

**M. Elaine Cress, Ph.D.**  
**Department of Kinesiology**  
**College of Education**  
**The University of Georgia**  
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### **Academic History**

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<b>Name</b>	M. Elaine Cress
<b>Present rank</b>	Professor
<b>Highest degree</b>	PhD, University of Wisconsin-Madison 1989.

#### **Academic Positions**

- Professor, Department of Kinesiology and Institute of Gerontology Faculty, 2007 to present.
- Associate Professor, Department of Kinesiology and Institute of Gerontology Faculty, 1998 -2007.
- Research Assistant Professor, Department of Health Services and Community Medicine, Department of Medicine / Division of Geriatrics, University of Washington at Seattle. June 1993 to March 1998.
- Senior Research Fellow, Department of Medicine, Division of Geriatrics/Gerontology University of Washington, August, 1989 to May, 1993
- Teaching Assistant, Department of Preventive Medicine University of Wisconsin at Madison. August 1984 to March 1989
- Graduate Assistant, Human Performance Laboratory, University of Colorado at Boulder August 1982 to 1984.

#### **Post-Graduate Awards**

- 1989-1993 University of Washington, Division of Geriatrics Senior Research Fellow Geriatrics
- 1996 American College Sports Medicine, Fellow

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### **INSTRUCTION**

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#### **Gerontology – Graduate Courses**

Biogerontology  
Public Health and Aging

#### **Kinesiology – Undergraduate and Graduate Courses**

Exercise and Aging and Practicum in Exercise and Aging  
Community and Public Health Physical Activity Interventions

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### Scholarly Activities

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#### A. PUBLICATIONS

\* identifies publication that has gone through stringent refereed process.  
\*\* identifies publication that was invited.  
No asterisk identifies publication that has gone through editorial review.

#### Chapters in Books

- \* \*\*Cress, M. E. (2005) Assessing cognitive and physical performance in older adults with special attention to fitness. Poon, L. W., Tomporowski, P. D., Chodzko-Zaiko, W. J. Aging, Exercise, and Cognition Volume I: Active Living, Cognitive Functioning and Aging. Champaign, IL: Human Kinetics. (100%)
- \* \*\*Cress, M.E. (2000) Muscle Function in Masters Athletes. BL. Drinkwater (Editor), International Olympic Committee Encyclopedia (Vol. Women in Sport pp. 144-157. Oxford, UK: Blackwell Science. (100%)
- \* \*\*Miszko, T.A., & Cress, M.E. (2000) A lifetime of fitness: Exercise in the perimenopausal and postmenopausal woman. Clinics in Sports Medicine, 19(2), 215-232. (70%; Student under my direction)
- \* \*\*Cress, M.E., & Green F.A. (1996) Exercise and aging: Physical fitness. M. A. Stenchever (ed), Health care for the older woman (pp. 69-84). New York: Chapman & Hall. (95%)
- \* \*\*Buchner, D.M., Guralnik, J.M., & Cress, M.E. (1995) The clinical assessment of gait, balance, and mobility in older adults. L. Z. Rubenstein, D. Wieland, & R. Bernabei (eds), Geriatric Assessment Technology: The State of the Art (pp. 75-89). Milan, Italy: Kurtis. (25%)
- \*\*Cress, M. E. (1994) Exercise and Older Women. R. Agostini Medical and Orthopedic Issues in Active and Athletic Women (pp. 68-74). Philadelphia: Hanley and Belfus. (100%)

#### Journal articles

- Cress, M.E., Orini, S. & Mueller, G. (in press) Response to unconventional views of frailty, Journal of Gerontology Medical Sciences.
- \*Arnett, S.W., Laity, J.H., Agrawal, S.K., & Cress, M.E. Aerobic reserve and physical functional performance in older adults, Age and Aging (in press).

- \*Moore, T. L. Spear, E. M. Johnson, F. T., and Cress, M. E. The effects of aerobic training and nutrition education on functional performance in low socioeconomic older adults. Journal Geriatric Physical Therapy. in press.
- Frisard, M.L., Fabre, J.M., Russell, R.D., King, C.M., DeLany, J.P., Wood, R.H., Ravussin for the Louisiana Healthy Aging Study. (2007) Physical activity level and physical functionality in nonagenarians compared to individuals aged 60-74 years. Journal of Gerontology Medical Sciences 62A (7) 783-788.
- Hearty, T. M. Schenkman M. L. Cress M. E. Kohrt W. M. (2007) Continuous Scale Physical Functional Performance Test: Appropriateness in middle-aged adults with and without Parkinson's Disease. Journal of Neurological Physical Therapy. 31:64-70.
- Panton, L. B., Kingsley, D., Toole, T., Cress, M. E., Abboud, G., Sirithienthad, P., Mathis, R., and McMillan, V. A. (2006) Comparison of Physical Functional Performance and Strength in Women with Fibromyalgia, Age and Weight Matched Controls, and Older Healthy Women. Physical Therapy. 86(11)1479-1488.
- Cress, M.E., Petrella, J.K., Moore, T.L., & Schenkman, M.L. (2005) Continuous-Scale Physical Functional Performance Test: Validity, Reliability, and Sensitivity of Data for the Short Version. Physical Therapy. 85(4):323-335. (30%).
- Wood, R.H. Gardner, R.E. Ferachi, K.A., King, C., Ermolao A.; Cherry, K.E.; Cress, M.E., & Jazwinski, S.M. (2005) Physical function and quality of life in older adults: sex differences. Southern Medical Association. 98(5):504-512. (10%)
- Cress M.E., Buchner D.M., Prohaska T., Rimmer J., Brown M., Macera C., DePietro L., & Chodzko-Zajko W. (2004) Physical activity programs and behavior counseling in older adult populations. Medicine and Science in Sports and Exercise. 36(11):1997-2003. (30%).
- \*Petrella, J.K., & Cress, M.E. (2004) Daily Ambulation activity and task performance in community-dwelling older adults with preclinical disability 63-71 years of age, Journal Gerontology Medical Sciences. 59A(3)264-267. (50%; student under my direction).
- \*Petrella, J.K., Cress, M.E., & Miller, L.S. (2004) The relationship of cognition and leg extension power to physical function in older adults. Age & Aging. 33:342-348 (30%; student under my direction).
- Ades, P.A., Savage, P., Cress, M.E., Brochu, M. Lee, N.M., Poehlman, E.T., (2003) Resistance training and physical performance in older disabled female cardiac patients. Medicine Science in Sports and Exercise 35 (8) 1265-1270.
- McCamey, M.A., Hawthorne, N.A., Reddy, S., Cress, M.E. & Johnson, M. A. (2003) A statewide educational intervention to improve older Americans' nutrition and physical activity. Family Economics and Nutrition Review. 15(1):47-57. (5%).
- \*Slade, J.M., De Los Santos, H.I. & Cress, M.E. (2003) Performance and characteristics of recreational masters runners: a 21-year retrospective analysis. Journal Aging Physical Activity. 11:190-205. (30%; Student under my direction)

