

STUART RUGG

Department of Kinesiology
Occidental College, Bioscience 313
1600 Campus Road, Los Angeles, California 90041

(OFFICE PHONE) 323-259-2705 - (HOME PHONE) 323-550-8779

E-mail: stuart@oxy.edu

PERSONAL

Birthdate: July 15, 1956, Berkeley, California, U.S.A.

EDUCATION

1989 Ph.D. (Kinesiology) University of California, Los Angeles
1987 M.S. (Kinesiology) University of California, Los Angeles
1978 B.S. (Zoology) University of California, Davis

APPOINTMENTS

1989-05 Chair, Department of Kinesiology, Occidental College

TEACHING

1987-05 Human Anatomy and Biomechanics, Occidental College
1997-02 Musculoskeletal Biomechanics, Mt. Saint Mary's College
Masters Program in Physical Therapy
1987-98 Applied Human Anatomy and Biomechanics, UCLA Extension
1984-90 Guest speaker at the Annual Teaching Assistant Conference, UCLA.
Topics: "How to Run a Laboratory Class" and "How to Motivate Students"
1981-86 Laboratory instructor: Biomechanics and Electromyography, UCLA;
1980-81 Laboratory instructor: Human Anatomy, San Diego State University

AWARDS - UNIVERSITY OF CALIFORNIA, LOS ANGELES:

1983 Distinguished Teaching Assistant Award

AWARDS - OCCIDENTAL COLLEGE:

1995 Loftsgordon Outstanding Teaching Award
1996 Loftsgordon Outstanding Teaching Award
2003 Outstanding Professor Honors
2004 Loftsgordon Outstanding Teaching Award
2005 Loftsgordon Outstanding Teaching Award
(Loftsgordon finalist - 1990, 1994, 1999, 2000)

PROFESSIONAL SOCIETIES

National Strength and Conditioning Association

ABSTRACTS

Rugg, S.G. (1986). The relationship between muscle lengths, moment arm lengths and joint torques during cycling. *Medicine and Science in Sports and Exercise*, 18: S64.

Rugg, S.G., and Gregor, R.J. (1987). The effect of seat height on muscle lengths, velocities, and moment arm lengths during cycling. *Journal of Biomechanics*, 20: 899.

Rugg, S.G., Gregor, R.J., Mandelbaum, B.R., and Chiu, L. (1988). *In vivo* moment arm lengths at the ankle. *Medicine and Science in Sports and Exercise*, 20:534.

MANUSCRIPTS

Ryan, M., Gregor, R.J., Whiting, W.C., and Rugg, S.G. (1989). Length change and EMG patterns of lower extremity muscles during cycling. Proceedings First World Congress on Sports Sciences. Colorado Springs, Colorado.

Rugg, S.G., Gregor, R.J., Mandelbaum, B.R., and Chiu, L. (1990). *In vivo* moment arm calculations at the ankle using magnetic resonance imaging (MRI). *J. Biomechanics*, 23: 495-501.

Whiting, W.C., Rugg, S., Coleman, A., and Vincent, W.J. (1997). Ab-Solute Certainty - Do Abdominal Trainers Work Any Better Than The Average Crunch? Consumer Matters - American Council of Exercise, 3(2):1-2.

Whiting, W.C., Rugg, S., Coleman, A., and Vincent, W.J. (1999). Muscle Activity During Sit-Ups Using Abdominal Exercise Devices. *J. Strength Cond. Res.* 13(4):339-345.

Sternlicht, E., and S. Rugg. (2003). Electromyographic Analysis of Abdominal Muscle Activity Using Portable Abdominal Exercise Devices and a Traditional Crunch. *Journal of Strength and Conditioning Research.* 17(3): 463-468.

Sternlicht, E., S. Rugg, M.D. Bernstein, and S.D. Armstrong. (2005). Electromyographical Analysis and Comparison of Selected Abdominal Training Devices With a Traditional Crunch. *Journal of Strength and Conditioning Research.* 19(1): 157-162.

Sternlicht, E., S. Rugg, L. Fujii, K. Tomomitsu, and M. Seki. (2005). Electromyographic Comparison of a Stability Ball Crunch with a Traditional Crunch. (Fall 2005 submission to *The Journal of Strength and Conditioning Research.*)

BOOKS

Edgerton, V.R., Roy, R.R., Gregor, R.J., and Rugg, S.G. (1986). Morphological basis of skeletal muscle power output. In: N.L. Jones, N. McCartney, and A.J. McComas (Eds.), *Human Muscle Power* (pp. 43–64). Champaign, Illinois: Human Kinetic Publisher.

