

CURRICULUM VITAE

Name: Nicholas A. Burd, PhD

Address: Department of Kinesiology and Community Health
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EDUCATION & TRAINING

- 2011 – 2013 **Postdoctoral research fellow, Preservation of muscle mass with advancing age**
Maastricht University Medical Centre+, Department of Human Movement Sciences,
Maastricht, The Netherlands
Mentor: Luc JC van Loon, Ph.D.
- 2007 – 2011 **Ph.D., Kinesiology**
McMaster University, Hamilton, ON Canada
Dissertation title: Contractile and nutritional modulation of human skeletal muscle
protein synthesis
Mentor: Stuart M. Phillips, Ph.D.
- 2005-2007 **M.S., Exercise Physiology**
Ball State University, Human Performance Laboratory, Muncie, IN USA
Thesis Title: The effect of a cyclooxygenase-2 inhibitor on human muscle protein synthesis
after acute resistance exercise
Mentor: Todd A Trappe, Ph.D.
- 2000-2005 **B.S., Exercise Science, Applied Science**
Ball State University, Muncie, IN USA

PROFESSIONAL EXPERIENCE

- 2013 - current Assistant Professor of Kinesiology and Community Health and faculty affiliate of
Division of Nutritional Sciences, University of Illinois at Urbana-Champaign, Urbana, IL
USA
- 2017 – current Gatorade Sports Science Institute (GSSI) Expert Panel
- 2017 - current Adjunct Faculty, The Faculty of Kinesiology & Physical Education, University of
Toronto
- 2011-2013 Postdoctoral research fellow: Human Movement Sciences
Maastricht University, Maastricht, The Netherlands
- 2007-2011 Graduate Research/Teacher Assistant: Exercise Metabolism Research Group
McMaster University, Hamilton, ON Canada

2005-2007 Graduate Research Assistant: Human Performance Laboratory
Ball State University, Muncie, IN USA

2003-2005 Undergraduate Research Assistant: Human Performance Laboratory
Ball State University, Muncie IN USA

2004 Internship: Human Performance Clinical/Research Laboratory Colorado State
University, Fort Collins, CO USA

DISSERTATION AND THESIS SUPERVISION

University of Illinois

Doctoral or Master's Thesis Advising & Committees

Name of Student	Role	Degree; Research title	Date
PhD			
Colleen McKenna	Primary Advisor	PhD in Division of Nutritional Sciences Dissertation title: <i>TBD</i> AWARDS: College of ACES Jonathan Baldwin Turner Fellowship	Spring 2022 (expected)
Annmarie Chizewski	Committee member	PhD in Kinesiology; Exercise Psychology Dissertation title: <i>TBD</i>	Spring 2019
Amadeo Salvador	Primary Advisor	PhD in Kinesiology; Exercise Physiology Dissertation title: <i>TBD</i> AWARDS: CAPES Foundation Grant	Spring 2021 (expected)
Kevin Paulussen	Primary Advisor	PhD in Kinesiology; Exercise Physiology Dissertation title: <i>TBD</i>	Spring 2022 (expected)
Richard Kesler	Primary Advisor	PhD in Kinesiology; Exercise Physiology Dissertation title: <i>TBD</i>	Spring 2022 (expected)
Tyler Wood	Committee member	PhD in Kinesiology; Motor Control Dissertation title: <i>TBD</i>	Spring 2020 (expected)
Lauren Killian	Committee member	PhD in Division of Nutritional Sciences Dissertation title: <i>TBD</i>	Spring 2019 (expected)
Joseph Beals	Primary Advisor	PhD in Division of Nutritional Sciences Dissertation title: <i>Human obesity and its influence on muscle protein synthesis</i> AWARDS: ACSM Foundation Doctoral Student Grant; Kraft Human Nutrition Fellowship	Spring 2018
Ziad Mahmassani	Committee member	PhD in Kinesiology; Exercise Physiology Dissertation title: <i>$\alpha7\beta1$ integrin regulation of skeletal muscle growth in response to mechanical stimulation</i>	Spring 2017
Stephan van Vliet	Primary Advisor	PhD in Kinesiology; Exercise Physiology Dissertation title: <i>Regulation of postprandial protein metabolism after food ingestion and exercise</i> AWARDS: ACSM Foundation Doctoral Student Grant; KCH Laura J. Huelster Award; ESPEN fellowship; Egg Nutrition Center fellowship	Spring 2017
Elizabeth Hubbard	Committee member	PhD in Kinesiology; Exercise Psychology Dissertation title: <i>The acute effects of high-intensity interval and continuous aerobic exercise on</i>	Summer 2017

		<i>physiological and functional outcomes in persons with multiple sclerosis</i>	
MS			
Rafael Alamilla	Primary Advisor	MS in Kinesiology; Exercise Physiology Thesis title: <i>TBD</i> AWARDS: Graduate School Fellowship	Spring 2020 (expected)
Susannah Scaroni	Primary Advisor	MS in Division of Nutritional Sciences Thesis title: <i>TBD</i> AWARDS: Craig Neilsen Foundation Scholarship	Spring 2019 (expected)
Isabel Martinez	Primary Advisor	MS in Kinesiology; Exercise Physiology Thesis title: <i>Manipulating dietary protein density and its effect on training induced muscle performance and overall health among middle-aged adults</i>	Spring 2018
Justin Parel	Primary Advisor	MS in Kinesiology; Exercise Physiology Thesis title: <i>The whole body protein turnover response to the ingestion of intrinsically labeled eggs at rest and after endurance exercise</i>	Spring 2017
Evan Shy	Primary Advisor	MS in Kinesiology; Exercise Physiology Thesis title: <i>Effect of meal composition to modulate the anabolic response during recovery from resistance exercise</i>	Spring 2016
Sasha McCorkle	Committee member	MS in Division of Nutritional Sciences Thesis title: <i>Macular pigment optical density and academic achievement among preadolescent children</i>	Spring 2016

Maastricht University

Name of Student	Role	Degree; Research title	Date
PhD			
Stefan Gorissen	Co-promoter Promoter: Prof. van Loon	PhD in NUTRIM School of Nutrition and Translational Research in Metabolism Dissertation title: <i>Dietary factors modulating postprandial protein handling</i>	Spring 2016
MS			
Nicole Verbaarschot	Primary Advisor	MS in Human Movement Sciences Thesis title: <i>The relationship between power output and heart rate in power profile and maximal incremental exercise testing in trained cyclist</i>	Spring 2012
Roy Meys	Primary Advisor	MS in Human Movement Sciences Thesis title: <i>The reliability of power-testing in semi-professional road cyclists</i>	Spring 2012

Stockholm University

Name of Student	Role	Degree; Research title	Date
MS			
Imre Kouw	Co-Supervisor w/ Prof. van Loon	MS in Biosciences and Nutrition	Spring 2012

		Thesis title: <i>The impact of dietary protein digestion and carbohydrate co-ingestion on whole-body protein turnover in young and elderly men</i>	
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ACADEMIC TEACHING EXPERIENCE

University of Illinois

- 2017-current **KIN 453 Nutrition for Performance**, Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign.
Role: Instructor, new course
- KIN 453 James Scholar Mentor for Honors Credit**, *Students: David Sierant (2017), Rosalyn Park (2017)*
- 2014-current **KIN 551 Scientific Basis of Physical Performance**, Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign.
Role: Instructor
- 2015-current **KIN 352 Bioenergetics of Human Movement**, Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign.
Role: Instructor
- KIN 352 James Scholar Mentor for Honors Credit**, *Students: Sarah Hovey (2016) Garret Waterstradt (2017), Kelsey Thompson, (2017), Shirali Shah (2018), Rosalyn Park (2018), Paul Teodoro (2018)*
- 2013 **KIN 565 Teaching in the Professoriate**, Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign. *Students: Stephan van Vliet*
Role: Mentor
- 2017 **KIN 125 Orientation in Kinesiology & Community Health**, Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign.
Role: Guest Lecturer
- 2017 **KIN 201 Physical Activity Research Methods**, Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign.
Role: Guest Lecturer, Human Research: Exercise, Nutrition, and Substrate Metabolism
- 2013-2016 **KIN 494 Special topics: Nutrition for Sport and Exercise**, Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign.
Role: Instructor, new course.