- \*Cress, M.E. & Meyer, M. (2003) Maximal voluntary and functional performance levels needed for independence in adults 65-97. Physical Therapy 83:37-48. (85%)
- \*Miszko, T.A., Cress, M.E., Slade, J.M., Covey, C.J., Agrawal, S.K., & Doerr, C.E. (2003). Effect of strength and power training on physical function in community-dwelling older adults. Journal Gerontology: Medical Sciences. 58(2):171-175. (50% student under my direction)
- Schenkman, M., Cutson, T.M., Kuchibhatla, M, Burton, S. & Cress, M.E. (2002) A new measure of physical functional performance applied to those with PD. Neurology Report. 26:130-138 (10%)
- \*Slade, J.M., Miszko, T.A., Laity, J.H., Agrawal, S.K., & Cress, M.E. (2002). Anaerobic power and physical function in strength trained and untrained older adults. Journal Gerontology Medical Sciences. 57A(3):M168-M172. (50%)
- \*Cress M.E., Kinne S., Patrick D., & Maher E. (2002). Physical functional performance in persons using a manual wheelchair. Journal Orthopaedic Sports Physical Therapy. 32(3):104-113. (80%)
- \*Brochu, M., Savage, P., Lee, M., Cress, M.E., Poehlman, E.T., Dee, J., Tischler, M. & Ades, P.A.(2002) Resistance training in older women with coronary heart disease: A randomized controlled trial. Journal Applied Physiology. 92:672-678. (10%)
- \*Jubrias, S.A., Esselman, P.C., Price, L.B., Cress, M.E., & Conley, K.E. (2001). Large energetic adaptations of elderly muscle to resistance and endurance training. Journal Applied Physiology. 90(5)1663-1670. (20%)
- \*Conley, K.E., Esselman, PC., Jurbrias, S.A., Cress, M.E., Inglin, B., Mogadam, C., & Schoene, RB. (2000) Ageing, muscle properties and maximal O2 uptake rate in humans. Journal Physiology, 526(1), 211-217. (20%)
- \*Cress, M.E., Buchner, D.M., Questad, K.A., Esselman, P.C., Schwartz, R.S., & de Lateur, B.J. (1999) Exercise: Effects on physical functional performance in independent older adults. Journal Gerontology: Medical Science, 54A(5), M242-248. (75%)
- \*Buchner, D.M., Cress, M.E., deLateur, B.J., Esselman, P.C., Margherita, A.J., Price, R., & Wagner, E.H. (1997) The effect of strength and endurance training on gait, balance, fall risk, and health services use in community-living older adults. Journal Gerontology: Medical Science, 52A(4), M218-M224. (20%)
- \*Buchner, D.M., Cress, M.E., de Lateur, B.J., Esselman, P.C., Margherita, A.J., Price, R., & Wagner, E.H. (1997) A comparison of the effects of three types of endurance training on balance and other fall risk factors in older adults. Aging Clinical Experimental Research, 9(1), 1-8. (20%)
- \*Cress M.E. (1997). Quantifying physical functional performance in older adults. Muscle and Nerve, 5(Supplement), S17-20. (100%)
- \*Buchner, D.M., Cress, M.E., Esselman, P.C., Margherita, A.J., deLateur, B.J., Campbell, A.J., & Wagner, E.H. (1996) Factors associated with changes in gait speed in older adults. Journal Gerontology: Medical Science 51A(6), M297-M302. (20%)
- \*Judge, J., Schechtman, K., Cress, M.E., & the FICSIT Group. (1996) The relationship

