CURRICULUM VITA ROGER MARO ENOKA

Place of Birth Palmerston North, New Zealand	Citizenship USA
Present Position	Business Address

Professor Department of Integrative Physiology

University of Colorado

Department of Integrative Physiology University of Colorado Boulder, CO 80309-0354 PHONE 303-492-7232

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Education

University of Otago, New Zealand University of Washington, Seattle University of Washington, Seattle Professional Experience	Dip. P.E. M.S. Ph.D.	1970 1976 1981	Physical Education Biomechanics of I Kinesiology	
Rongotai College, New Zealand		High	School Teacher	1971-1974

Rongotal College, New Zealand	riigii belloor reactier	17/1-17/7	
University of Washington, Seattle,	Teaching and Research	1974-1981	
Department of Kinesiology	Assistant		
University of Arizona, Tucson			
Department of Exercise & Sport Sciences	Assistant Professor	1981-1987	
	Associate Professor	1987-1992	
	Professor	1992-1993	
Department of Physiology	Assistant Professor	1986-1990	
	Associate Professor	1990-1992	
	Professor	1992-1993	
Cleveland Clinic Foundation			
Department of Biomedical Engineering	Staff Scientist	1993-1996	
University of Colorado Boulder			
Department of Kinesiology and Applied Physiology	Professor	1996-2003	
Department of Kinesiology and Applied Physiology	Chair	2001-2003	
Department of Integrative Physiology	Professor	2003-Present	
Department of Integrative Physiology	Chair	2003-2014	
University of Colorado Denver, Anschutz Medical Campus			
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Department of Medicine, Geriatrics Adjoint Professor 2003- Present Adjoint Professor Department of Neurology 2011- Present

Major Fields of Research

Biomechanics of Human Movement Neurophysiology of Movement

Professional Organizations

American College of Sports Medicine American Physiological Society American Society of Biomechanics Society for Neuroscience

Honors and Awards		
President, American Society Presidential lecture, annual r	meeting of the American College of Sports Medicine onal Society of Biomechanics	1989-1990 2004 2011 2012
Pre- and Postdoctoral Trainee	s	
1. Doctoral Students		
James D. Howard, B.S., M.S Present position:		1983 - 1987
Douglass H. Laidlaw, B.S., I	M.S., Ph.D.	1993 - 2000
Present position:	President Summit Scientific Consulting	
J. Timothy Noteboom, B.S., Present position:	P.T., M.S., Ph.D. Assistant Dean and Associate Professor Department of Physical Therapy Regis University Denver, Colorado	1997 - 2000
Kurt W. Kornatz, M.S., Ph.I).	1999 - 2004
Present position:	Assistant Professor Department of Exercise and Sport Science University of North Carolina–Greensboro	
Anna Marie Taylor, B.S., Ph Present position:		1999 - 2003
Kevin Keenan, M.S., Ph.D. Present position:	Associate Professor Department of Human Movement Sciences University of Wisconsin Milwaukee, WI	2000 - 2005
Carol Mottram, B.S., P.T., P		2000 - 2005
Present position:		2000 2000
Brach Poston, M.S., Ph.D.		2002 - 2006
Present position:	Assistant Professor Department of Kinesiology and Nutrition Sciences University of Nevada, Las Vegas Las Vegas NV	
Zach Riley, M.S., Ph.D.	Las Vegas, NV	2004 - 2008
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Present position:	Assistant Professor Department of Kinesiology Indiana University-Purdue University Indianapolis Indianapolis, IN	
Mark Jesunathadas, B.S., Ph		2005 - 2009
Present position:	High School Teacher Missingingi State, MS	
Adam Marmon, M.S., Ph.D.	Mississippi State, MS	2005 - 2009
Present position:	Postdoctoral Fellow Department of Physical Therapy University of Delaware Newark, DE	2000 2009
Michael Pascoe, B.A., M.S.,	Ph.D.	2005 - 2010
Present position:	Assistant Professor Physical Therapy Program Anschutz Medical Campuse University of Colorado Denver, Colorado	
Matt Holmes, M.S., Ph.D.		2007 - 2012
Present position:	Postdoctoral Fellow Department of Internal Medicine University of Utah Salt Lake City, Utah	
Jamie Justice, B.A., M.S., Ph	n.D.	2007 - 2013
Present position:	Research Fellow School of Medicine Wake Forest University Greensboro/Winston-Salem, NC	
Jeffrey Gould, B.A., M.S.		2010 - 2015
Present position:	Research Scientist Zoll Medical Corporation Boston, MA	
Diba Mani, B.A., M.S.		2011 - Present
Present position:	Graduate Student Department of Integrative Physiology University of Colorado Boulder, Colorado	
Awad Almuklass, P.T., M.So	2.	2013 - Present
Present position:	Graduate Student Department of Integrative Physiology University of Colorado Boulder, Colorado	
Landon Hamilton, B.S., M.A	۸.	2013 - Present
	Graduate Student	