Maastricht University

- 2012-2013 **BGZ2004 Food for life**, Department of Human Movement Sciences, Maastricht University Medical Centre+
Role: Guest Lecturer, Protein and Amino Acid Metabolism
- 2012-2013 **BHP4704 Review**, Department of Human Movement Sciences, Maastricht University Medical Centre+ Maastricht University
Role: Guest Lecturer, How to Write a Research Review
- 2012-2013 **BHP4703 Writing a Research Proposal**, Maastricht University Medical Centre+, Department of Human Movement Sciences, Maastricht University
Role: Guest Lecturer

McMaster University

- 2007-2010 **KIN 2CC3: Cardiorespiratory & Metabolic Exercise Physiology**, Department of Kinesiology
Role: Teaching assistant
- 2008-2011 **KIN 2C03: Neuromuscular Exercise Physiology**, Department of Kinesiology,
Role: Teaching assistant
- Fall 2010 **KIN 1F03: Introduction to Human Nutrition & Health**, Department of Kinesiology
Role: Teaching assistant
- Spring 2009 **KIN 4Q03: Pediatric Exercise Physiology**, Department of Kinesiology
Role: Teaching assistant
- Fall 2007 **KIN 1AA3: Human Anatomy & Physiology II**, Department of Kinesiology
Role: Teaching assistant

SCHOLARLY ACTIVITY

Primary research articles in refereed journals

1. Niemi GM, Skinner SK, Walk AM, Edwards CG, De Lisio M, Holscher HD, **Burd NA**, Khan NA. Oral Glucose Tolerance is Associated with Neuroelectric Indices of Attention Among Adults with Overweight and Obesity. *Obesity (Silver Spring)*. 2018 Sep 11. doi: 10.1002/oby.22276. [Epub ahead of print]. PMID: 30204939.
2. van Vliet S, Skinner SK, Beals JW, Pagni BA, Fang H-Y, Ulanov AV, Li Z, Paluska SA, Mazzulla M, West DWD, Moore DR, Wilund KR, and **Burd NA**. Dysregulated handling of dietary protein and muscle protein synthesis after mixed meal ingestion in maintenance hemodialysis patients. *Kidney International Reports*. 2018.
3. Whole egg, but not egg white ingestion, induces mTOR co-localization with the lysosome after resistance exercise in trained young men. Abou Sawan S, van Vliet S, West DWD, Beals JW, Paluska SA, **Burd NA**, Moore DR. *Am J Physiol Cell Physiol*. 2018 Aug 22. doi: 10.1152/ajpcell.00225.2018. PMID: 30133322

4. Physiological responses during a 25-km time trial in elite wheelchair racing athletes. Edwards T, Barfield JP, Niemi GM, Beals JW, Broad EM, Motl RW, De Lisio M, **Burd NA**, Pilutti LA. *Spinal Cord Ser Cases*. 2018 Aug 14;4:77. doi: 10.1038/s41394-018-0114-3. eCollection 2018. PMID: 30131876
5. Altered anabolic signaling and reduced stimulation of myofibrillar protein synthesis after feeding and resistance exercise in people with obesity. Beals JW, Skinner SK, McKenna CF, Poozhikunnel EG, Farooqi SA, van Vliet S, Martinez IG, Ulanov AV, Li Z, Paluska SA, **Burd NA**. *J Physiol*. 2018 Aug 16. doi: 10.1113/JP276210. PMID: 30113718.
6. Abou Sawan S, van Vliet S, Parel JT, Beals JW, Mazzulla M, West DWD, Philp A, Li Z, Paluska SA, **Burd NA**, Moore DR. Translocation and protein complex co-localization of mTOR is associated with postprandial myofibrillar protein synthesis at rest and after endurance exercise. *Physiol Rep*. 2018 Mar;6(5). doi: 10.14814/phy2.13628.
7. van Vliet S, Shy EL, Abou Sawan S, Beals JW, West DW, Skinner SK, Ulanov AV, Li Z, Paluska SA, Parsons CM, Moore DR, **Burd NA**. Consumption of whole eggs promotes greater stimulation of postexercise muscle protein synthesis than consumption of isonitrogenous amounts of egg whites in young men. *Am J Clin Nutr*. 2017 Oct 4. pii: ajcn159855. doi: 10.3945/ajcn.117.159855. [Epub ahead of print]. PMID: 28978542
8. Beals JW, Mackenzie RWA, van Vliet S, Skinner SK, Pagni BA, Niemi GM, Ulanov AV, Li Z, Dilger AC, Paluska SA, De Lisio M, **Burd NA**. Protein-Rich Food Ingestion Stimulates Mitochondrial Protein Synthesis in Sedentary Young Adults of Different BMIs. *J Clin Endocrinol Metab*. 2017 Sep 1;102(9):3415-3424. doi: 10.1210/jc.2017-00360. PMID: 28911136
9. Niemi GM, Edwards T, Barfield JP, Beals JW, Broad EM, Motl RW, **Burd NA**, Pilutti LA, De Lisio M. Circulating Progenitor Cell Response to Exercise in Wheelchair Racing Athletes. *Med Sci Sports Exerc*. 2017 Aug 11. doi: 10.1249/MSS.0000000000001402. [Epub ahead of print] PMID: 28806276
10. Niemi GM, Parel J, Beals J, van Vliet S, Paluska SA, Moore DR, **Burd NA**, De Lisio M. Kinetics of circulating progenitor cell mobilization during submaximal exercise. *J Appl Physiol (1985)*. 2017 Jan 12:jap.00936.2016. doi: 10.1152/jappphysiol.00936.2016. PMID: 28082336
11. Mazzulla M, Parel JT, Beals JW, van Vliet S, Abou Sawan S, West DWD, Paluska SA, Ulanov AV, Moore DR, **Burd NA**. Endurance Exercise Attenuates Postprandial Whole-Body Leucine Balance in Trained Men. *Med Sci Sports Exerc*. 2017 Dec;49(12):2585-2592. doi: 10.1249/MSS.0000000000001394. PMID: 28767524
12. Gorissen SH, Horstman AM, Franssen R, Kouw IW, Wall BT, **Burd NA**, de Groot LC, van Loon LJ. Habituation to low or high protein intake does not modulate basal or postprandial muscle protein synthesis rates: a randomized trial. *Am J Clin Nutr*. 2016 Nov 30. pii: ajcn129924. PMID: 27903518
13. Wall BT, **Burd NA**, Franssen R, Gorissen SH, Snijders T, Senden JM, Gijsen AP, van Loon LJ. Pre-sleep protein ingestion does not compromise the muscle protein synthetic response to protein ingested the following morning. *Am J Physiol Endocrinol Metab*. 2016 Oct 25:ajpendo.00325.2016. doi: 10.1152/ajpendo.00325.2016. PMID: 27780822

