake City, UT, April 2011.

9. **Fjeldstad AS.** Optical Coherence Tomography in MS. **CAC Research Symposium.** 45 min oral presentation. MS Research Conference Brain Institute, University of Utah, February 2012.
10. **Fjeldstad, AS.** Therapy animals. **Caregiver Conference.** 30 min oral presentation. Salt Lake City, UT, November 2012.
11. **Fjeldstad, AS.** MS Now, An MS Research Revolution. **National MS Society, Utah-Southern Idaho Chapter, Annual Meeting.** 45 min oral presentation. Boise, ID, January 2013.
12. **Fjeldstad, AS.** Multiple Sclerosis, Exercise and Service Dogs. **The Multiple Sclerosis Association of America.** 45 min oral presentation. Provo, UT, May 2013.
13. **Loughran-Fjeldstad, AS.** Exercise in Multiple Sclerosis. **Multiple Sclerosis Conference.** 45 min oral presentation, December 2015, University of Utah, Salt Lake City, UT.
14. **Loughran-Fjeldstad, AS.** Optical Coherence Tomography in Multiple Sclerosis. **Multiple Sclerosis Conference.** 30 min oral presentation, April 2016, University of Utah, Salt Lake City, UT.

GRANTS

- College of Arts & Sciences Student Request for Travel Funds. ASCM Regional Meeting, Kansas City, MO., \$325, October 2006.
- Health and Exercise Science Research Grant, University of Oklahoma, OK., \$250, January 2007.
- TEVA Pharmaceutical Educational Grant, University of Utah, UT., \$20,000, January 2010.
- TEVA Pharmaceutical Educational Grant, University of Utah, UT., \$20,000, October 2011.

ACADEMIC HONORS

- Virginia Commonwealth University Women Soccer Scholarship, 1994-1995
- SCHEV Scholarship, Virginia Commonwealth University, 1997
- School of Education Stipend, Virginia Commonwealth University, 2000
- Scandinavian Inc. Foundation, Ted H. Greenberg Scholarship, University of Oklahoma, October 2006

CERTIFICATIONS

- **Kinesiotherapist** – VA Hospital, Richmond, VA (December 1998)

TECHNICAL COMPETENCIES

- Body Composition Assessment (e.g. Anthropometrics, Skinfolds)
- Dual-Energy X-ray Absorptiometry Assessment (AP Lumbar Spine, Total Body, Body Composition etc.)
- Strength Testing (1-RM)
- Functional Capacity Testing (6 minute walk etc.)
- Blood Vessel Function Test (HDI CR-2000 Pulse Contour Analysis)
- Artery Stiffness Measures (SphygomoCor®)
- Blood Flow Plethysmography
- Blood Vessel Flow and Diameter Measures using Ultrasound (Logic E and 7)
- Noninvasive Blood Pressure Measures using Finopress
- Ankle Brachial Index Measured with Handheld Doppler
- Lung capacity measures (forced expiratory volume)

- Retinal nerve fiber layer measures using Optical Coherence Tomography (Heidelberg Engineering)
- Data entry/quality control/statistical analysis

PROFESSIONAL MEMBERSHIPS

- **American College of Sports Medicine** (2004-2014)
- **Multiple Sclerosis Society** (2005-present)