- between physical performance measures and independence in instrumental activities of daily living. Journal American Geriatric Society, 44, 1332-41. (20%)
- \*Cress, M.E., Buchner, D.M., Questad, K.A., Esselman, P.C., de Lateur, B.J., & Schwartz, R.S. (1996) Continuous-scale physical functional performance in healthy older adults: a validation study. Archives Physical Medicine Rehabilitation, 77, 1243-50. (80%)
- \*Cress, M.E., Conley, K.E., Balding, S.L., Hansen-Smith, F., & Konczak, J. (1996) Functional training: muscle structure, function, and performance in older women. Journal Orthopaedic Sports Physical Therapy, 24(1), 4-10. (75%)
- \*Coleman, E., Buchner, D., Cress, M.E., deLateur, B.J., & Chan, B.K.S. (1996) The relationship of joint symptoms with exercise performance in older adults. Journal American Geriatric Society, 44, 14-21. (15%)
- \*Conley, K.E., Cress, M.E., Jubrias, S.A., Esselman, P.C., & Odderson, I.R. (1995). From muscle properties to human performance, using magnetic resonance. Journal Gerontology, 50A, 35-40. (50%)
- \*Cress, M.E., Schechtman, K.B., Mulrow, C.D., Fiatarone, M.A., Gerety, M.B., & Buchner, D.M. (1995) Relationship between physical performance and self-perceived physical function. Journal American Geriatric Society, 43, 93-101. (65%)
- \*Morris-Chatta R., Buchner, D., deLateur B.J., & Cress, M. (1994) Isokinetic testing of ankle strength in older adults: Assessment of inter-rater reliability and of stability of strength over six months. Archives Physical Therapy Rehabilitation, 75, 12113-1216. (15%)
- \*Cress, M.E. (1993) Age-related changes: A scientific basis for exercise programming. Topics Geriatric Rehabilitation, 8 (3), 22-37. (100%)
- \*Buchner, D.M., Cress, M.E., Wagner, E.H., de Lateur, B.J., Price, R., & Abrass, I.B. (1993) The Seattle FICSIT/MoveIt study: the effect of exercise on gait and balance in older adults. Journal American Geriatric Society, 41, 321-325. (15%)
- \*Buchner, D.M., Cress, M.E., de Lateur, B.J., & Wagner, E.H. (1993). Variability in the effect of strength training on skeletal muscle strength in older adults. L'Anne Gerontologique, 7, 143-53. (20%)
- \*Konczak, J., Meeuwsan, H., Cress, M., & Foo, V. (1992) Perceiving affordances in stair climbing: How young and elderly women perceive maximum climbability. J. Experimental Psychology, Human Perception and Performance, 18(3), 691-697. (20%)
- \*Cress, M.E., Johnson, J., & Agre, J. C. (1991) Isokinetic strength testing in older women: A comparison of two systems. Journal Orthopaedic Sports Physical Therapy, 13(4), 199-202. (65%)
- \*Cress, M., Thomas, D., Johnson, J., Kasch, F., Cassens, R., Smith, E., & Agre, J. (1991). Effect of training on VO<sub>2</sub>max, thigh strength, and muscle morphology in septuagenarian women. Medicine Science Sports Exercise, 23(6), 752-758. (90%)

Cress, M.E. & Schultz, E. (1985). Aging muscle: functional, morphologic, biochemical, and regenerative capacity. Topics in Geriatric Rehabilitation, 1(1), 11-19. (90%)

Journal Articles (under review)

\*Moore, T.L., Johnson, M. A., Quinn, M.E., Cress, M.E. Aerobic and strength training improves physical function in underserved elders.

\*Hayes, D.M., Baumgartner, T.A, Cress, M.E. Reliability of a simple portable test for leg strength in older adult women

\*Hayes, D.M., Williamson, G.M., O'Connor, P.J., Cress, M.E. Pain, leg strength, and physical function among older women with osteoarthritis.

\*Hayes, D.M., O'Connor, P.J., Cureton, K.J., Cress, M.E. Elastic resistance training benefits older women with osteoarthritis: A randomized controlled trial.

### **Bulletins or Reports**

\*\*NIA. (1998). Exercise: A guideline from the National Institute on Aging. Publication NIH 99-4258, My Role: Panel of nations best informed experts on the topic of exercise for older adults.

Cress, M.E. (1998). National initiative: A new way of aging. Club Business Industry, (18-19).

### **B. CONVENTION PAPERS**

- \* identifies presentation that has gone through a refereed process.
- \*\* identifies presentation that was invited.
- # indicates that presentation abstract has been published or is under review.

### **International**

\*\* Cress, M.E. Functional Assessment: Don't get tripped up using the wrong performance measure, University Hospital, Geneva Switzerland. November, 2002

\*\* Cress, M.E. Functional Assessment using the Continuous Scale Physical Functional Performance Scale, University Hospital, Geneva Switzerland. November, 2002

\*\* Cress, M.E. Evaluation of recovery from hip fracture: physical functional performance. Investigator Meeting, Major Pharmaceutical (name withheld per confidentiality agreement).Rome, Italy, September 15, 2005

\*\*Cress, M.E. Function or Fitness: What is the difference? University of Padua, Padova, Italy. October 10, 2005

\*\*Cress, M.E. Aging: Enablement or disablement, that is the question, University Hospital of Geneva. Geneva, Switzerland. October 4, 2005

- \*\*Cress, M.E. Aging: Enablement or disablement, that is the question, Convegno delle Sezioni Triveneta e Lombarda della Societa' Italiana di Medicina Interna, Sirmione, Italy. October 28, 2005
- \*\*Cress, M.E. Assessing function in older adults. University Hospital of Brescia, Brescia, Italy. November 3, 2005
- \*\*Cress, M.E. Independent living: bridge from acute care to community living. University of Padua, Padava Italy, December 19, 2007; University of Brescia, Brescia, Italy, December 20, 2007

### **National**

- O'Connor, P.J., Poudevigne, M.S., Cress, M.E., Motl, R.W. Clapp 3<sup>rd</sup>, JF. (2008). Safety and efficacy of supervised moderate intensity resistance training adopted during pregnancy, Annual Conference of American College of Sports Medicine, Indianapolis, ID.
- Manns, T., Tomzcak, C., Jelani, A., **Cress, E.**, Haennel, R., (2008). Use of the short version Continuous Scale Physical Functional Performance Test (CS-PFP10) with stroke survivors. Annual Conference & Exposition of the American Physical Therapy Association, Nashville, TN.
- #\*Hayes, DM, O'Connor PJ, Cureton KJ, Cress ME (2008). Elastic resistance training benefits older women with osteoarthritis: A randomized controlled trial. Physical Therapy: Annual Conference & Exposition of the American Physical Therapy Association, San Antonio, TX.
- Cress, M.E., Gondo, Y., Davey, A., Poon, L. (2007) Assessing function among the oldest old. Gerontologist. Annual Meeting Gerontological Society of America, San Francisco CA
- Cress, M.E., Hayes, D.M., Moore, T.L., Gary, R.A., (2007) Physical Functional Performance in Patients with Class II and III Chronic Heart Failure. *Medicine and Science in Sports and Exercise*. 39(5) S287.
- # \*Hayes D.M., Baumgartner T.A. & Cress, M.E. (2006) Reliability for a simple portable test of lower extremity muscular strength in older adult women. Gerontology Society of America Annual Meeting
- #Moore, T.L., Johnson, M.A., and Cress, M.E. (2006). Interventions to Abate Functional Dependency. *Aging in Time and Place. Medicine Science in Sports & Exercise, 38(5) Suppl. S370.*
- #Hayes, D.M., Grogg, K., Cress, M.E. (2006). Observations Using Home-Based Resistance-Training Targeting Tetraplegics with Incomplete Spinal Cord Injuries - Feasibility Study Medicine Science in Sports & Exercise, 38(5) Suppl. S300.
- #Cress, M.E., Hayes, D.M. Wright, H., Kinsey, T., Mahoney, O. (2006). Comparison of Physical Functional Performance in Patients 2-to-24 Weeks Post-Hip Fracture. Medicine Science in Sports & Exercise 38(5) Suppl. S43.
- Holton, F., Fabre, J. Russell, R, Gardner, R.E., Cress, M.E., Jazwinski, S.M, Welsh, D.A., Wood, R.H. Physical function, dyspnea, and perceived pain characterize need for assistive care in older adults (2006) Medicine Science in Sports & Exercise, 38(5) Suppl. S43.