14. van Vliet S, Beals JW, Parel JT, Hanna CD, Utterback PL, Dilger AC, Ulanov AV, Li Z, Paluska SA, Moore DR, Parsons CM, **Burd NA**. Development of Intrinsically Labeled Eggs and Poultry Meat for Use in Human Metabolic Research. *J Nutr*. 2016 Jun 8. pii: jn228338., PMID: 27360524
15. Beals JW, Sukiennik RA, Nallabelli J, Emmons RS, van Vliet S, Young JR, Ulanov AV, Li Z, Paluska SA, De Lisio M, **Burd NA**. Anabolic sensitivity of postprandial muscle protein synthesis to the ingestion of a protein-dense food is reduced in overweight and obese young adults. *Am J Clin Nutr*. 2016 Sep 7. pii: ajcn130385., PMID: 27604771
16. Gorissen SH, **Burd NA**, Kramer IF, van Kranenburg J, Gijsen AP, Rooyackers O, van Loon LJ. Co-ingesting milk fat with micellar casein does not affect postprandial protein handling in healthy older men. *Clin Nutr*. 2015 Dec 24. pii: S0261-5614(15)00349-0. doi: 10.1016/j.clnu.2015.12.011, PMID: 26774526
17. **Burd NA**, Gorissen SH, van Vliet S, Snijders T, van Loon LJ. Differences in postprandial protein handling after beef compared with milk ingestion during postexercise recovery: a randomized controlled trial. *Am J Clin Nutr*. 2015 Oct;102(4):828-36. doi: 10.3945/ajcn.114.103184, PMID: 26354539
18. Kouw IW, Gorissen SH, **Burd NA**, Cermak NM, Gijsen AP, van Kranenburg J, van Loon LJ. Postprandial protein handling is not impaired in type 2 diabetes patients when compared with normoglycemic controls. *J Clin Endocrinol Metab*. 2015, Aug;100(8):3103-11, PMID:26037513
19. **Burd NA**, Cermak NM, Kouw IW, Gorissen SH, Gijsen AP, van Loon LJ. The use of doubly labeled milk protein to measure postprandial muscle protein synthesis rates in vivo in humans. *J Appl Physiol*. 2014, 117(11):1363-70, PMID:25277738
20. An R, Chiu CY, Zhang Z, **Burd NA**. Nutrient intake among US adults with disabilities, *J Hum Nutr Diet*. 2014, Sep 19, PMID: 25233949
21. Moore DR, Churchward-Venne TA, Witard O, Breen L, **Burd NA**, Tipton KD, Phillips SM. Protein ingestion to stimulate mofibrillar protein synthesis requires a greater relative protein intakes in healthy older versus younger men, *J Gerontol A Biol Med Sci*. 2015, 70(1):57-62, PMID:25056502
22. An R, **Burd NA**. Carbohydrate, Fat, and Protein Intake in Association with Energy Intake across Sex, Race, and Body Weight Status in the US Adult Population: 1999-2010, *Public Health Nutrition*. 2014, 18(8):1343-52, PMID:25203716
23. Rowlands DS, Nelson AR, Phillips SM, Faulkner JA, Clarke J, **Burd NA**, Moore D, Stellingwerff T. Protein-leucine fed dose effects on muscle protein synthesis after endurance exercise. *Med Sci Sports Exerc*. 2015, 47(3):547-55, PMID: 25026454
24. Gorissen SH, **Burd NA**, Hamer HM, Gijsen AP, Groen BB, van Loon LJC. Carbohydrate co-ingestion delays dietary protein digestion and absorption but does not modulate postprandial muscle protein accretion. *J Clin Endocrinol Metab*. 2014 Mar 14:Jc20133970, PMID:23826365

25. **Burd NA**, Hamer HM, Pennings B, Pellikaan WF, Senden JMG, Gijsen AP, van Loon LJC. Substantial differences between organ and muscle specific tracer incorporation rates in a lactating dairy cow. PLoSOne. 2013 Jun 27;8(6):e68109, PMID:23826365
26. **Burd NA**, Pennings B, Groen BBL, Gijsen AP, Senden JMG, van Loon LJC. The single biopsy approach is reliable for the measurement of muscle protein synthesis rates in vivo in older men. J Appl Physiol. 2012 Sep;113(6):896-902, PMID: 22815390
27. Robinson MJ, **Burd NA**, Breen L, Rerечich T, Yang Y, Hector AJ, Baker SK, Phillips SM. Dose-dependent responses of myofibrillar protein synthesis with beef ingestion are enhanced with resistance exercise in middle-aged men. Appl Physiol Nutr Metab. 2013 Feb;38(2):120-5, PMID:23438221
28. Wall B, Dirks M, Verdijk L, Snijders T, Hansen D, Vranckx P, **Burd NA**, Dendale, van Loon LJ. Neuromuscular electrical stimulation increases muscle protein synthesis in elderly, type 2 diabetic men. AJP–Endocrinology and Metabolism. 2012 Sep;303(5):E615-23, PMID:22739107
29. Yang Y, Churchward-Venne TA, **Burd NA**, Breen L, Tarnopolsky, Phillips SM. Myofibrillar protein synthesis following ingestion of soy protein isolate at rest and after resistance exercise in elderly men. Nutr Metab (Lond). 2012 Jun 14;9(1):57, PMID:22698458
30. Camera DM, West DW, **Burd NA**, Garnham A, Phillips SM, Hawley J, Coffey V. Low muscle glycogen concentration does not suppress the anabolic response to resistance exercise. J Appl Physiol. 2012 May 24, PMID:22628371
31. Mitchell CJ, Churchward-Venne TA, West DWD, **Burd NA**, Breen L, Baker SK, Phillips SM. Resistance exercise load does not determine training-mediated hypertrophic gains in young men. J Appl Physiol. 2012 Apr 19, PMID:22533517
32. Donges CE*, **Burd NA***, Duffield R, Smith GC, West DWD, Short MJ, Mackenzie R, Plank LD, Shepherd PR, Phillips SM, Edge JA. Concurrent resistance and aerobic exercise stimulates both myofibrillar and mitochondrial protein synthesis in sedentary overweight middle-aged men. J Appl Physiol 2012 Jun; 112(12):1992-2001, PMID:22492939 **designates co-authored manuscripts*
33. Churchward-Venne TA, **Burd NA**, Mitchell MJ, West DWD, Philp A, Marcotte GR, Baker SK, Baar K, Phillips SM. Supplementation of a suboptimal protein dose with leucine or essential amino acids: effects on myofibrillar protein synthesis at rest and following resistance exercise in men. J Physiol 2012 Mar 25, PMID:22451437
34. West DW, **Burd NA**, Churchward-Venne TA, Camera DM, Mitchell CJ, Baker SK, Hawley JA, Coffey VG, Phillips SM. Sex-based comparisons of myofibrillar protein synthesis after resistance exercise in the fed state. J Physiol 2012 Mar 1, PMID:22383503
35. **Burd NA**, Andrews RJ, West DWD, Little JP, Cochran AJR, Hector AJ, Cashaback JGA, Gibala MJ, Potvin JR, Baker SK, Phillips SM. Muscle time under tension during resistance exercise stimulates differential muscle protein sub-fractional synthetic responses in men J Physiol 2012, Jan 15;590(Pt 2):351-62, PMID:22106173