Gregor, R.J., and Rugg, S.G. (1986). Effects of saddle height and pedaling cadence on power output and efficiency during cycling. In: F.R. Burke (Ed.), *Science of Cycling* (pp. 69–90). Champaign, Illinois: Human Kinetic Publishers.

Whiting, W.C., and S. Rugg. (2006). *Dynatomy: Dynamic Human Anatomy*. Human Kinetics, Champaign, Illinois.

PRESENTATIONS

The relationship between muscle lengths, moment arm lengths and joint torques during cycling, American College of Sports Medicine meeting, Indianapolis, Indiana, May 1986.

Cine/kine MRI: A new dynamic technique to measure moment arms at the ankle. American Orthopaedic Foot and Ankle Society meeting, Saint Paul, Minnesota, July 1988.

Lectured for eight days on kinesiology and biomechanics for an Aerobics Conference in La Plagne, France, July 16 - 23, 1994.

Comparative analysis of techniques for muscular involvement determination. National Strength and Conditioning Association Conference in Atlanta, Georgia, June 1996.

Exercise products: validating claims of current exercise products, including abdominal exercisers. Clinical Seminars in Sports Medicine, California State University Northridge, April 1997.

Whiting, W.C., Rugg, S., Vincent, W.J., and Coleman, A. Muscle activity patterns during situps using abdominal exercise devices. *Poster Presentation*, California State University Northridge, February, 1997.

Exercise for Older Adults. Presentation for a Symposium of Health Issues and Strategies for Quality Aging. Saturday April 10, 1999 at the Woodland Hills Warner Center Marriott Hotel. Symposium Sponsored by : CSUN Center for Sports Medicine, Encino-Tarzana Regional Medical Center, and The Fitness Store.

PROFESSIONAL CONSULTATION/CLIENTS

Guthy-Renker Corporation, Bob Caudill and Associates, Raymond Entertainment & Tri-Star Productions, Response IQ, Quantum Television, Amazing Goods, Inc., Weider Publications, Inc., Flex Equipment, Inc., Simply Fit, Inc.

RESEARCH SUPPORT

Co-Investigator (Flex Equipment, Inc.) 1990-1991: Electromyographical Analysis and Comparison of the Flex Abflexor with Traditional Abdominal Exercises.

Co-Investigator (Flex Equipment, Inc.) 1995: Electromyographical Analysis and Comparison of the Flex Abflexor with the Abflex Abdominal Machine.

Co-Investigator (Flex Equipment, Inc.) 1995: Comparison of the Training Adaptations between the Flex Abflexor and the Abflex Abdominal Machine.

Co-Investigator (Soloflex Equipment, Inc.) 1996: Kinematic Analysis and Comparison of the Squat Exercise Using Free-weights, Smith Machine and the Soloflex Training Device.

Co-Investigator (Launch Fitness Products, Inc.) 1996: Electromyographical Analysis and Comparison of Wrist Flexors and Extensors using the Advantage Wrist Training Device and Free-weight Training.

Co-Investigator (Flex Equipment, Inc.) 1997: Electromyographical Analysis of Eccentric Movements for Selected Free-weight and Selectorized Machines.

Co-Investigator (American Council on Exercise) 1997-1998: Muscle Activity During Sit-Ups Using Abdominal Exercise Devices.

Co-Investigator (Quantum Television) 1998-1999: Electromyographical Analysis and Comparison of the Quantum Ab Rocker with Traditional Abdominal Exercises.

Co-Investigator (Guthy-Renker) 2001: Electromyographical Analysis and Comparison of the Guthy-Renker Perfect Abs with Traditional Abdominal Exercises.

Co-Investigator (Collier Shannon Scott, PLLC) 2003: Electromyographical Analysis of Shoulder and Abdominal Muscle Activity Using the Ab-One Portable Abdominal Exercise Device and a Traditional Crunch.

Principal-Investigator (Amazing Goods, Inc.) 2005: Electromyographic Analysis of Abdominal Muscle Activity Using the Core Sculptor Plus, Crunch Bicycle Maneuver, and a Traditional Crunch.

Principal-Investigator (Integrity Partners, Inc.) 2005: Electromyographical Analysis and Comparison of Abdominal Muscle Activity Using the Ab-Zone Portable Abdominal Exercise Device and a Traditional Crunch.