

Daniela Andrea Rubin

Education

- 2005, Ph. D. **Human Movement Science**, University of North Carolina-Chapel Hill, NC.
- 2001, M.A. **Exercise and Sport Science**, University of North Carolina-Chapel Hill, NC.
- 1996, B.A. **Teaching Degree in Physical Education**, Higher Institute of Physical Education Professorate, Mar del Plata, Argentina.

Professional Teaching experience

- 2006-present, Assistant Professor- Department of Kinesiology, CSUF, CA
- 2005-2006, Visiting Assistant Professor - Department of Exercise and Sport Science, UNC-CH, NC.
- 2004-2005, Lecturer - Department of Exercise and Sport Science, UNC-CH, NC
- 1999-2004, Teaching assistant - Department of Exercise and Sport Science, UNC-CH, NC

Graduate courses taught

- CSFU, 2006-2007- KNES 452-Graded Exercise Testing and Prescription
- UNC, 2000-2001-EXSS 280L- Physiology of Exercise Laboratory (TA)
- UNC, 2002-EXSS 380- Assessment of Physiologic Function (TA)

Undergraduate courses taught

- CSUF, Present- KNES 348- Physiology of Exercise
- CSUF, 2006-2007- KNES 348L- Physiology of Exercise Laboratory
- CSUF, Present-KNES 354- Cardiovascular Exercise Testing and Prescription
- UNC, 2002-2006- EXSS 76 -Human Physiology
- UNC, 2005-2005- EXSS – Independent Studies in Exercise and Sport Science
- UNC, 2005-2006- EXSS- Honor Thesis
- UNC, 2005-2006- EXSS 89- Physiology of Human Performance
- UNC, 2005-2006- EXSS 89L- Physiology of Human Performance Laboratory
- UNC, 1999-2002-PHYA 26- Beginning Swimming
- UNC, 2002- PHYA - Aerobic Dance
- UNC, 1999-2001- PHYA 26X- Survival swimming
- UNC, 1999-2000- PHYA –Beginning Volleyball

Research and professional experience

- Current, Principal investigator, **Nutritional and Exercise Aspects of Prader Willi Syndrome and Childhood Obesity**, CSUF, CA
- 2006-2007, Consultant, **Active Kids!**, CSUF, CA
Assessment of physical activity program for underserved youth
- 2005-2006, Co-investigator. **Member of Physical Activity Intervention Committee and Behavior Intervention Committee**, UNC-CH, NC

Planning of outreach behavior intervention component and its implementation. Planning of the Physical Activity intervention implementation in a NIH funded middle-school study (HEALTHY Study)

- **2003-2005, Committee member for the Prevention Physical Activity Intervention Committee, UNC-CH, NC**
Planning of physical activity program, selection of outcomes, protocol writing, training of research assistants and physical education teachers. (STOPPT2D Study)
- **2003, Temporary intern.** UNC Diabetes Care Clinic, Chapel Hill, NC
Patient counseling regarding physical activity and nutrition in the Action to Control Cardiovascular Risk in Diabetes Study, funded by NIH.
- **2002, Research fellow.** Metabolism Laboratory Joslin Diabetes Center, Boston, MA
Collaboration with research projects, presentation of data in laboratory meetings and in summer research seminar.
- **2001, Research Assistant.** Energy Expenditure of Physical Activity in the Youth study, UNC-CH, NC.
Data collection, equipment use and calibration.
- **2001, Fitness programmer.** Pulse Corporation, Research Triangle Park, NC.
Programming of physical activity for children.
- **2000, Student intern.** International Institutes of Health Promotion, American University, Washington D.C.
Selection and organization of material on Health Promotion in Argentina and Brazil for presentations provided by the Institute.