36. **Burd NA**, Groen BBL, Beelen M, Senden JMG, Gijsen AP, van Loon LJC. The reliability of using the single biopsy approach to assess basal muscle protein synthesis rates *in vivo* in humans. *Metabolism*, 2012 Mar 9;8:15, PMID:22209666
37. Yang Y, Breen L, **Burd NA**, Hector AJ, Churchward-Venne T, Josse AR, Tarnopolsky MA, Phillips SM. Resistance exercise enhances myofibrillar protein synthesis with graded intakes of whey in older men. *Br J Nutr*. 2012 Feb 7:1-9, PMID:22313809
38. **Burd NA**, Yang Y, Moore DR, Tang JE, Tarnopolsky, Phillips SM. Greater stimulation of myofibrillar protein synthesis with ingestion of whey protein isolate versus micellar casein at rest and after resistance exercise in elderly men. *Br J Nutr*. 2012 Jan 31:1-5, PMID:22289570
39. West DWD*, **Burd NA***, Coffey VG, Baker SK, Burke LM, Hawley JA, Moore DR, Stellingwerf T, Phillips SM. Rapid aminoacidemia enhances myofibrillar protein synthesis and anabolic intramuscular signaling responses after resistance exercise. *Am J Clin Nutr*. 2011 Sep;94(3):795-803, PMID:21795443 **designates co-authored manuscripts*
40. **Burd NA**, West DW, Rerечich T, Prior T, Baker SK, Phillips SM. Validation of a single biopsy approach and bolus protein feeding to determine myofibrillar protein synthesis in stable isotope tracer studies in humans. *Nutr Metab (Lond)*. 2011 Mar 9;8:15, PMID:21388545
41. **Burd NA**, West DW, Moore DR, Atherton PJ, Staples AW, Prior T, Tang JE, Rennie MJ, Baker SK, Phillips SM. Enhanced Amino Acid Sensitivity of Myofibrillar Protein Synthesis Persists for up to 24 h after Resistance Exercise in Young Men. *J Nutr*. 2011 Apr 1;141(4):568-73, PMID:21289204
42. Coffey VG, Moore DR, **Burd NA**, Rerечich T, Stellingwerff T, Garnham AP, Phillips SM, Hawley JA. Nutrient provision increases signalling and protein synthesis in human skeletal muscle after repeated sprints. *Eur J Appl Physiol*. 2011 Jul; 111(7):1473-83, PMID:21131864
43. Staples AW, **Burd NA**, West DW, Currie KD, Atherton PJ, Moore DR, Rennie MJ, Macdonald MJ, Baker SK, Phillips SM. Carbohydrate Does not Augment Exercise-Induced Protein Accretion versus Protein Alone. *Med Sci Sports Exerc*. 2011 Jul; 43(7):1154-61, PMID:2231864
44. **Burd NA**, West DWD, Staples AW, Atherton PJ, Baker JM, Moore DR, Holwerda AM, Parise G, Rennie MJ, Baker SK, Phillips SM. Low-Load High Volume Resistance Exercise Stimulates Muscle Protein Synthesis More than High-Load Low Volume Resistance Exercise in Young Men. *PLoSOne*. 2010 Aug 9;5(8):e12033, PMID:20711498
45. **Burd NA**, Holwerda AM, Selby KC, West DWD, Staples AW, Cain NE, Cashaback JGA, Potvin JR, Baker SK, Phillips SM. Resistance exercise volume affects myofibrillar protein synthesis and anabolic signalling molecule phosphorylation in young men. *J Physiol*. 2010 Aug 15;588(Pt 16):3119-30, PMID:20581041
46. **Burd NA**, Dickinson JM, Lemoine JK, Carroll CC, Sullivan BE, Haus JM, Jemiolo B, Trappe SW, Hughes GM, Sanders CE Jr, Trappe TA. Effect of a cyclooxygenase-2 inhibitor on postexercise muscle protein synthesis in humans. *Am J Physiol Endocrinol Metab*. 2010 Feb;298(2):E354-61, PMID:19934404
47. West DW, **Burd NA**, Tang JE, Moore DR, Staples AW, Holwerda AM, Baker SK, Phillips SM.

Elevations in ostensibly anabolic hormones with resistance exercise enhance neither training-induced muscle hypertrophy nor strength of the elbow flexors. *J Appl Physiol.* 2010 Jan;108(1):60-7, PMID:19910330

48. West, W.D., Kujbida, G.W., Moore, D.R., Atherton P., **Burd, N.A.**, Padzik J.P., De Lisio, M., Tang, J.E., Parise, G., Rennie, M.J., Baker, S.K., Phillips S.M. Resistance exercise-induced increases in putative anabolic hormones do not enhance muscle protein synthesis or intracellular signaling in young men. *J Physiol.* 2009 Nov 1;587 (Pt 21):5239-47, PMID:19736298
49. Moore DR, Tang JE, **Burd NA**, Rerecich T, Tarnopolsky MA, Phillips SM. Differential stimulation of myofibrillar and sarcoplasmic protein synthesis with protein ingestion at rest and after resistance exercise. *J Physiol.* 2009 Feb 15;587(Pt 4):897-904, PMID:19124543
50. Trappe, T.A., **Burd, N.A.**, Louis, E., Lee, G., and Trappe S. Influence of concurrent exercise or nutrition countermeasures on thigh and calf muscle volume and function during 60 d of bedrest in women. *Acta Physiol (oxf).* 2007 Oct; 191(2):147-59, PMID:17655736
51. Weinheimer, E.M., Jemiolo, B., Carroll, C.C., Harber, M., Haus, J.M., **Burd, N.A.**, LeMoine, J.K., Trappe, S., and Trappe, T.A. Resistance exercise and cyclooxygenase (COX) expression in human skeletal muscle: implications for COX-inhibiting drugs and protein synthesis. *Am J Physiol Integr Comp Physiol.* 2007 Jun;292(6):R2241-8, PMID:17322116

Reviews (Peer-reviewed)

1. Van Vliet SV, Beals JW, Martinez IG, Skinner SK, **Burd NA**. Achieving Optimal Post-Exercise Muscle Protein Remodeling in Physically Active Adults through Whole Food Consumption. *Nutrients.* 2018 Feb 16;10(2). pii: E224. doi: 10.3390/nu10020224. Review. PMID: 29462924
2. **Burd NA**, De Lisio M. Skeletal Muscle Remodeling: Interconnections Between Stem Cells and Protein Turnover. *Exerc Sport Sci Rev.* 2017, PMID: 28419002
3. van Vliet S, **Burd NA**, van Loon LJ. The skeletal muscle anabolic response to plant versus animal-based protein consumption. *J. Nutr.* 2015, PMID:26224750
4. **Burd NA**, Tardif N, Rooyackers O, van Loon LJC. Optimizing the measurement of mitochondrial protein synthesis in human skeletal muscle. *Applied Physiology, Nutrition, and Metabolism.* 2015 Jan;40(1): 1-9, PMID:25494678
5. Trommelen J, van Vliet S, **Burd NA**. Postexercise 'window' of potential for the stimulation of muscle protein synthesis. *AgroFOOD Industry Vol 24(5) Sept-Oct 2013*
6. **Burd NA**, Gorissen SH, van Loon LJC. Anabolic resistance of muscle protein synthesis with aging. *Exerc Sport Sci. Rev.* 2013, PMID:23558692
7. Churchward-Venne TA, **Burd NA**, Phillips SM. Nutritional regulation of muscle protein synthesis with resistance exercise: strategies to enhance anabolism. *Nutr Metab (Lond).* 2012 May 7;9(1):40, PMID:22594765

8. **Burd NA**, Mitchell CJ, Churchward-Venne TA, Phillips SM. Bigger weights may not beget bigger muscles: Evidence from acute muscle protein synthetic responses after resistance exercise. *Applied Physiology, Nutrition, and Metabolism* 2012 April 26, PMID:22533517
9. **Burd NA** and Phillips SM. Fast whey protein and the leucine trigger affect exercise-induced muscle protein synthesis. *NutraFoods. Special Issue on Whey Proteins*. 2010, 9(4) 7-11
10. West DWD, **Burd NA**, Staples AW, and Phillips SM. Human skeletal muscle hypertrophy is an intrinsic process. *International Journal of Biochemistry and Cell Biology* 2010 Sep;42(9):1371-5, PMID:20541030
11. **Burd NA**, Tang JE, Moore DR, Phillips SM. Exercise training and protein metabolism: influences of contraction, protein intake, and sex-based differences. *J Appl Physiol*. 2009 May 106(5):1692-701, PMID:19036897

Editorials/Perspectives/Letters (Peer-reviewed)