- \*\*Cress, M.E. Physical Activity and Public Health Implications. White House Conference on Aging, Kennesaw, Georgia July 14, 2005.
- \* \*\*Cress, M.E. Evaluation of recovery from hip fracture: physical functional performance. Investigator Meeting, Major Pharmaceutical (name withheld per confidentiality agreement). Miami, Florida, July 23, 2005
- \*\* Cress, M.E. Physiological Determinants of Performance: The Senior Years, University of South Carolina, Keynote speaker Second Annual Aging Research Day. Columbus, South Carolina April, 8<sup>th</sup> 2005
- \*Petrella, J.K., Cress, M.E., Ferrara, M.S., Dudley, G.A., & Mahoney, O.M., (2004) Recovery of knee joint, quadriceps muscle, and physical function following total knee arthroplasty. Medicine Science in Sports & Exercise, 36(5):S29.
- \*Arnett, S., Laity, J., & Cress, M.E. (2004) The influence of aerobic reserve on performance based function in older adults. Medicine Science in Sports & Exercise. 36(5):S193
- \*Moore, T.L., McCamey, A., Johnson, M.A., Quinn, M.E., & Cress, M.E. (2004) An evidenced-based exercise program can be implemented in a community of underserved elders. Medicine Science in Sports and Exercise. 36(5):S193
- Cress, M.E., Moore, T.L., Johnson, M.A., & Quinn, M.E. (2003) Aerobic and strength training improves physical function in underserved elders. Medicine and Science in Sports and Exercise 35(5):S195.
- \*Moore, T.L., Cress, M.E., Johnson, M.A., & Quinn, M.E. (2003) Physical function and health status in underserved elders. Medicine and Science in Sports and Exercise 35(5):S224.
- \* #Petrella, J.K. & Cress, M.E. (2002) The relationship of daily walking habits to physical function in community dwelling elders Medicine Science Sports Exercise 34(5):S122 [abstract].
- \* #Miszko, T.A., Cress, M.E., Slade, J.M., Covey, C.J., Agrawal, S.K., & Doerr, C.E. (2002) Effect of strength and power training on physical function in community-dwelling older adults. Medicine Science Sports and Exercise 34(5):S250 [abstract]. (student under my direction)
- \*\*Cress, M.E. Physical activity needs of the frail and the very old, (2002) American College of Sports Medicine St. Louis, MO.
- \*\*Cress, M.E. Reporting Intended to Activate Behavior Change (2002) University of Georgia Gerontology Consortium, Athens, GA
- \* #Cress, M.E & Petrella, J.K. (2002) Contribution of cognitive and physical function to daily functional tasks University of Georgia, Master Teachers in Gerontology Workshop, Cognition, Exercise and Healthy Aging, St Simon's Island, GA, June, 2002
- \*Laity, J.H., Slade, J.M., Petrella, J.K., Miszko, T.A., Agrawal, S.K., & Cress, M.E. (2001) Physiologic reserve: Oxygen cost of physical function in older adults. Medicine Science Sports Exercise 33(6):S124 [abstract].

- \* #Slade, J.M., Miszko, T.A., Laity, J.H., Agrawal, S.K., & Cress, M.E. (2001) Anaerobic power and physical function in strength trained and untrained older adults. Medicine Science Sports Exercise 33(6):S124 [abstract].
- \* #Petrella, J.K., Miller, L.S., & Cress, M.E. (2001). The relationship of leg power, lower body flexibility, and cognition to functional performance. (2001) Medicine Science Sports Exercise 33(6):S253 [abstract].
- \*\* Cress, M.E. (2001) Instructional techniques using multiple media sources. Master Teachers in Gerontology: Nutrition and Healthy Aging, Savannah, GA February.
- \*\*Cress, M.E. (2001) Functional assessment strategies. University of Colorado Health Sciences Center Geriatric Grand Rounds Denver, CO , February.
- \*\*Cress, M.E. (2001) Implementing community based exercise programs, Division of Aging Services, June.
- \*\*Cress, M.E. (2001) Nutrition and Aging conference Atlanta, GA Medical clearance and safety issues in exercise for older adults, Division of Aging Services AAA Wellness coordinators conference, Macon GA, July.
- \*\*Cress, M.E. (2001) Lifestyle Choices Tract – Best Practices and Myths about exercising programs for older adults Georgia Gerontology Consortium, Columbus, GA, October.
- \*\* Cress, M.E, Petrella, J. Clarke, G. (2000) Physical performance in older adults predicts level of social services in low-income housing residents. American College of Sports Medicine Specialty Conference: Physical Activity Programming for the Older Adult, October.
- \*\*Cress, M.E. (2000) Anderson Area Medical Center, Anderson, South Carolina, Center Effective Therapeutic Interventions. June.
- \* Cress, M.E. (2000) University of Washington Health Promotion Research Center, Group Health, and King County Senior Services, Lifetime Fitness Continuing Education Workshop. December.
- \* # Slade, J.M. & Cress, M.E. (2000) Running performance over 20 years of racing Medicine Science Sports Exercise 32(5):S191.
- \*Baker, L.D., Craft, S, Cress, M.E., Lofgreen, T., Cholerton, B., Gleason, C., Lofgreen C., Cherrie, M., Avery, E., Hightower, A., Ahmed, S., & Asthana, S. (2000) Estrogen-induced benefits in cognition for healthy postmenopausal women. Neuroscience, [abstract].
- \*Schwartz, R., Buchner, D., Merriam, G., Cress, M., & Vitiello, M. (2000) Exercise and GHRH (1-29) treatment of the elderly. Endocrine Society 82nd Annual Meeting, [abstract].
- \*Schwartz, R., Merriam, G., Cress, M., Vitiello, M., Barsness S, Hastings R, & Buchner DM. (2000) GHRH and exercise effects on strength and function. Journal American Geriatric Society, [abstract].
- #Cress, M., & Meyers M. (2000) Aerobic threshold for physical function in older adults. Medicine Science Sports Exercise, 32(5), S219 [abstract].