Peer-reviewed publications (in chronological order)

- D.A. Rubin**, R.J. Butler, B. Beckman, and A.C. Hackney. The effect of footwear on cardio-respiratory responses during a training run. *International Journal of Sports Medicine*. In press.
- D.A. Rubin**, R.G. McMurray, J.S. Harrell, A.C. Hackney, and A.M. Haqq. (2008) Do cytokines relate to surrogates for adiposity in adolescents? *Journal of Investigative Medicine*. **56**:786-92.
- D.A. Rubin**, R.G. McMurray, J.S. Harrell, D.E. Thorpe, and A.C. Hackney. (2008) Vigorous physical activity and cytokines in adolescents *European Journal of Applied Physiology*. **103**:495-500
- D.A. Rubin**, R.G. McMurray, J.S. Harrell, A.C. Hackney, D.E. Thorpe, and A.M. Haqq. (2008) The association between insulin resistance and cytokines in adolescents: the role of weight status and exercise *Metabolism: Clinical and Experimental*. **57**:683-690.
- D.A. Rubin**, R.G. McMurray, and J.S. Harrell. (2008) Insulin and weight status in adolescents: independent effects of intensity of physical activity and peak aerobic power. *Pediatric Exercise Science*. **20**:29-39.
- J.C. Bowles, D.P. Hales, D.F. Tate, **D.A. Rubin**, S. Benjamin, and D.S. Ward. (2008) Physical activity environment in child care centers: relationships to physical activity behavior. *American Journal of Preventive Medicine*. **34**:23-29.
- J.W. Duke, **D.A. Rubin**, W. Daly, and A.C. Hackney (2007). Influence of prolonged exercise on the 24-hour free testosterone-cortisol ratio hormonal profile. *Medicina Sportiva*. **11**:48-50.
- A.C. Hackney and **D.A. Rubin** (2006). El sistema neuroendocrino y el estrés del ejercicio: una breve revisión. *Medicina del Ejercicio*. **21** (1-2): 23-34.
- D.A. Rubin**, R.G. McMurray, A.C. Hackney, and J.S. Harrell (2005). The relationship between leptin, metabolic hormones, body composition and exercise. *Journal of Pediatric Endocrinology and Metabolism*. **18**:1073-1081.

- A.W. Moore, S. Timmerman, K.K. Brownlee, **D.A. Rubin**, A.C. Hackney (2005). Strenuous fatiguing exercise: relationship to circulating thyroid hormones. *International Journal of Endocrinology and Metabolism* 1:18-24
- W. Daly, C.A. Seegers, **D.A. Rubin**, J. Dobridge and A.C. Hackney (2005). Relationship between stress hormones and testosterone with prolonged endurance exercise. *European Journal of Applied Physiology* 93: 375-80.
- D.A. Rubin**, R.G. McMurray, J.S. Harrell, B.W. Carlson, and S. Bangdiwala (2003). Accuracy of Three Dry-Chemistry Methods for lipid profiling and Risk-factor classification. *International Journal of Sports Nutrition and Exercise Metabolism* 13: 362-273.
- D.A. Rubin** (2000). Country profile, Argentina: Facing a Double Burden. *American Journal of Health Promotion, Global Perspectives* 3 (4).

Manuscripts under review

- Wiersma L., **Rubin D.A.** The development and effectiveness of Active Kids: A park-based afterschool physical activity intervention for Hispanic Youth. Journal: *Journal of Physical Activity and Health*.

Manuscript in progress

- Weiss J, **Rubin DA**, and Gomel JN. Physical Activity among Latino Adults: Perceived Barriers and Behaviors' Target Journal: *Journal of Behavior Medicine*

Published Abstracts

- D.A. Rubin**, R.G. McMurray, J.S. Harrell, A.C. Hackney, D.E. Thorpe, and A.M. Haqq (2007). Insulin resistance and cytokines in adolescents: weight status and exercise as moderators. *Acta Kinesiologiae Universitatis Tartuensis*. 12: S166-167.
- D.A. Rubin**, R.J. Butler, B. Beckman, and A.C. Hackney (2007). The effect of footwear on cardio-respiratory responses during a training run. *Medicine and Science in Sport and Exercise* 39:S476.
- D.A. Rubin**, R.G. McMurray, D.E. Thorpe, J.S. Harrell, and A.C. Hackney (2006). Resistin and adiponectin in adolescents: influence of vigorous physical activity and aerobic power. *Medicine and Science in Sport and Exercise* 38: S485.
- D.A. Rubin**, R.G. McMurray, A.M. Haqq, A.C. Hackney, and J.S. Harrell (2005). The relationship between resistin, adiponectin, TNF- α and IL-6 to adiposity surrogates in adolescents. *Obesity Research* 13: A187.
- D.A. Rubin**, R.G. McMurray, and J.S. Harrell (2005). Vigorous physical activity and maximal aerobic power are related to and influence insulin in adolescents. *Medicine and Science in Sport and Exercise* 37: S433.
- D.A. Rubin**, R.G. McMurray, and J.S. Harrell (2004). Association between insulin sensitivity and maximal aerobic power is related to weight status in youth. *Medicine and Science in Sport and Exercise* 36: S51.
- D.A. Rubin**, R.G. McMurray, A.C. Hackney, and J.S. Harrell (2003). Relationship of metabolic hormones to exercise and body fat in youth. *Medicine and Science in Sport and Exercise* 35: S57.