1. **Burd NA**, Beals JW, van Vliet S, van Loon LJC. The postexercise increase in muscle protein synthesis rate is indicative of skeletal muscle reconditioning rather than muscle hypertrophy per se. *J Appl Physiol*. 2015; 118: 498-503 (14)
2. **Burd NA**, Stear SJ, Burke LM, Castell LM. A-Z of nutritional supplements: dietary supplements, sports nutrition foods and ergogenic aids for health and performance—Part 47. *Br J Sports Med*. 2013; 47(14); 933-4, PMID:23973882
3. Ranchordas MK, **Burd NA**, Godfrey RJ, Senchina DS, Stear SJ, Burke LM, Castell LM. A-Z of nutritional supplements: dietary supplements, sports nutrition foods and ergogenic aids for health and performance—Part 43. *Br J Sports Med*. 2013; 47 155-156, PMID:23525752
4. **Burd NA**, Moore DR, Mitchell CJ, Phillips SM. Big claims for big weights but with little evidence. *Eur J Appl Physiol* 2012, PMID:23086296
5. **Burd NA**, Wall BT, van Loon LJ. Last word on Viewpoint: The curious case of anabolic resistance: old wives' tales or new fables? 2012 Apr 112(7):1237, PMID:22467757
6. Lee J and **Burd NA**. No role of muscle satellite cells in hypertrophy: Further evidence of a mistaken identity? *J Physiol* 2012, PMID:22707593
7. Ranchordas MK, **Burd NA**, Senchina DS, Burke LM, Stear SJ, Castell LM. A-Z of nutritional supplements: dietary supplements, sports nutrition foods and ergogenic aids for health and performance—Part 29. *Br J Sports Med*. 2012; 46 155-156
8. **Burd NA**, Wall BT, van Loon LJC. The curious case of anabolic resistance: old wives' tales or new fables? *J Appl Physiol*. 2012 Apr 112(7):1233-5, PMID:22134695
9. **Burd NA**, Jeukendrup A, Reid MB, Burke LM, Stear SJ, Castell LM. A-Z of nutritional supplements: dietary supplements, sports nutrition foods and ergogenic aids for health and performance—Part 26. *Br J Sports Med*. 2011; 45:1163-1164

10. **Burd NA**, West DW, Camera DM, Breen L. No role for early IGF-1 signalling in stimulating acute 'muscle building' responses. *J Physiol*. 2011 June 1;589(Pt 11):2667-8, PMID:21632529
11. **Burd NA**, West DWD, Churchward-Venne TA, Mitchell CJ. Growing collagen, not muscle, with weightlifting and 'growth' hormone. *J Physiol*. 2010 Feb 1;588(Pt 3):395-6, PMID:20123793
12. Moore DR, **Burd NA**. Exercise intensity matters for both young and old muscles. *J Physiol*. 2009 Feb 1;587(Pt 3):511-2, PMID:190749

Book chapters (Peer-reviewed)

1. **Burd, N.A.**, & Phillips, S.M. (2011). Nutrition for Power and Sprint Training. In S.A. Lanham-New, S.J. Stear, S.M. Shirreffs, & A.L. Collins (Eds.), *Sport and Exercise Nutrition*. Wiley-Blackwell: Oxford, UK.
2. **Burd, N.A.**, & Phillips, S.M. (2012). Protein and Exercise. In C.A. Rosenbloom, & E.J. Coleman (Eds.), *Sports Nutrition: A practice manual for professionals (5th Edition)*. Academy of Nutrition and Dietetics: Chicago, IL
3. **Burd, N.A.** (2015). Methionine. In L.M. Castell, S.J. Stear, & L.M. Burke (Eds.), *Nutritional Supplements in Sport, Exercise, and Health: An A-Z Guide*. Routledge Taylor & Francis Group: New York, NY.
4. **Burd, N.A.** (2015). Peptides. In L.M. Castell, S.J. Stear, & L.M. Burke (Eds.), *Nutritional Supplements in Sport, Exercise, and Health: An A-Z Guide*. Routledge Taylor & Francis Group: New York, NY.
5. **Burd, N.A.** (2015). Phosphatidylserine. In L.M. Castell, S.J. Stear, & L.M. Burke (Eds.), *Nutritional Supplements in Sport, Exercise, and Health: An A-Z Guide*. Routledge Taylor & Francis Group: New York, NY.
6. Van Vliet, S. & **Burd, N.A.** (2015). Protein. In L.M. Castell, S.J. Stear, & L.M. Burke (Eds.), *Nutritional Supplements in Sport, Exercise, and Health: An A-Z Guide*. Routledge Taylor & Francis Group: New York, NY.
7. **Burd, N.A.**, & Cermak, N. (2015). Threonine. In L.M. Castell, S.J. Stear, & L.M. Burke (Eds.), *Nutritional Supplements in Sport, Exercise, and Health: An A-Z Guide*. Routledge Taylor & Francis Group: New York, NY.
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9. **Burd, N.A.** (2015). Whey Protein. In L.M. Castell, S.J. Stear, & L.M. Burke (Eds.), *Nutritional Supplements in Sport, Exercise, and Health: An A-Z Guide*. Routledge Taylor & Francis Group: New York, NY.

10. Beals, J.W., Shy, E.L., & **Burd, N.A.** (2017). Interaction between diet and physical activity in older people. In M.M. Raats, L.C.P.G.M. de Groot, D. van Asselt (Eds.), *Food for the Aging Population (2nd edition)*. Woodhead/Elsevier: Duxford, UK
11. **Burd, N.A.**, & Phillips, S.M. (2017). Protein and Exercise. In C.A. Rosenbloom, & E.J. Coleman (Eds.), *Sports Nutrition: A handbook for Professionals (6th Edition)*. Academy of Nutrition and Dietetics: Chicago, IL
12. Martinez, I.G., Skinner, S.K., **Burd, N.A.** (In press). Protein intake for Optimal Sports Performance. In D. Bagchi (Eds.), *Nutrition and Enhanced Sports Performance: Muscle Building, Endurance, and Strength (2nd Edition)*. Elsevier.

Selected published abstracts

1. **Burd, N.A.**, Lee, G., Trappe, S., & Trappe, T.A. (2006). Influence of exercise or nutrition countermeasures during 60 d of bedrest in women: Thigh and calf muscle volume. *FASEB J.* 20:LB34.
2. Trappe, T.A., Tesch, P. Alkner, B., **Burd, N.A.**, & Trappe, T.A. (2006). Gender specific changes in muscle mass with long-term bedrest. *FASEB J.* 20:LB34
3. Weinheimer, E. Jemiolo, B., Carroll, C.C., Harber, M.P., Haus, J.M., **Burd, N.A.**, LeMoine, Trappe, S.W., & Trappe, T.A. (2007). Resistance exercise and cyclooxygenase (COX) expression in human skeletal muscle: Implications for COX-inhibiting drugs and protein synthesis. *FASEB J.* 21:A937
4. **Burd, N.A.**, Dickinson, J.M., LeMoine, L.M., Carroll, C.C., Haus, J.M., Sanders, C., & Trappe, T.A. (2008). Consumption of a COX-2 inhibitor stimulates muscle protein synthesis after resistance exercise in humans. *FASEB J.* 22:958.15
5. **Burd, N.A.**, West, D.W., Staples, A.W., Holwerda, A.M., Moore, D.R., Tang, J.E., Baker, S., & Phillips, S.M. (2009). Influence of muscle contraction intensity and fatigue on muscle protein synthesis following resistance exercise. *Med. Sci. Sports Exerc.* 43(5):53-54.
6. **Staples, A.W.**, Sherriffs, S.S., Burd, N.A., West, D.W., Moore, D.R., Tang, J.E., Baker, S.K., & Phillips, S.M. (2009). Muscle protein synthesis is not augmented by protein-carbohydrate co-ingestion at rest or following resistance exercise. *Med. Sci. Sports Exerc.* 41(5):150.
7. **Burd, N.A.**, West, D.W., Staples, A.W., Atherton, P.J., Moore, D.R., Prior, T., Tang, J., Rennie, M.J., Baker, S.K., & Phillips, S.M. (2010). The latent resistance exercise and feeding interaction to stimulate myofibrillar protein synthesis post-exercise is dependent on effort. *Appl Physiol Nutr Metab.* Dec; 35(6): S12.
8. Holwerda, A.M., **Burd, N.A.**, Selby, K.C., West, D.W., Staples, A.W., Cain, N.E., Cashaback, J., Potvin, J.R., Baker, S.K., & Phillips, S.M. (2010). Three sets of resistance exercise elicit a greater elevation in myofibrillar protein synthesis than 1 set of resistance exercise in young men. *Appl Physiol Nutr Metab.* Dec; 35(6): S42.
9. West, D.W., **Burd, N.A.**, Coffey, V.G., Staples, A.W., Baker, S.K., Burke, L.M., Hawley, J.A., & Phillips, S.M. (2010) Bolus protein feeding is more beneficial than pulse feeding for enhancing myofibrillar protein synthesis. *Appl Physiol Nutr Metab.* Dec; 35(6): S109