- Miszko, T., Ferrara, M., & Cress, M. (2000) The relationship between leg power, dynamic balance, and function in healthy older adults. Medicine Science Sports Exercise, 32(5), S219 [abstract].
- \*Nakamura, D.Y., Moore, M.L., Esselman, P.C., Engrav, L.H., Gibran, N.S., & Cress, M.E. (2000) Use of the CS-PFP (Continuous Scale Physical Function Performance) Test as a functional outcome measure. Burn Care & Rehabilitation, S192 [abstract].
- \*\*Cress, M.E. (1999) University of South Carolina, Identifying impairment and strategies for intervention in independent older adults. University of South Carolina, School of Public Health, November.
- \*\*Cress, M.E. (1999) Assessing functional capacity in independent older adults: Identifying Impairment. 5<sup>th</sup> World Congress on Physical Activity and Aging, Orlando FL August.
- \*\*Cress, M.E. (1999) Can exercise change physical function in independent older adults? Advanced Geriatric Continuing Education Study Section. American Physical Therapy Association National Conference, Seattle WA. February.
- \* Cress, M.E. (1998) Physical functional assessment: An overview of available tools. Tutorial Presentation, American College of Sports Medicine National Meeting, June.
- \*\* Cress, M.E. (1998) New assessment methods in physical functional performance. Atlanta VAMC Rehabilitation/ Emory Department of Geriatrics; Atlanta, GA. December.
- \*\* Cress, M.E. (1998) Assessment of physical functional performance in older adults, University of Vermont, March.
- \*\*Lofgreen, C., Baker L.D, Cress, M., Lofgreen T, & Asthana, S. (1999). Evaluation of activities of daily living for patients with Alzheimer's disease. The Gerontologist, [abstract].
- \*\*Cress, M., Ferrara, M., Miszko, T., Peterson, C., & Slade, J. (1999). Age, leg power and balance as determinants of Physical Functional Performance (PFP) in independent older adults. The Gerontologist, [abstract].
- #Cress, M. (1999). Relationship between physical capacity and physical function. Southern Gerontological Society Meeting, [abstract].
- #Jubrias, S., Conley, K., Esselman P.C, & Cress M.E. (1999). Oxidative capacity, but not mitochondrial content increases after endurance training in the elderly. Medicine Science Sports Exercise, 31(5), S277 [abstract].
- #Miszko, T.A., Cress, M.E., Buchner, D.M., Schwartz, R.S., & deLateur, B.J. (1999). Physical reserve buffers functional decline in independent older adults. Medicine Science Sports Exercise, 31(5), S350 [abstract].
- \* Cress, M.E. (1995-1998) Physical Activity and Health Promotion. University of Washington Northwest Geriatric Education Center. Seattle Greater Metropolitan area, Idaho, Eastern Washington, Montana.
- Basso, C., Cress, M., Buchner, D., Merriam, G., & Schwartz, R. (1998) Predictors of

- physical functional performance (PFP) in healthy older women. The Gerontologist, [abstract].
- Cress M.E. & Lopez N. (1998) Physical Activity Programming for Low-Income Older Adults. Gerontologist, 38(1), 168 [abstract].
- #Cress M.E, Buchner, D., Questad, K., & Esselman, P. (1997) Exercise training improves physical functional performance in independent older adults. Medicine Science Sports Exercise, 29(5), S76 [abstract].
- \* \*\*Cress M.E. (1997) Quantifying physical functional performance in older adults. Muscle and Nerve, 5(Supplement), S17-20. (100%).
- \*\* Cress, M.E. (1996) Physical Functioning in the Elderly, Duke University, Durham, NC. November.
- \*Cress, M.E. Therapeutic Exercise. (1996) University of Washington, Department of Physical Medicine and Rehabilitation Review Course: Seattle, WA.
- Cress M.E, Conley, K., Schwartz, R., Questad, K., & Esselman, P. (1996). Change in physical function with exercise in older adults. The Gerontologist, 36(1), 28 [abstract].
- Esselman P.C, Cress M.E, & Engrav L.H. (1996). Measurement of physical function after burn injuries. Proceedings American Burn Association, 55 [abstract].
- \*Cress, M.E. (1996) Physical Functioning in the Elderly, University of Washington Department of Medicine / Geriatrics. April.
- \*\*Cress, M.E. (1995) Beyond disability: continuous scaled physical functional performance, University of Washington, Rehabilitation Medicine Grand Rounds September.
- \*\*Cress, M.E. (1995) Physiological reserve: assessing and quantifying physiologic reserve, University of Washington NW Regional Conference for OT and PT, November.
- #Questad, K., Cress, M., Esselman, P., Schwartz, R., Buchner D.B, deLateur, B., Kinne, S., & Patrick D. (1995) The relationship of perceived and performance based function in independent older adults. The Gerontologist, 35(1), 375 [abstract].
- #Cress, M., Questad, K., Esselman, P., Schwartz, R., Buchner D.M, & deLateur, B. (1995) Physical functional reserve in independent elders. The Gerontologist, 35(1), 367 [abstract].
- Esselman P.C., Cress M.E, Schoene R.B., & Conley K.E. (1995) Reliability of VO2max in older adults . Medicine Science Sports Exercise, 27(5), S244 [abstract].
- #Cress, M., Questad, K., Kinne, S., & Patrick D. (1995) Functional performance measurement in persons with physical disabilities. The Gerontologist, 35(1), 164 [abstract].
- #Cress M.E., Winograd C.H., Guralnik J.M., Berg K., Buchner D.M, & Duncan P. (1994) Performance-based measurement: impairment to high-level function. Gerontologist, 34 (special issue), [abstract].