Oral presentations in scientific meetings

- Exercise Aspects of Prader Willi Syndrome and Childhood Obesity. *The Foundation for Prader-Willi Research 2008 Annual Conference*, Arlington, VA, September 2008.

Insulin resistance and cytokines in adolescence: weight status and exercise as moderators. *24th Annual meeting of the Pediatric Work Physiology*, Tallinn, Estonia, September 2007.

Pathophysiology of obesity. *South East Chapter American College of Sports Medicine Annual Meeting*, Charlotte, NC, 2006.

Differences in units used to express levels of cardiovascular fitness and Insulin resistance in adolescents. *South East Chapter American College of Sports Medicine Annual Meeting*, Charlotte, NC, 2005.

Association between insulin sensitivity and maximal aerobic power is related to weight status in youth. *American College of Sports Medicine Annual Meeting*, Indianapolis, IL, 2004.

Relationship of metabolic hormones to exercise and body fat in youth. *American College of Sports Medicine Annual Meeting*, San Francisco, CA 2003.

The insulin response to a moderate intensity 30-min swim in healthy adults. *South East Chapter American College of Sports Medicine Annual Meeting*, Atlanta, GA, 2002.

Poster presentations in scientific meetings

The effect of footwear on cardio-respiratory responses during a training run. *American College of Sports Medicine Annual Meeting*, New Orleans, LA, June 2007.

Active Kids! Community-based physical activity program for underserved youth. *California Childhood Obesity Conference*, Anaheim, CA, January 2007.

Resistin and adiponectin in adolescents: influence of vigorous physical activity and aerobic power. *American College of Sports Medicine Annual Meeting*, Denver, CO, June 2006.

The relationship between resistin, adiponectin, TNF- α and IL-6 to adiposity surrogates in adolescents. *North American Association for the Study of the Obesity Annual Conference*, Vancouver, Canada, October 2005.

Vigorous physical activity and maximal aerobic power are related to and influence insulin in adolescents. *American College of Sports Medicine Annual Meeting*, Nashville, TN, June 2005.

Current research support

W81XWH-08-1-0025 Rubin (PI)

02/01/08-01/31/09

Congressionally Directed Medical Research Program
US Army Medical Research and Materiel Command

Nutritional and Exercise Aspects of Prader Willi Syndrome and Childhood Obesity. Collaborative effort between California State University (Rubin, D [PI]), the University of Florida (Driscoll, D [PI]), and Children's Hospital of Orange County (Clark, S) to determine the nutritional phases of PWS, and the metabolic and hormonal responses to aerobic and resistance exercise.
Role: PI for overall grant, PI for CSUF

Completed research support

U01 DK61223 Harrell (PI)

3/01/02-6/30/06

NIH/NIDDK

Physical Activity in Youth—Preventing Type 2 Diabetes: Studies to Treat or Prevent Pediatric Type 2 Diabetes (STOPP-T2D)

Working Title: HEALTHY, A middle school program for diabetes prevention

The overall goal of this cooperative agreement is to test a longitudinal school-based intervention to prevent or reduce development of risk factors for type 2 diabetes and insulin resistance in middle school youth. The intervention includes changes in the school environment (physical education classes, and food served and sold) and behavior modification. The cooperative agreement includes seven field sites throughout the United States. Role: Co-Investigator