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12. Camera, D.M., **Burd, N.A.**, Phillips, S.M., Hawley, J.A., & Coffey, V.G. (2011). Effect of muscle glycogen status and nutrition on cell signaling following resistance exercise. *Med. Sci. Sports Exerc.* 43(5):583.
13. Mitchell, C., Churchward-Venne, T., Keegan, S., West, D., **Burd, N.A.**, Baker, S., & Phillips, S.M. (2011). The influence of training load and volume on anabolic signaling and muscle hypertrophy with resistance training. *Med. Sci. Sports Exerc.* 43(5):53-54.
14. **Burd, N.A.**, Wall, B.T., Dirks, M.L., Verdijk, L.B., Snijders, T., Hansen, D., Senden, J.M., Vranckx, P., Dendale, P., & van Loon, L.J. (2012). Neuromuscular electrical stimulation increases muscle protein synthesis rates in type 2 diabetic men. *FASEB J.* 26:1b712
15. Kouw, I.W., Cermak, N.M., **Burd, N.A.**, Gijsen, A.P., van Kranenburg, J., & van Loon, L.J. (2013). Dietary nitrate co-ingestion with protein does not further enhance whole body protein synthesis rates in older, type 2 diabetic men. *Clinical Nutrition.* Vol 32, S4.
16. Kouw, I.W., Gorissen, S.H., **Burd, N.A.**, Cermak, N.M., Gijsen, A.P., & van Loon, L.J. (2014). Postprandial muscle protein synthesis is not impaired in elderly type 2 diabetes patients when compared with healthy age-matched controls. *Clinical Nutrition.* Vol 33, S125.
17. Gorissen, S.H., **Burd, N.A.**, Kramer, I.F., van Kranenburg, J., Gijsen, A.P., & van Loon, L.J. (2014). Fat co-ingestion does not impair postprandial protein digestion and absorption kinetics or whole body net protein balance in elderly males. *Clinical Nutrition.* Vol 33, S124.
18. Gorissen, S.H., Horstman, A.M., Franssen, R., Kouw, I.W., Kramer, I.F., Wall, B.T., **Burd, N.A.**, de Groot, L.C., & van Loon, L.J. (2015). The impact of habitual protein intake on dietary protein digestion and absorption kinetics and postprandial muscle protein synthesis rates in older males. *Clinical Nutrition.* Vol 34, S4.
19. Van Vliet, S., Beals, J.W., Utterback, P.L., Hanna, C.D., Dilger, A.C., Ulanov, A.V., Moore, D.R., Parsons, C.M., & **Burd, N.A.** (2015). The production of intrinsically labelled eggs and poultry meat for use in human metabolic research. *Applied Physiology, Nutrition, and Metabolism.* 40(S1): S1-S69.
20. Parel, J., van Vliet, S., Emmons, R.S., Beals, J.W., van Loon, L.J., Paluska, S.A., De Lisio, M., & **Burd, N.A.** (2015). Protein ingestion does not modulate skeletal muscle LAT1 protein content throughout the postprandial period in healthy young men. *Applied Physiology, Nutrition, and Metabolism.* 40(S1): S1-S69.

21. **Burd, N.A.**, Wall, B.T., Franssen, R., Gorissen, S.H., Snijders, T., & van Loon, L.J. (2015) Protein ingestion before sleep does not modulate postprandial protein handling to the subsequent morning protein meal in young males. *Applied Physiology, Nutrition, and Metabolism*. 40(S1): S1-S69
22. **Burd, N.A.**, Parel, J.T., Mazzulla, M., Sawan, S.A., Beals, J.W., Shy, E.L., van Vliet, S., & Moore, D.R. (2016). Running Induces Gut Injury but Does Not Modulate Postprandial Release of Dietary Protein Derived-amino acids. *Med Sci Sports Exerc*. May;48(5 Suppl 1):442.
23. van Vliet, S., Emmons, R.S., Parel, J.T., Beals, J.W., van Loon, L.J., Paluska, S.A., De Lisio, M., & **Burd, N.A.** (2016). mTOR Activation occurs Independent of Changes in Skeletal Muscle LAT1 Protein Content after Protein Ingestion. *Med Sci Sports Exerc*. May;48(5 Suppl 1):443.
24. Beals, J.W., Sukiennik, R.A., van Vliet, S., Young, J.R., Ulanov, A.V., Li, L., Paluska, S.A., & **Burd, N.A.** (2016). Diminished Postprandial Muscle Protein Synthetic Response to Protein Ingestion in Obese Adults. *Med Sci Sports Exerc*. May;48(5 Suppl 1):5.
25. Skinner, S.K., Beals, J., van Vliet, S., Niemi, G.M., Dilger, A.C., De Lisio, M., Paluska, S., & **Burd, N.A.** (2017). Elevated Muscle Inflammatory Response after Protein-Dense Food Ingestion in Obese Adults. *FASEB J*. April; 31:794.17.
26. **Burd, N.A.**, van Vliet, S., van Loon, L.J.C., Beals, J.W., & Paluska S.A. (2017). Sustained Postprandial Muscle Protein Synthesis Rates after Protein Ingestion in Healthy Young Males. *FASEB J*. April; 31:652.2.
27. Abou Sawan, S., van Vliet, S., Shy, E.L., Beals, J.W., Paluska, S.A., **Burd, N.A.**, & Moore, D.R. (2017). Whole Eggs and Egg Whites Ingestion Induce Similar Increases in Muscle Anabolic Signaling Phosphorylation after Resistance Exercise in Trained Young Men. *FASEB J*. April; 31:1036.15.
28. Moore, D.R., Lysecki, P., Breen, L., **Burd, N.A.**, Smith, K., Atherton, P.J., & Phillips, S.M. (2017). Chronic alterations in blood pH affect fasting-state amino acid oxidation and myofibrillar and albumin protein synthesis in healthy young men. *FASEB J*. April; 31:1036.14.
29. Bailey, M.A., Beals, J.W., Skinner, S.K., Paluska, S.A., **Burd, N.A.**, & Holscher, H.D. (2017). Investigating the links between habitual diet, the gastrointestinal microbiota, and cardiovascular disease risk factors in healthy weight, overweight, and obese men and women. *FASEB J*. April; 31:965.37.
30. Martinez, I.G., van Vliet, S., Shy, E.L., Beals, J.W., Ulanov, A.V., Orlando, M., West, D.W., Moore, D.R., Paluska, S.A., & **Burd, N.A.** (2017). Post-Exercise Consumption of Whole Eggs or Egg Whites Improves Whole Body Leucine Balance but Does Not Differentially Modulate Leucine Kinetics in Resistance-Trained Young Men. *FASEB J*. April; 31:652.4.
31. Beals, J.W., van Vliet, S., Sukiennik, R.A., Young, J.R., Dilger, A.C., Ulanov, A.V., Li, Z., Paluska, S.A., & **Burd, N.A.** (2017). Protein-Dense Whole Food Ingestion Augments Postprandial Mitochondrial Protein Synthesis in Healthy-Weight, Overweight, and Obese Young Adults. *FASEB J*. April; 31:44.8.