- \*\*Cress, M.E. (1994) Performance-based functional measurement: impairment to high-level function. Gerontological Society of America Symposium: Annual Meeting. Washington, D.C. November.
- #Conley KE., Blei ML., Odderson IR., Esselman P.C., Cress M.E., & Kushmeric M.J. (1992) ATP synthesis rates and oxidative capacity: variation in normal human forearm muscle. Society Magnetic Resonance Annual Meeting. [abstract].
- #Cress M.E., Schechtman K., Mulrow C.D., Fiatarone M., Gerety M., & Buchner D. (1992) Relationship between physical performance and self-perceived physical function. Gerontologist, 32, 76 [abstract].
- Cress, M., Esselman, P., deLateur B.J, Alquist, A., & Buchner D.M. (1992) Lower limb strength predicts VO<sub>2</sub>max in frail elderly. Medicine Science Sports Exercise, 24(5), S15 [abstract].
- #Cress, M., & Schwartz, R. (1992). Quantification of physical functional performance. Clinical Research, 40 (1), 19A [abstract].
- #Cress, M., Thomas, D., Agre, J., Cassens, R., & Smith, E. (1989) Skeletal muscle adaptations to long-term training in elderly women. Medicine Science Sports Exercise, 21(2), [abstract].
- #Cress M.E., Conrad J.J., Agre J.A., & Smith E.L.. (1988) Quadriceps strength decline: exercise vs. normal aging. Archives Physical Medicine, 69(9), 724 [abstract].
- Cress, M., Byrnes W.C., Dickinson A.L., & Foster V.L. (1984) Modification of type II fiber atrophy and LDH isozymes consequent to an eight week endurance training program in elderly women. Medicine Science in Sports and Exercise. 69(9), 724 [abstract].

### **Manuscripts under review or in preparation**

- Cress, M.E., Orini, S., Mueller, G., Butler, D.Q., Poon, L., (under review). Frailty: A Public Health Imperative
- Cress, M.E., Hayes, D.M., Kruger, J., Buchner, D.M., Can functional training be a substitute for resistance training in adults?
- Moore-Harrison, T.L., Johnson, M.A., Quinn, M.E., Cress, M.E. (under review) Evidence-based exercise program implemented at congregate meal sites improves function and health status in underserved older adults.
- Manns, T., Tomzcak, C., Jelani, A., Cress, E., Haennel, R., Physical functional performance of stroke survivors and their matched controls: associations with ambulatory activity, peak and submaximal oxygen consumption.
- Hayes, D.M., Cress, M.E. Improving Older Adult Resident Assessment in Public Housing
- Hayes, D.M., Baumgartner, T.A., Cress, M.E., Reliability of a simple portable test for lower extremity muscular strength in older adult women.
- Hayes, D.M., Williamson, G.M., O'Connor, P.J., Cress, M.E Pain, leg strength, and physical function among older women with osteoarthritis.
- Hayes, D.M., O'Connor, P.J., Cureton, K.J., Cress, M.E Elastic resistance training benefits older women with osteoarthritis: a randomized controlled trial.

O'Connor, P.J., Poudevigne, M.S., Cress, M.E., Motl, R.W. Clapp 3<sup>rd</sup>, JF., (2008). Safety and efficacy of supervised moderate intensity resistance training adopted during pregnancy

**Book reviews** none

**Other Publications** None

### **Creative Contributions other than formal publications**

With the assistance of the Office of Information Technology, the Continuous Scale Physical Functional Performance (CS-PFP) Website ([www.coe.uga.edu/cs-pfp](http://www.coe.uga.edu/cs-pfp)) has been developed. This site provides functional performance information. This website offers an inexpensive, accurate, and reliable method of data reduction for laboratories implementing the CS-PFP assessment tool. Those using the website have the data pooled for the development of a normative data set on physical function. (1999)

The Physical Functional Performance – 10 (PFP-10) test CD-ROM containing Standard Operating Procedure manual for site set-up and test administration was developed and contains the following information. (2005)

Evaluation of Functional Performance in Older Adults: The Physical Functional Performance – 10 Test Administration Training and Site Set-up CD-ROM (2005)

Six DVDs of the Physical Functional Performance – 10 Test were created for the purpose of illustration of the PFP-10 in older adults and patients 2-12 weeks post hip fracture.

### **C. GRANTS RECEIVED**

#### **Areas of Research**

Utilizing a research foundation in basic muscle structure and function including measurement of enzymes, isozymes, histochemistry, and ultrastructure, a unifying theme of this research is the investigation of the underlying determinates of physical function. Through funding from the National Institute on Aging, a state-of-the-art procedure for assessing physical functional performance was developed for populations with a broad range of abilities. Several laboratories have adopted this procedure nationally and there is emerging interest in the development of a culturally appropriate version for international applications. Current research applications from our laboratory include the investigation of cognitive contributions to physical function, and understanding the contribution of blood flow to both cognitive and physical function, and investigation of the disparities in function in minority populations.

#### **Funded Grants**

Co-Investigator (2008) Physical function in cancer patients undergoing chemotherapy  
Funded by University of Georgia College of Public Health (Total costs: \$6,000).