	Department of Integrative Physiology University of Colorado Boulder, Colorado	
Karim Derqaoui, B.A., M.S.		2015 - Present
Present position:	Graduate Student Department of Integrative Physiology University of Colorado Boulder, Colorado	
Robyn Capobianco, B.A., M	.A.	2015 - Present
Present position:	Graduate Student Department of Integrative Physiology University of Colorado Boulder, Colorado	
Daniel Feeney, B.S., M.S.		2015 - Present
Present position:	Graduate Student Department of Integrative Physiology University of Colorado Boulder, Colorado	
Leah Davis, B.A., M.S.		2015 - Present
Present position:	Graduate Student Department of Integrative Physiology University of Colorado Boulder, Colorado	
2. Postdoctoral Fellows		
Grant A. Robinson, Ph.D.		1986 - 1989
Present position:	Assistant Research Professor Experimental Surgery Duke University Durham, NC	
S. Jayne Garland, Ph.D.	2 dinam, 1 (C	1988 - 1989
Present position:	Professor and Director School of Physical Therapy University of Western Ontario	
	London, Ontario Canada	
Lawrence P. Serrano, M.D.		1988 - 1989
Present position:	Physician Private Practice Wickenberg, Arizona	
Andrew J. Fuglevand, Ph.D.		1989 - 1992
Present position:	Associate Professor Department of Physiology University of Arizona Tucson, Arizona	

Guang Yue, Ph.D. 1991 - 1996 Present position: Research Scientist Department of Biomedical Engineering Cleveland Clinic Foundation Cleveland, Ohio Diana S. Glendinning, Ph.D. 1992 - 1994 Present position: **Associate Professor** Graduate Program in Health Sciences Seton Hall University South Orange, New Jersey Martin Bilodeau, Ph.D. 1993 - 1995 Present position: Associate Professor École des sciences de la réadaptation Université d'Ottawa Canada Sophie De Serres, Ph.D. 1996 - 1999 Scientific Advisor Present position: Gestion de la qualité Institut de recherché Robert-Sauvé et en sécurité travail Montreal, Canada John G. Semmler, Ph.D. 1997 - 2002 Senior Lecturer Present position: School of Molecular & Biomedical Science University of Adelaide Adelaide, Australia 1997 - 2003 Brian L. Tracy, Ph.D. **Associate Professor** Present position: Department of Health and Exercise Science Colorado State University Fort Collins, Colorado Sandra K. Hunter, Ph.D. 1999 - 2003 Present position: Professor Department of Physical Therapy Marquette University Milwaukee, Wisconsin 2000 - 2006 Evangelos Christou, Ph.D. Professor Present position: Department of Kinesiology and Applied Physiology University of Florida Gainesville, Florida Jennifer Jakobi, Ph.D. 2001 - 2002 Present position: Assistant Professor Department of Human Kinetics University of British Columbia