32. Van Vliet, S., Shy, E.L., Beals, J.W., Ulanov, A.V., Li, Z., Paluska, S.A., Moore, D.R., & **Burd, N.A.** (2017). Greater Stimulation of Postexercise Muscle Protein Synthesis after Consumption of Whole Eggs versus Egg Whites in Healthy Young Men. *FASEB J.* April; 31:167.7
33. De Lisio, M., Niemi, G.M., Edwards, T., Barfield, J.P., Beals, J.W., Broad, E., Motl, R.W., Newsome, L., **Burd, N.A.**, & Pilutti, L.A. (2017). Progenitor Cell Mobilization Following a Half-Marathon in Elite Wheelchair Athletes. *Med Sci Sports Exerc.* May;49 (5 Suppl):459-460.
34. Barfield, J.P., Edwards, T., Beals, J.W., Niemi, G.M., Broad, E., Motl, R.W., De Lisio, M., Newsome, L., **Burd, N.A.**, & Pilutti, L.A. (2017). Physiological Responses to a Simulated Half-marathon Road-race in Elite Wheelchair Racing Athletes. *Med Sci Sports Exerc.* May;49 (5 Suppl):857-858.
35. Thompson, S. Skinner, S., Edwards, C., Khan, N. **Burd, N.**, & Holscher H. Cross-sectional links between volatile fatty acids and indices of glucose and insulin homeostasis. *The Obesity Society Annual Meeting at ObesityWeek 2017*; November 2, 2017. Washington, DC.
36. Niemi, G. Skinner, S., Walk, A., Edwards, C. Beals, J., Covello, A., Holscher, H., **Burd, N.**, & Khan, N. Oral Glucose Tolerance Is Associated With Behavioral and Neuroelectric Indices of Attention. *The Obesity Society Annual Meeting at ObesityWeek 2017*; November 2, 2017. Washington, DC.
37. **Burd, N.A.**, van Vliet, S., Skinner, S.K., Beals, J.W., Hsin-Yu, F., Ulanov, A.V., Paluska, S.A., & Wilund, K.R. (2018). Dietary amino acid availability and anabolic signaling molecule phosphorylation is blunted in maintenance hemodialysis patients. *Med Sci Sports Exerc.* May;50 (5 S):825.
38. Skinner, S.K., Beals, J.W., van Vliet, S., Parel, J.T., Poozhikunnel, E. Ulanov, A.V., Li, L., Jäger R, Purpura, M., Paluska, S.A., Oliver, J., & **Burd, N.A.** (2018). Muscle protein synthetic responses after low-dose protein ingestion and resistance exercise in older women. *Med Sci Sports Exerc.* May;50 (5 S):750-751.
39. Scaroni, S.E., Skinner, S.K., Beals, J.W., van Vliet, S., Poozhikunnel, E., Jäger R, Purpura, M., Paluska, S.A., Oliver, J., & **Burd, N.A.** (2018). Resistance exercise and low dose protein ingestion augments anabolic signaling mechanisms in older women. *Med Sci Sports Exerc.* May;50 (5S):750.
40. Beals, J.W., Skinner, S.K., van Vliet, S., Martinez, I.G., Poozhikunnel, E.G., Ulanov, A.V., Li, L., Paluska, S.A., & **Burd, N.A.** (2018). Blunted muscle protein synthetic response to feeding and resistance exercise in obese young adults. *Med Sci Sports Exerc.* May;50 (5S):647.
41. Niemi, G.M., Walk, A.M., Edwards, C.G., Bailey, M.A., Skinner, S.K., De Lisio, M., **Burd, N.A.**, Holscher, H.D., & Khan, N. (2018). Chronic systemic inflammation moderates the relationship between adiposity and behavioral and neuroelectric indices of attention. *Med Sci Sports Exerc.* May;50 (5S):756.
42. Salvador, A.F., Skinner, S.K., Beals, J.W., Parel, J., Ulanov, A., Li, L., Paluska, S.A., Oliver, J.M., & **Burd, N.A.** (2018). Myofibrillar protein synthesis to traditional and cluster sets in trained young men and women. *Med Sci Sports Exerc.* May;50 (5S):646.

Selected Media Appearances (2013-present)

- 2018, Research featured in *Men's Health*. Want to Get Ripped? Eat 3 Whole Eggs After Your Workout.
- 2016, Interview for the *Globe and Mail*. The muscle-building power of milk vs. beef after a workout: which is better?
- 2015, Video for *Physiology of Sport and Exercise* (6th edition). L.W. Kenny, J.H. Wilmore, & D.L. Costill (Eds.). Leucine
- 2013, Video for *Nestle Nutrition Institute*. Does chronically consuming protein immediately after exercise actually cause you to get stronger or faster?

UNIVERSITY SERVICE (2013-Present)

Campus, University, and College Committees served.

University of Illinois

Campus Committees

- 2017-present **Institutional Review Board-BioMedical (IRB2)**
Role: Member
- 2017-present **Exercise is Medicine on Campus (EIM-OC)**
Role: Committee Chair; founding member; awarded gold level campus
- 2014, 2016 **UIUC Research Board Grant Reviewer**
Role: Reviewer

College committees

- 2015-2016 **Search committee**, Open-Rank Position, Communication Disorders Related to Head and Neck Cancer

Departmental committees

- 2016-2017 **Search committee**, Assistant Professor in Exercise Physiology
2017-2018 **Search committee**, Assistant/Associate Professor in Exercise Psychology

PROFESSIONAL & PUBLIC SERVICE

National Peer Review Committees

- 2015-present **American College of Sports Medicine**, Grant Review Committee

Editorial Board

- 2015-2017 **BMC Nutrition** – Associate editor
2017-present **Frontiers Nutrition**—Review editor

Manuscript Review (Ad-hoc)

The Journal of Physiology; The Journal of Applied Physiology; American Journal of Physiology: Endocrinology & Metabolism; American Journal of Physiology: Regulatory, Integrative, and Comparative

Physiology; Clinical Nutrition; Medicine and Science in Sports and Exercise; Scandinavian Journal of Medicine & Science in Sports; International Journal of Sport Nutrition and Exercise Metabolism; Journal of Sport Sciences; Nutrition & Metabolism; Nutrition Research; British Journal of Nutrition; Medicina Sportiva; American Journal of Clinical Nutrition; PlosOne; Experimental Gerontology; Sports Medicine Exercise and Sport Sciences Reviews; Applied Physiology, Nutrition, and Metabolism; Physiological Reports; Journal of Strength and Conditioning Research; Amino Acids; Journal of Musculoskeletal & Neuronal Interactions; Nutrients; Food Research International; Frontiers in Physiology; Obesity Journal; Frontiers in Nutrition

Public Service

2018-present	Director, Human Performance Testing
2018	NASA Sports Nutrition and Sports in Space (with Bruce W. Fouke)
2018	Christie Clinic Illinois Marathon Runner's Symposium
2018	EIM-OC sponsored event: Illini Veterans Memorial 5K
2017	Wellness on Wheels: Health promotion outreach
2017	Kinesiology Student Association (KSA): Health promotion outreach

INVITED SPEAKER (Selected presentations)

2018	“Protein” Gatorade Sports Science Institute’s Sports Nutrition Preconference to ACSM-Recent Advances in Sports Nutrition: Re-Visiting the Basics. Minneapolis, Minnesota. May 29 th , 2018.
2017	“Recent concepts related to dietary protein sources in optimizing protein intakes for athletes”. Gatorade Sports Institute (GSSI) Expert Panel. Sarasota, Florida. October 18 th , 2017. “Physiological demands on the tactical population from early to mid-career”. NSCA tactical strength and conditioning (TSAC) Leadership course. Colorado Springs, Colorado. October 11 th , 2017. “Maximizing protein in the diet with exercise” UIUC DNS Nutrition Symposium 2017. Faculty Mini-Symposium: Protein in the Modern World. April 19, 2017
2016	“Protein dense food consumption for skeletal muscle remodeling, and effect of adiposity”. National Pork Board meeting. St. Louis, Missouri. July 27, 2016 “Muscle protein synthesis: does protein and peptide intake matter, and is there a difference between proteins?”, The Marine Proteins and Peptides Symposium. Alesund, Norway, April 2016
2015	“Impact of protein ingestion on dietary protein digestion and absorption kinetics and postprandial muscle protein synthesis rates in healthy weight and obese adults”, Obesity week 2015, Young Investigator Challenge Competition. Los Angeles California, November, 2015 “Strategies to maximize skeletal muscle mass” Midwest University. May 20, 2015. Phoenix, AZ, USA
2014	“Maximizing muscle mass with postexercise protein intake” Experimental Biology (EB), San Diego, CA, USA
2013	“The ups and downs of muscle protein turnover: the role of food and exercise” University of Illinois at Urbana-Champaign. Nov 6 2013; Urbana, Illinois, USA