Principal Investigator (2005) Faculty Research Leave. Cross-cultural validation of the Physical Functional Performance Test in Independent Older Adults in Switzerland and Italy. Funded by University of Georgia College of Education (Total Costs: \$10,710).

- Principal Investigator (2004-2005) Observations using home-based resistance-training targeting tetraplegics with incomplete spinal cord injuries – a feasibility study. Funded by the University Georgia Biomedical Health Sciences Institute and Shepherd Center (Total Costs: \$19,455).
- Co-investigator (2005-2006) Exercise and cognitive behavioral therapy as an intervention for depression in heart failure patients. PI: R. Gary, Emory University; Funded by American Heart Association (\$110,000; subcontract: \$54,152) Role: Oversight of the evaluation of physical functional outcomes (10%).
- Co Investigator (2004-2005) Effects of exercise on back pain in pregnancy. PI: Pat O'Connor National Institutes of Health (Direct + Indirect Costs: \$1,008,337) (10%).
- Principal Investigator (2005) Major Pharmaceutical Company (Name with-held as per confidentiality agreement) Pilot Study of Physical Performance, Strength/Power & Self-Report Measures in Post-Hip Fracture Subjects. (Direct + Indirect costs: \$85,280; Supplement Direct + Indirect \$20,700; Total: \$105,980).
- Principal Investigator (2002) Department of Exercise Science and Gerontology Center, UGA, Physical Activity and Nutrition Workshops for Georgia Wellness Coordinators Sole author. Funded by the Georgia State Division of Aging Services; (Amount received \$15,000).
- Principal Investigator (2002-2003) Department of Exercise Science and Gerontology Center, UGA, Continuous Scale Physical Functional Performance Technology Transfer; Funded by the Georgia Gerontology Consortium (Amount received \$5,000)
- Principal Investigator (2002) Department of Exercise Science and Gerontology Center, UGA, UGA-College of Education Large extramural collaborative grant support, (Amount received \$10,281.72).
- Principal Investigator (2001-2003) Department of Exercise Science and Gerontology Center, UGA, Community based interventions to improve cardiovascular health in underserved elders; Co-authored with Dr. Mary Ann Johnson. (Dr. Mary Ellen Quinn, PI from MCG). Funded by University of Georgia – Medical College of Georgia Joint Intramural Grants Program (Amount received \$99,545).
- Principal Investigator (2000-2002) Department of Exercise Science and Gerontology Center, UGA, Reporting physical function intended to motivate behavior in older adults. Authored. Funded by the Georgia Gerontology Consortium (Amount received \$10,000).
- Co-investigator (2001-2002) Developing nutrition resources for older adults in elderly nutrition programs. PI: Dr. Mary Ann Johnson, Dept Foods and Nutrition; Funded by USDA – Food Stamp Program DHR Dept. Family & Child. Services (Amount received \$413,017) Role: Developing exercise interventions for low-income elders (5%)
- Co-Investigator (2000-2005) Department of Exercise Science and Gerontology Center, UGA, A population-based, multidisciplinary study of centenarians. Authored by LW Poon. Funded by the National Institute on Aging. (Amount received \$11,222,621). Role: Development, implementation, and interpretation of performance and self-rated functional outcomes in the oldest-old. 5% Co-PI on Project 3.

- Principal Investigator (1999), Department of Exercise Science and Gerontology Center, UGA, Athens Housing Authority: Physical function in older adults living in low-income housing Authored. Funded by Georgia Gerontology Consortium Grant (Amount received \$5,000).
- Principal Investigator (1999) Department of Exercise Science and Gerontology Center, UGA, College of Education Summer Grant Writing Support (Amount received 7% salary support).
- Principal Investigator (1998). Department of Exercise Science and Gerontology Center, UGA, The relationship of leg power to physical functional performance in older adults, Sole Author. Funded by UGA Georgia Gerontology Consortium (Amount received \$5,000).
- Principal Investigator (1997-1998) Departments of Health Services and Medicine, University of Washington, Senior Health Active Recreation Program (SHARP), Sole author. Funded by the Seattle King County Division on Aging; (Amount received \$120,610).
- Principal Investigator (1992-1997) Departments of Health Services and Medicine, University of Washington, Physical Functional Performance in Aging and Exercise (NIA R29) Co-author DM Buchner and RS Schwartz. Funded by the National Institute on Aging. (Amount received \$350,000).
- Co-Principal Investigator (1992-1997) Department of Radiology, Health Services and Medicine, University of Washington, Exercise and Age: Muscle Function by NMR and Performance (NIA R01) Co-author with Kevin Conley, PI; Funded by National Institute on Aging. (Amount received: \$146,000).
- Co-Principal Investigator (1992-1997) Department of Medicine, University of Washington, Growth Factors and Exercise in Older Women Co-author with Robert S Schwartz, PI. Grant funded by the National Institutes of Health. (Amount received: \$1,189,327).
- Principal Investigator (1993-1994) Departments of Health Services and Medicine, University of Washington, Educational Services grant for NWACSM Authored Funded by American College of Sports Medicine. (Amount received \$5,000).
- Co-Principal Investigator (1990-1993) Departments of Health Services and Medicine, University of Washington Frailty and Injuries: Cooperative Studies of Intervention Techniques. Co-author with DM Buchner. Funded by National Institutes of Health (NIH U01) David Buchner; PI. (Amount received: \$1,365,723).
- Co-Principal Investigator (1987-1989) Department of Preventive Medicine, University of Wisconsin-Madison Muscle and Bone Response to Exercise in Elderly Women. Author. Funded by the National Institutes of Health (Amount received \$187,000).
- Principal Investigator (1989) Department of Preventive Medicine, University of Wisconsin-Madison , Oakwood Retirement Community Senior Programs for Active Retirement. Sole Author. Funded by St. Mary's Hospital, Dana Medical Foundation (Amount received \$45,000).