	Okanagan, BC	
Thorsten Rudroff, Ph.D.		2002 - 2012
Present position:	Assistant Professor	
	Department of Health and Exercise Science	
	Colorado State University	
	Fort Collins, Colorado	
Katrina Maluf, Ph.D.		2002 - 2005
	Associate Professor	2002 2000
11 333111 F 331113111	Physical Therapy Program	
	San Diego State University	
Minoru Shinohara, Ph.D.	Sum Briege Sume Surversity	2003 - 2006
Present position:	Associate Professor	2000 2000
Tresent position.	School of Applied Physiology	
	Georgia Institute of Technology	
	Atlanta, Georgia	
Chat Marita Dh. D	Triania, Georgia	2003 - 2004
Chet Moritz, Ph.D.	Assistant Professor	2005 - 2004
Fresent position.		
	Department of Physical Medicine University of Washington	
	•	
	Seattle, Washington	
Ben Barry, Ph.D.		2004 - 2007
Present position:		
	Program Authority for Exercise Physiology	
	School of Medical Sciences	
	University of New South Wales	
	Sydney, Australia	
Kimberlee Jordan, Ph.D.		2006 - 2009
Present position:	Human Movement Scientist	
	Callaghan Innovation	
	Christchurch, New Zealand	
Didier Staudenmann, Ph.D.		2006 - 2007
Present position:	Assistant Professor	
	Department of Medicine, Unit Sports Science	
	University of Fribourg	
	Fribourg, Switzerland	
Stéphane Baudry, Ph.D.	<i>5</i> ,	2007 - 2009
Present position:	Research Associate	2007 - 2009
resent position.	Laboratory of Applied Biology	
	Institut des Sciences de la Motricité	
	Université Libre de Bruxelles	
	Bruxelles, Belgium	
	Dianches, Deigium	2012 2012
Christopher Arellano, Ph.D.		2012 - 2013
Present position:	Research Associate	
	Department of Ecology and Evolutionary Biology	

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Brown University Providence, RI

Boris Matkowski, Ph.D.

2013 - 2014

Present position: Research Associate

Faculté des Sciences du Sport Université de Bourgogne

Dijon, France

Publications

A. Manuscripts Published in Refereed Journals

- A1. Enoka RM. Ground reaction force during the pull. **International Olympic Lifter** V: 32-35, 1979.
- A2. Enoka, R.M. The pull in Olympic weightlifting. **Medicine and Science in Sports** 11: 131-137, 1979.
- A3. Enoka RM, Hutton RS, Eldred E. Changes in excitability of tendon tap and Hoffmann reflexes following voluntary contractions. **Electroencephalography and Clinical Neurophysiology** 48: 664-672, 1980.
- A4. Enoka RM, Miller DI, Burgess EM. Below-knee amputee running gait. **American Journal of Physical Medicine** 61: 66-84, 1982.
- A5. Enoka RM. Muscular control of a learned movement: The speed control system hypothesis. **Experimental Brain Research** 51: 135-145, 1983.
- A6. Koehler W, Hamm TM, Enoka RM, Stuart DG, Windhorst U. Contraction of single motor units are reflected in membrane potential changes of homonymous alpha–motoneurons. **Brain Research** 296: 379-384, 1984.
- A7. Koehler W, Hamm TM, Enoka RM, Stuart DG, Windhorst U. Linear and nonlinear summation of a-motoneuron potential changes elicited by contractions of homonymous motor units in cat medial gastrocnemius. **Brain Research** 296: 385-388, 1984.
- A8. Heckman CJ, Condon SM, Hutton RS, Enoka RM. Can Ib axons be selectively activated by electrical stimuli in human subjects? **Experimental Neurology** 86: 576-582, 1984.
- A9. Hutton RS, Enoka RM, Suzuki S. Activation history and constant errors in human force production. **Brain Research** 307: 344-346, 1984.
- A10. Hasan Z, Enoka RM. Isometric torque-angle relationship and movement-related activity of human elbow flexors: Implications for the equilibrium-point hypothesis. **Experimental Brain Research** 59: 441-450, 1985.
- A11. Koehler W, Hamm TM, Enoka RM, Stuart DG, Windhorst U. Stimulus-related correlations between medial gastrocnemius muscle tension and homonymous motoneuron membrane potential result from non-linearities. **Brain Research** 343: 388-393, 1985.
- A12. Howard JD, Hoit JD, Enoka RM, Hasan Z. Relative activation of two human elbow flexors under isometric conditions: A cautionary note concerning flexor equivalence. **Experimental Brain Research** 62: 199-202, 1986.