NIH-NINR R01-1837 Harrell, J (PI)
 Graduate Student Opportunity Trust Fund, UNC-Chapel Hill Rubin, D (PI) 01/08/04- 05/05/05
 The relationship between adipokines, adiposity, exercise and insulin resistance in adolescents. Cross-sectional study investigating the relationship between adipokines associated with diabetes and CVD and their relationship with adiposity, exercise and insulin resistance during puberty.
 Role: principal investigator

Town of Chapel Hill Grant Pettit, A (PI) 01/08/04-01/06/05
 Physical Activity in Youth to Optimize Fitness and Fun. Multidisciplinary intervention program for overweight youth in the Town of Chapel Hill, Chapel Hill, NC.
 Role: consultant for physical activity

Professional, University and Community service

2008, Editorial Board member, California Journal of Health Promotion

2006-present, Journal reviewer, CSUF, CA

Journal of Rehabilitation and Research Development

British Journal of Sports Medicine

European Journal of Applied Physiology

Journal of Sports Medicine & Science

Brain, Behaviour and Immunity

European Journal of Pediatrics

2007-2008, Chair of Thesis Committee. Department of Kinesiology, CSUF, CA

Student: Adam Sheppard

2000-current, Member of Thesis Committees. Department of Exercise and Sport Science, UNC-CH, NC., Department of Kinesiology, CSUF, CA

Students: *Melissa Wiggington (CSUF), William Thomas (CSUF), Gerardo Flores (CSUF), Amy Armstrong, Sandy Kennedy, Eoin Hunt, Kaye Brownlee, Erin Elder, Laurie Bronson, Rett Larsen, Matthew Jacobs.*

2005-2006, Chair of Honor Thesis Committee. Department of Exercise and Sport Science, UNC-CH, NC.

Student: LaDonna Brown

2007-current, Undergraduate Committee member. Department of Kinesiology, CSUF, CA

2007-2008, Physical Activity and Health Search Committee member. Department of Kinesiology, CSUF, CA

2006-present, Member in the Center for the promotion of healthy lifestyles and obesity prevention, CSUF, CA

2005-2006, Conference planning committee member for the Diabetes and Exercise Sports Association, UNC-CH, NC

2004-2005, Consultant-Promoting Activity in Youth to Optimize Fitness and Fun. Chapel Hill, NC.

Planning and conduction of physical activity sessions in multidisciplinary intervention in overweight youth.

2004-2005, Collaborator with Hispanic Swimming and Safety Awareness Program. UNC-CH, NC.

Mentoring of the leader of the program in grant proposal and program planning.
Instruction of swimming lessons in Spanish for Latino youth.

2003-2004, Educator in Taking Control of Your Diabetes Conference. Raleigh, NC.

Education regarding physical activity for people with diabetes.

Professional memberships

American College of Sports Medicine. 2004-present.

Center for the promotion of healthy lifestyles and obesity prevention. 2006-present

South East Chapter of the American College of Sports Medicine. 2000-2006.

North American Society for Pediatric Exercise Medicine-2008

Honors and awards

Frank Porter Graham Graduate and Professional Student Honor Society

University of North Carolina-Chapel Hill, NC

April 2005

Summer Student Research Scholarship.

Joslin Diabetes Center, Harvard Medical Institutions, Boston, MA.

May 2002

Graduate School Merit Award Scholarship.

University of North Carolina-Chapel Hill, NC.

August 2001

Teaching Excellence Award.

Physical Activities Program, University of North Carolina-Chapel Hill, NC.

May 2000

Honored student- Class of 1996.

Higher Institute of Physical Education Professorate "Club A. Quilmes", Argentina

May 1996

Skills and certifications

Exercise-testing and health-screening skills.

Measurement of metabolic rate, sub-maximal and maximal oxygen uptake testing, lactate threshold, anaerobic capacity, strength and flexibility.

Electrocardiogram, blood pressure, body composition.

X-ray Technician Bone Densitometry certification 06/04/2008

Blood biochemistry skills.

Hematocrit, hemoglobin, glucose, lactate, radioimmunoassay, enzyme linked immunoassay, colorimetric assays.

Computer skills.

Statistica, S.S.P.S., Microsoft Word, PowerPoint, and Excel.

Diabetes Expertise Program. The North Carolina Baptist Hospitals, Winston Salem, NC, 04/10-04/11 2003.