“The role of dietary protein in the regulation of muscle mass” University of Illinois at Chicago. Oct 18 2013; Chicago, Illinois, USA

“Does chronically consuming protein immediately after exercise actually cause you to get strong (resistance training) or faster (endurance training)?” American College of Sports Medicine (ACSM). May 28-June 1, 2013; Indianapolis, Indiana USA

“The effect of resistive exercise on muscle carbohydrate and protein metabolism. In symposium: “Acute and chronic responses to concentric and eccentric exercise”. American College of Sports Medicine (ACSM). May 28-June 1, 2013; Indianapolis, Indiana USA

“Contraction induced changes in muscle protein synthesis—Does exercise load matter?” In symposium: “Sensing the tension: Identifying Mechanotransducers that Regulate Muscle Growth”. American College of Sports Medicine (ACSM). May 28-June 1, 2013; Indianapolis, Indiana USA

“Protein intake – before, during, or after to enhance endurance and strength training adaptations” Danish Sports Medicine Congress. Invited lecture. Jan 31 – Feb 2, 2013; Kolding, Denmark

2012 “Protein and recovery from exercise – Are guidelines the same for all sorts of exercise?” American College of Sports Medicine (ACSM), invited lecture. May 30 2012, San Francisco, California USA

“Contractile and nutritional modulation of human skeletal muscle protein synthesis” In the masterclass for Prof. dr. Alfred Goldberg, Striated muscle plasticity and metabolism in health and disease, Maastricht University, January 16, 2012, Maastricht, Netherlands

2009 “Impact of resistance exercise intensity on human skeletal muscle protein synthesis.” Department of kinesiology seminar, McMaster University, October 22, 2009, Hamilton, ON, CA

“Impact of resistance exercise intensity and anabolic hormones on human skeletal muscle protein turnover” Department of Sport & Exercise Science Research seminar, University of Auckland, Tamaki Campus, October 9 2009, Auckland, NZ

“Scientific update related to resistance exercise intensity and protein dose effects on human skeletal muscle”. Sobre Entrenamiento Group Symposium. Online symposium. June 15, 2009

FUNDING

Ongoing Research Support

Vision 20/20 program, Primary Investigator: “Food first approach to stimulate muscle protein synthesis in health adults” Awarded: \$20,000 (September 2018 – 2020).

National Cattleman’s Association, Primary Investigator (with Naiman Khan & Steven Petruzzello): “The role of beef ingestion in supporting exercise-derived benefits for the muscle-brain interconnect” Awarded: \$74,187 USD (July 2018 – June 2019)

Alliance for Potato Research & Education (APRE), Primary Investigator: “Ingestion of potatoes as a nutritional strategy to improve cycling time-trial performance in endurance trained cyclist”

Awarded: \$90,378 USD (Sept 2017 – Aug 2018)

BiRimingham-Illinois Partnership for Discovery, EnGagement, and Education (BRIDGE) Seed Grant, Co-PI (with Leigh Breen): “Identifying the human protein turnover signature associated with exercise and inactivity by the use of dynamic proteomics”.

Awarded: \$9,000 USD (UIUC); £8500 (UoB) (June 2017 – May 2018)

National Cattleman’s Association, Primary Investigator: “The influence of regular beef consumption and protein density of the diet on training induced gains in muscle strength and performance in healthy adults”,
Awarded: \$253,626 USD (July 2016-June 2018).

Japan *Curves*, Co-Primary Investigator: “Nutritional strategies to augment the postprandial muscle protein synthetic response to the ingestion of a low dose of protein in older women”

Awarded: \$185,000 USD (June 2016-May 2018).

Hass Avocado Board, Co-Investigator: “Investigating the Effects of Avocado Intake on Metabolic and Cognitive Health: A Systems Approach”.

Awarded: \$887,221 USD (December 2015 – December 2017)

Completed Research Support

National Pork Board, Primary Investigator: “Effect of pork ingestion on postprandial mitochondrial protein synthesis and inflammation in healthy weight, overweight, and obese adults”,

Awarded: \$42,348 USD (May 2016 - April 2017).

UIUC Division of Nutritional Sciences, Primary Investigator: “Whole egg versus egg white consumption on postprandial protein handling *in vivo* in humans”

Awarded: \$20,000 USD (Oct 2015 – Oct 2017)

Division of Nutritional Sciences Vision 20/20 research program award, Co-Investigator: “The effects of overweight/obesity and acute dietary protein ingestion on muscle stem cell function”.

Awarded: \$22,500 USD (Oct 2014 – Oct 2016) - completed

National Pork Board, Primary Investigator: “Postprandial muscle protein synthetic response after high quality pork consumption in lean, overweight, and obese adults”.

Awarded: \$135,400 USD (Oct 2014 – Oct 2016) - completed

UIUC Center on Health, Aging, and Disability, Primary Investigator: “Protein ingestion after endurance exercise for muscle mass maintenance and metabolic health”

Awarded: \$20,000 USD - completed

University of Toronto Faculty of Kinesiology and Physical Education Research Grant, Co-Investigator: “Development of intrinsically-labeled egg proteins for the study of human protein metabolism”.

Awarded: \$5,000 CAD - completed

UIUC Research Board, Primary Investigator: “The time-dependent measurement of postprandial muscle protein synthesis rates by the use of doubly labeled milk proteins in humans”

Awarded: \$30,000 USD - completed

Graduate Student Fellowships

CAPES Foundation (Ministry of Education of Brazil), Amadeo Salvador, KCH graduate student: “Effect of the protein density of the diet on the skeletal muscle adaptive response to resistance exercise training”
Awarded: \$200,000 USD

Egg Nutrition Center/American Egg Board, Stephan van Vliet, KCH graduate student: “Nutritional strategies to support skeletal muscle mass maintenance with advancing age”
Awarded: \$20,000 USD - Completed

ACSM Foundation Doctoral Student Grant, Joseph Beals, DNS graduate student: “Resistance exercise as a strategy to enhance basal and postprandial muscle protein synthesis in obese adults”
Awarded: \$5,000 USD - Completed

European Society for clinical nutrition and metabolism (ESPEN), Stephan van Vliet, KCH graduate student: “Protein ingestion as a strategy to enhance muscle protein anabolism in hemodialysis patients”
Awarded: €50,000 - Completed

ACSM Foundation Doctoral Student Grant, Stephan van Vliet, KCH graduate student: “Intrinsically labeled egg protein for the in vivo measurement of human protein metabolism”
Awarded: \$5,000 USD-Completed

Kraft Human Nutrition Fellowship (2014), Joseph Beals, DNS graduate student
Awarded: \$20,810

AWARDS & RECOGNITION

2011	ACSM Charles M. Tipton National Student Research Award
2010	The Physiological Society Travel Grant. 2010 Awarded: £ 500
2010	McMaster University School of Graduate Studies International Excellence Award Awarded: \$10,000 CAD
Fall 2013	University of Illinois List of Teachers Ranked as Excellent by Their Students
2015	The American Society for Nutrition (ASN) Peter J. Reeds Young Investigator Award
Fall 2015	University of Illinois List of Teachers Ranked as Excellent by Their Students
Spring 2016	University of Illinois List of Teachers Ranked as Excellent by Their Students
2016	NIH Loan Repayment Program
Spring 2017	University of Illinois List of Teachers Ranked as Excellent by Their Students
Fall 2017	University of Illinois List of Teachers Ranked as Excellent by Their Students
Spring 2018	University of Illinois List of Teachers Ranked as Excellent by Their Students

ASSOCIATION MEMBERSHIPS

American Society for Nutrition
American College of Sports Medicine