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A13. Hutton RS, Enoka RM. Kinematic assessment of a functional role for recurrent inhibition and selective recruitment. **Experimental Neurology** 93: 369-379, 1986.

- A14. Windhorst U, Christakos CN, Koehler W, Hamm TM, Enoka RM, Stuart DG. Amplitude reduction of motor unit twitches during repetitive activation is accompanied by relative increase of hyperpolarizing membrane potential trajectories in homonymous a–motoneurons. **Brain Research** 398: 181-184, 1986.
- A15. Gordon DA, Hamm TM, Enoka RM, Reinking RM, Windhorst U, Stuart DG. Measurement of axonal conduction velocity in single mammalian motor axons. **Journal of Neuroscience Methods** 19: 267-284, 1987.
- A16. Enoka RM, Robinson GA, Kossev AR. A stable, selective electrode for recording single motor-unit potentials in humans. **Experimental Neurology** 99: 761-764, 1988.
- A17. Enoka RM. Load- and skill-related changes in segmental contributions to a weightlifting movement. **Medicine and Science in Sports and Exercise** 20: 178-187, 1988.
- A18. Enoka RM, Rankin LL, Joyner MJ, Stuart DG. Fatigue-related changes in neuromuscular excitability of rat hindlimb muscles. **Muscle & Nerve** 11: 1123-1132, 1988.
- A19. Taylor JA, Chase PR, Enoka RM, Seals DR. Cardiovascular adjustments to rhythmic handgrip exercise: relationship to electromyographic activity and post-exercise hyperemia. **European Journal of Applied Physiology** 58: 32-38, 1988.
- A20. Nemeth PM, Norris GJ, Lowry OH, Gordon DA, Enoka RM, Stuart DG. Activation of muscle fibers in individual motor units revealed by 2–deoxyglucose–6–phosphate. **Journal of Neuroscience** 11: 3959-3966, 1988.
- A21. Rankin LL, Enoka RM, Volz KA, Stuart DG. Coexistence of twitch potentiation and tetanic force decline in rat hindlimb muscle. **Journal of Applied Physiology** 65: 2687-2695, 1988.
- A22. Enoka RM, Rankin LL, Stuart DG, Volz KA. Fatigability of rat hindlimb muscle: Associations between electromyogram and force during a fatigue test. **Journal of Physiology** 408: 251-270, 1989.
- A23. Seals DR, Enoka RM. Sympathetic activation is associated with increases in EMG during fatiguing exercise. **Journal of Applied Physiology** 66: 88-95, 1989.
- A24. Enoka RM, Robinson GA, Kossev AR. Task and fatigue effects on low threshold motor units in a human hand muscle. **Journal of Neurophysiology** 62: 1344-1359, 1989.
- A25. Gordon DA, Enoka RM, Stuart DG. Motor-unit force potentiation during a standard fatigue test in the adult cat. **Journal of Physiology** 421: 569-582, 1990.
- A26. Gordon DA, Enoka RM, Karst GM, Stuart DG. Force development and decay in single motor units of adult cats during a standard fatigue test. **Journal of Physiology** 421: 583-595, 1990.
- A27. Howard JD, Enoka RM. Maximum bilateral contractions are modified by neurally mediated interlimb effects. **Journal of Applied Physiology** 70: 306-316, 1991.
- A28. Trimble MH, Enoka RM. Mechanisms underlying the training effects associated with neuromuscular electrical stimulation. **Physical Therapy** 71: 273-282, 1991.
- A29. Robinson GA, Enoka RM, Stuart DG. Immobilization-induced changes in motor unit force and fatigability in the cat. **Muscle & Nerve** 14: 563-573, 1991.