#### **Submitted Grants (Pending or Not funded)**

- Co-Investigator (2007) The use of home-based exercise to increase physical function in Parkinson's Disease (submitted 7/2007)

- Principal Investigator (2006) Functional outcomes and quality of life as determinants of aging in place. (Unfunded 10/13/2006).
- Co-investigator (2002) Active for Life, Grant submitted to Robert Woods Johnson Foundation (Amount requested \$100,000)
- Principal Investigator (2002) Community exercise programming for underserved elders, Grant submitted to the Centers for Disease Control and Prevention (Amount requested \$1,265,782)
- Co-Principal investigator (2001) Developing Nutrition Resources for Older Adults in Elderly Nutrition Program. Co-authored with Mary Ann Johnson, PhD, PI; Grant submitted to the Department of Agriculture as a supplement to an ongoing program). (Amount requested: \$8,836).
- Principal Investigator (2000) The influence of blood flow on physical function and cognitive performance in older adults, Co-authored with Kevin McCully. Grant submitted to the American Heart Association. 2 years (Amount requested \$60,000).

### **Grants (Consulting Role)**

A progressive, home-based aerobic and resistance exercise program for heart failure patients. PI: Rebecca Gary, PhD, Emory University (Funded 2-years)

Arthritis benefits of a physical activity program in West Virginia, PI: Dina L. Jones, Ph.D., PT Department of Orthopaedics  
West Virginia University, Funded CDC, 9/2005 (3-years).

Chronic angina and physical function in women, PI: Laura Kimble, RN, PhD, Emory University, Submitted to National Institutes of Health, 10/2002 (not funded)

The physical effects of exercise in African American older adults age 55 and above, PI: Marshina Baker, MS, Bowie State University, Submitted to National Institutes of Health 3/2001 (not funded)

Multidisciplinary study of longevity and healthy aging in the Louisiana population Co-PI: Michael Jazwinski, M.D. and Robert Wood, PhD, LSU Funded by National Institutes of Health 7/2001-2005

Physical function in Louisiana elders PI: Robert Wood Funded by State of Louisiana tobacco settlement (\$222,997) 01/01/2002- 12/31/2006.

Tai Chi exercise to reduce risk factors for falling in the elderly. PI: Ge Wu, Ph.D. University of Vermont, Submitted to National Institutes of Health, 9/2000, not funded

Alzheimer's Disease: Therapeutic potential of estrogen PI: Sanjay Asthana, MD, University Wisconsin Medical Center, Madison, Funded by the National Institutes of Health, 6/1999

Problem solving/physical intervention and aging. PI: Linda Teri, PhD University of Washington Roybal Center, Funded by National Institutes of Health, 2/1999

Resistance training in older women with cardiac disability, PI: Philip Ades, MD, University Vermont, Funded by National Institutes of Health 7/1999

Utility of a novel performance-based measure of physical function in studies of promising intervention programs. PI: Thomas Gill, MD, Yale University Funded by National Institutes of Health, 9/1998

**D. Recognitions and outstanding achievements**

Herbert H. deVries Award for Distinguished Research in the field of Aging from the Council of Aging and Adult Development of the American Association for Physical Activity and Recreation (AAPAR – AAPHERD), 2008.

Northwest Chapter of the American College of Sports Medicine, Longstanding Service Award, 1999.

Fellow Status American College of Sports Medicine, April, 1996.

International Association of Gerontology Student Scholarship to the XIIIth Congress, 1985.

Alpha Delta Kappa Teaching Scholarship, 1969.

**E. SUPERVISION OF STUDENT RESEARCH**

Doctoral Committee chair	6 completed
Doctoral Committee member	5 completed; 2 current
M. Ed Oral Committee	10 completed
M.A. Thesis Committee chair	3 completed; 1 current
M.A. Thesis Committee	5 completed; 1 current

**F. EDITORSHIP**

American College of Sports Medicine, Health & Fitness, Associate Editor, 2008 - present  
Appointed Associate Editor, Journal Aging and Physical Activity for 3-year term beginning 2000 through 2003.

Member Editorial Board, Journal Orthopedic and Sports Physical Therapy, 1996-1999.

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**Public Service**


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Excellent community relationships are key to my research and teaching. I began cultivating these relationships in 1999 shortly after accepting this position at the University of Georgia.

**Athens Community Service**

Athens Community Council on Aging Board – 3 year term 1999-2002

University of Georgia Botanical Garden, Master Gardener, volunteer

University of Georgia Learning In Retirement, Faculty Co-Sponsor, 2001 to present

Student presentations at local retirement communities, Athens Housing Authority, and the Athens Senior Center.

**University of Georgia Committees**

College of Education Graduate Faculty Committee (2003-2006)

Institutional Review Board (2003-2006)

Program Review Committee Department Foods and Nutrition (2004), co-chair

College of Education Committee on Committees 1999-2001

College of Education Undergraduate Grievance Committee 1998 -2000

College of Education Multicultural Task Force 2000 to 2002

College of Education Professional Development Committee 2000 to 2002

Search Committee, School Health and Human Performance Director 2001

Institute of Gerontology Curriculum Committee 1999 to present

### **Committees Outside the University**

Gerontological Society of America, Membership Committee, 2005 – 2007

National Institute on Aging Special Emphasis Panel Ad Hoc PO1 Review – Joint application of University of Arkansas Medical Sciences and University of Texas at Galveston 2003

American College of Sports Medicine Project Review Committee, 1997 to 2000.

American College of Sports Medicine Special Health Initiative on Aging, 1999 to present.

American College of Sports Medicine Special Health Initiative on Aging, Best practices subcommittee, chair, 2001-2004

Center for Disease Control Prevention Research Center Peer Review Panel, 7/1999.

National Institute on Aging Public Information Office Committee on Physical Activity in the Older Adult-Specific Recommendations, 1996-1998.

Northwest American College of Sports Medicine

- Executive Board, 1992-94
- President elect, 1994 - 1995
- President, 1995
- Past-President 1996-1997