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- A30. Enoka RM, Trayanova N, Laouris Y, Bevan L, Reinking RM, Stuart DG. Fatigue-related changes in motor unit action potentials of adult cats. **Muscle & Nerve** 14: 138-150, 1992.
- A31. Enoka RM, Stuart DG. Neurobiology of muscle fatigue. **Journal of Applied Physiology** 72: 1631-1648, 1992.
- A32. Nordstrom MA, Fuglevand AJ, Enoka RM. Estimating the strength of common input to human motoneurons from the cross-correlogram. **Journal of Physiology** 453: 547-574, 1992.
- A33. Fuglevand AJ, Zackowski KM, Huey KA, Enoka RM. Impairment of neuromuscular propagation during human fatiguing contractions at submaximal forces. **Journal of Physiology** 460: 549-572, 1993.
- A34. Galganski ME, Fuglevand AJ, Enoka RM. Reduced control of motor output in a human hand muscle of elderly subjects during submaximal contractions. **Journal of Neurophysiology** 69: 2108-2115, 1993.
- A35. Glendinning DS, Enoka RM. Motor unit behavior in Parkinson's disease. **Physical Therapy** 74: 61-70, 1994.
- A36. Garland SJ, Gerilovsky L, Enoka RM. Association of recording techniques and muscle architecture on H-reflex shape and amplitude. **Muscle & Nerve** 17: 581-592, 1994.
- A37. Garland SJ, Enoka RM, Serrano LP, Robinson GA. Behavior of motor units in human biceps brachii during a fatiguing submaximal contraction. **Journal of Applied Physiology** 76: 2411-2419, 1994.
- A38. Yue G, Alexander AL, Laidlaw D, Gmitro AF, Unger EC, Enoka RM. Sensitivity of muscle proton spin-spin relaxation time as an index of muscle activation. **Journal of Applied Physiology** 77: 84-92, 1994.
- A39. Keen DA, Yue GH, Enoka RM. Training-related enhancement in the control of motor output in elderly humans. **Journal of Applied Physiology** 77: 2648-2658, 1994.
- A40. Nordstrom MA, Enoka RM, Reinking RM, Callister RC, Stuart DG. Reduced motor unit activation of muscle spindles and tendon organs in the immobilized cat hindlimb. **Journal of Applied Physiology** 78: 901-913, 1995.
- A41. Fuglevand AJ, Bilodeau M, Enoka RM. Short-term immobilization has a minimal effect on the strength and fatigability of a human hand muscle. **Journal of Applied Physiology** 78: 847-855, 1995.
- A42. Yue G, Fuglevand AJ, Nordstrom MA, Enoka RM. Limitations of the surface-EMG technique for estimating motor unit synchronization. **Biological Cybernetics** 73: 223-233, 1995.
- A43. Spiegel KM, Stratton J, Burke JR, Glendinning DS, Enoka RM. Influence of age on the assessment of motor unit activation in a human hand muscle. **Experimental Physiology** 81: 805-819, 1996.
- A44. Enoka RM. Eccentric contractions require unique activation strategies by the nervous system. **Journal of Applied Physiology** 81: 2339-2346, 1996.

A45. Yue GH, Bilodeau M, Hardy PA, Enoka RM. Task-dependent effect of limb immobilization on the fatigability of the elbow flexor muscles in humans. **Experimental Physiology** 82: 567-592, 1997.

- A46. Enoka RM. Neural adaptations with chronic physical activity. **Journal of Biomechanics** 30: 447-455, 1997.
- A47. De Serres SJ, Enoka RM. Older adults can maximally activate the biceps brachii muscle by voluntary command. **Journal of Applied Physiology** 84: 284-291, 1998.
- A48. Laidlaw DH, Kornatz KW, Keen DA, Suzuki S, Enoka RM. Strength training improves the steadiness of slow lengthening contractions performed by old adults. **Journal of Applied Physiology** 87: 1786-1795, 1999.
- A49. Semmler JG, Kutzscher DV, Enoka RM. Gender differences in the fatigability of human skeletal muscle. **Journal of Neurophysiology** 82: 3590-3593, 1999.
- A50. Laidlaw DH, Bilodeau M, Enoka RM. Steadiness is reduced and motor unit discharge is more variable in old adults. **Muscle & Nerve** 23: 600-612, 2000.
- A51. Yao WX, Fuglevand AJ, Enoka RM. Motor-unit synchronization increases EMG amplitude and decreases force steadiness in simulated contractions. **Journal of Neurophysiology** 83: 441-452, 2000.
- A52. Graves AE, Kornatz KW, Enoka RM. Older adults use a unique strategy to lift inertial loads with the elbow flexor muscles. **Journal of Neurophysiology** 83: 2030-2039, 2000.
- A53. Bilodeau M, Keen DA, Sweeney PJ, Shields RW, Enoka RM. Strength training enhances motor output in persons with essential tremor. **Muscle & Nerve** 23: 771-778, 2000.
- A54. Burnett RA, Laidlaw DH, Enoka RM. Coactivation of the antagonist muscle does not covary with steadiness in old adults. **Journal of Applied Physiology** 89: 61-71, 2000.
- A55. Semmler JG, Steege JW, Kornatz KW, Enoka RM. Motor-unit synchronization is not responsible for larger motor-unit forces in old adults. **Journal of Neurophysiology** 84: 358-366, 2000.
- A56. Semmler JG, Kutzscher DV, Enoka RM. Limb immobilization alters muscle activation patterns during a fatiguing isometric contraction. **Muscle & Nerve** 23: 1381-1392, 2000.
- A57. Noteboom JT, Fleshner M, Enoka RM. Activation of the arousal response impairs the performance on a simple motor task. **Journal of Applied Physiology** 91: 821-831, 2001.
- A58. Noteboom JT, Barnholt KR, Enoka RM. Activation of the arousal response and impairment of performance increase with anxiety and stressor intensity. **Journal of Applied Physiology** 91: 2093-2101, 2001.
- A59. Kern DS, Semmler JG, Enoka RM. Long-term activity in upper- and lower-limb muscles of humans. **Journal of Applied Physiology** 91: 2224-2232, 2001.
- A60. Hunter SK, Enoka RM. Sex differences in the fatigability of arm muscles depends on absolute force during isometric contraction. **Journal of Applied Physiology** 91: 2686-2694, 2001.

A61. Tracy BL, Enoka RM. Older adults are less steady during submaximal isometric contractions with the knee extensor muscles. **Journal of Applied Physiology** 92: 1004-1012, 2002.

- A62. Taylor AM, Steege JW, Enoka RM. Motor-unit synchronization alters spike-triggered average force in simulated contractions. **Journal of Neurophysiology** 88: 265-276, 2002.
- A63. Laidlaw DH, Hunter SK, Enoka RM. Nonuniform activation of the agonist muscle does not covary with index finger acceleration in old adults. **Journal of Applied Physiology** 93: 1400-1410, 2002.
- A64. Semmler JG, Kornatz KW, Dinenno DV, Zhou S, Enoka RM. Motor unit synchronisation is enhanced during slow lengthening contractions of a hand muscle. **Journal of Physiology** 545: 681-695, 2002.
- A65. Hunter SK, Ryan DL, Ortega JD, Enoka RM. Task differences with the same load torque alter the endurance time of submaximal fatiguing contractions in humans. **Journal of Neurophysiology** 88: 3087-3096, 2002.
- A66. Hunter SK, Enoka RM. Changes in muscle activation can prolong the endurance time of a submaximal isometric contraction in humans. **Journal of Applied Physiology** 94: 108-118, 2003.
- A67. Enoka RM, Christou EA, Hunter SK, Kornatz KW, Semmler JG, Taylor AM, Tracy BL. Mechanisms that contribute to differences in motor performance between young and old adults. **Journal of Electromyography and Kinesiology** 13: 1-12, 2003.
- A68. Shinohara M, Keenan KG, Enoka RM. Contralateral activity in a homologous hand muscle during voluntary contractions is greater in old adults. **Journal of Applied Physiology** 94: 966-974, 2003.
- A69. Christou EA, Shinohara M, Enoka RM. Fluctuations in acceleration during voluntary contractions impair movement accuracy more in older adults. **Journal of Applied Physiology** 95: 373-384, 2003.
- A70. Hunter SK, Lepers R, MacGillis CJ, Enoka RM. Activation among the elbow flexor muscles differs when maintaining arm position during a fatiguing contraction. **Journal of Applied Physiology** 94: 2438-2447, 2003.
- A71. Semmler JG, Kornatz KW, Enoka RM. Motor-unit coherence during isometric contractions is greater in a hand muscle of older adults. **Journal of Neurophysiology** 90: 1346-1349, 2003.
- A72. Taylor AM, Christou EA, Enoka RM. Multiple features of motor-unit activity influence force fluctuations during isometric contractions. **Journal of Neurophysiology** 90: 1350-1361, 2003.
- A73. Hunter SK, Critchlow A, Sin I-S, Enoka RM. Time to task failure for a sustained contraction is similar in men and women matched for strength. **Journal of Applied Physiology** 96: 195-202, 2004.
- A74. Taylor AM, Enoka RM. Quantification of the factors that influence discharge correlation in model motor neurons. **Journal of Neurophysiology** 91: 796-814, 2004.

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A75. Tracy BL, Byrnes WC, Enoka RM. Strength training reduces force fluctuations during anisometric contractions of the quadriceps femoris muscles in old adults. **Journal of Applied Physiology** 96:1530-1540, 2004.

- A76. Taylor AM, Enoka RM. Optimization of input patterns and neuronal properties to evoke motor neuron synchronization. **Journal of Computational Neuroscience** 16: 139-157, 2004.
- A77. Farina D, Merletti R, Enoka RM. The extraction of neural strategies from the surface EMG. **Journal of Applied Physiology** 96:1486-1495, 2004.
- A78 Hunter SK, Duchateau J, Enoka RM. Muscle fatigue and the mechanisms of task failure. **Exercise and Sport Sciences Reviews** 32: 44-49, 2004.
- A79. Christou EA, Jakobi JM, Critchlow A, Fleshner M, Enoka RM. The 1-2 Hz oscillations in muscle force are exacerbated by stress, especially in older adults. **Journal of Applied Physiology** 97: 225-235, 2004.
- A80. Callister RJ, Sesodia SJ, Enoka RM, Nemeth PM, Reinking RM, Stuart DG. Fatigue of rat hindlimb motor units: biochemical-physiological associations. **Muscle & Nerve** 30: 714-726, 2004.
- A81. Hunter SK, Critchlow A, Sin I-S, Enoka RM. Men are more fatigable than strength-matched women when performing intermittent fatiguing contractions. **Journal of Applied Physiology** 96: 2125-2132, 2004.
- A82. Hunter SK, Critchlow A, Enoka RM. A sex difference in muscle fatigability exists in young adults but not old adults. **Journal of Applied Physiology** 97: 1723-1732, 2004.
- A83. Rudroff T, Poston B, Shin I-S, Bojsen-Møller J, Enoka RM. Net excitation of the motor unit pool varied with load type during fatiguing contractions. **Muscle & Nerve** 29: 78-87, 2005.
- A84. Mottram CJ, Jakobi JM, Semmler JG, Enoka RM. Motor unit activity differs with load type during a fatiguing contraction. **Journal of Neurophysiology** 93: 1381-1392, 2005.
- A85. Keenan KG, Farina D, Maluf KS, Merletti R, Enoka RM. The influence of amplitude cancellation on the simulated surface electromyogram. **Journal of Applied Physiology** 98: 120-131, 2005.
- A86. Moritz CT, Barry BK, Pascoe MA, Enoka RM. Discharge rate variability influences the variation in force fluctuations across the working range of a hand muscle. **Journal of Neurophysiology** 93: 2449-2459, 2005.
- A87. Shinohara M, Keenan KG, Enoka RM. Fluctuations in motor output during steady contractions are weakly related across contraction types and between hands. **Muscle & Nerve** 31:741-750, 2005.
- A88. Hunter SK, Rochette L, Critchlow A, Enoka RM. Time to task failure differs with load type when old adults perform a submaximal fatiguing contractions. **Muscle & Nerve** 31:730-740, 2005.
- A89. Moritz CT, Christou EA, Meyer FG, Enoka RM. Coherence at 16-32 Hz can be caused by short-term synchrony of motor units. **Journal of Neurophysiology** 94: 105-118, 2005.

A90. Maluf KS, Shinohara M, Stephenson JL, Enoka RM. Muscle activation and time to task failure differ with load type and contraction intensity for a human hand muscle.

Experimental Brain Research 167:165-177, 2005.

- A91. Kornatz KW, Christou EA, Enoka RM. Practice reduces motor unit discharge variability in a hand muscle and improves manual dexterity in old adults. **Journal of Applied Physiology** 98: 2072-2080, 2005.
- A92. Maluf KS, Enoka RM. Task failure during fatiguing contractions performed by humans. **Journal of Applied Physiology** 99: 389-396, 2005.
- A93. Tracy BL, Maluf KS, Stephenson JL, Hunter SK, Enoka RM. Variability of motor unit discharge and force fluctuations across a range of muscle forces in older adults. **Muscle & Nerve** 32: 533-540, 2005.
- A94. Hunter SK, Critchlow A, Enoka RM. Muscle fatigability is less for old men compared with strength-matched young men. **Journal of Applied Physiology** 99: 890-897, 2005.
- A95. Mottram CJ, Christou EA, Meyer FG, Enoka RM. Frequency modulation of motor unit discharge has task-dependent effects on fluctuations in motor output. **Journal of Neurophysiology** 94: 2878-2887, 2005.
- A96. Keenan KG, Farina D, Merletti R, Enoka RM. Influence of motor unit properties on the size of the simulated evoked surface EMG potential. **Experimental Brain Research** 169: 37-49, 2006.
- A97. Shinohara M, Moritz CT, Pascoe MA, Enoka RM. Prolonged vibration increases stretch reflex amplitude, motor unit discharge rate, and force fluctuations in a hand muscle. **Journal of Applied Physiology** 99: 1835-1842, 2005.
- A98. Tracy BL, Enoka RM. Steadiness training with light loads in the knee extensors of elderly adults. **Medicine and Science in Sports and Exercise** 38: 735-745, 2006.
- A99. Mottram CJ, Maluf KS, Stephenson JL, Andersen MK, Enoka RM. Prolonged vibration of the biceps brachii tendon reduces time to failure when maintaining arm position with a submaximal load. **Journal of Neurophysiology** 95: 1185-1193, 2006.
- A100. Semmler JG, Kornatz KW, Meyer FG, Enoka RM. Diminished task-related adjustments of common inputs to hand muscle motor neurons in older adults. **Experimental Brain Research** 172: 507-518, 2006.
- A101. Keenan KG, Farina D, Merletti R, Enoka RM. Amplitude cancellation reduces the size of motor unit potentials averaged from the surface EMG. **Journal of Applied Physiology** 100: 1928-1937, 2006.
- A102. Mottram CJ, Hunter SK, Rochette L, Anderson MK, Enoka RM. Time to task failure varies with gain of the feedback signal for women, but not for men. **Experimental Brain Research** 174: 575-587, 2006.
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C. Published Abstracts and Short Communications

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