

2006 ANNUAL REPORT

DEPARTMENT OF HEALTH AND HUMAN PERFORMANCE

OVERVIEW

The Department of Health and Human Performance (HLHP) is one of four departments within the College of Education. The Department was originally called the Department Health, Physical Education, and Recreation at Auburn University. The primary purpose of the department at that time was to offer teacher education programs in health and physical education. During the 1990s, the department changed its name to Health and Human Performance to better represent the changes in academic emphases that emerged within the profession. Beginning Fall 2007, the Department will officially change its name again, to *Kinesiology*. Over the years, the profession has expanded beyond physical education into a much broader arena, including exercise science and health promotion (non-teacher certification emphases). In 2006, there are over 500 undergraduate majors (346 – exercise science majors, 104 Health Promotion majors, and 76 physical education majors) and approximately 50 graduate students enrolled in the HLHP masters and doctoral programs. The graduate program has emphases areas in: Exercise Science (tracks within Exercise Science include: Athletic Training (non-certification), Biomechanics, Exercise Physiology, Motor Behavior), Health Promotion, and Physical Education Teacher Education. Beyond the undergraduate and graduate programs, HLHP also offers the Physical Activity and Wellness (PHED) program, serving thousands of Auburn students each year. This year our graduate program was included in the 2006 National Research Council (NRC) assessment of research-doctoral programs in the United States. This is the first year Kinesiology (Exercise Science) programs were included in the NRC taxonomy and this prestigious assessment. Since the Department's inception it has dramatically broadened its mission and goals. It is also noteworthy that in 2006, the department requested to change the Ed.D. degree program in the Physical Education – Teacher Education to a Ph.D. program. Now all doctoral programs in Kinesiology are Ph.D. degree programs. With respect to changes in graduate programs, the Exercise Science program area implemented a new Athletic Training Master's track this year.

The Department of Health and Human Performance continues to train students to improve the health or athletic performance of individuals by using an interventionist model. Experiences run the gamut from helping elderly people be well and fit to motivating young children to be more physically active to increasing elite athletes' speed and endurance.

The professors in the HLHP embrace the opportunity to combine exercise of both the mind and the body. What sets this department apart is its scientific bent. There is a major focus of sophisticated research in HLHP. The department has an emphasis on research in both laboratory and field settings. There are several different lab experiences available, including exercise physiology labs where students have the opportunity to assess health-related fitness and performance attributes; biomechanics labs where high-speed filming and computer modeling is available; a motor behavior lab where students investigate the role of cognitive factors in the

learning and control of human movements; and a physical education lab that focuses on teaching/learning issues.

Another unique program that offers an integrated experience of instruction, research and outreach is the *TigerFit* program. Students conduct a variety of physical fitness tests including assessing cardiovascular fitness and measuring a person's body fat via underwater weighting. This program offers a service to the community as well as the university. Like all the programs in this department, it focuses on improving the health and performance of individuals. Students are often able to work with and provide these services for various constituencies in the community (i.e., police and fire department personnel), seeing first-hand the practical use of physical fitness assessments.

All of the programs open the door to a variety of career paths with one goal in mind – improving the health and/or performance of the student/patient/client. Students in health promotion may one day work in cardiac rehabilitation and pharmaceutical sells, at a wellness center, or for a corporate fitness program. Students in exercise science are being prepared to further their education in a graduate program to become physical therapists, enter medical school, or specialize in advance training in exercise physiology, biomechanics or motor behavior. Students in the teacher preparation area will use their training to improve instruction in K-12 schools.

HLHP is ranked 27th in the American Academy of Kinesiology and Physical Education (AAKPE) national rankings of doctoral programs in the field. Auburn's Health Promotion program recently received the American College of Sport Medicine's University Connection Program Endorsement, bringing international recognition to our program.

As of the end of the 2006 review period, the Department has 13 faculty (+1 faculty search is underway and 1 hire has been completed for Fall 2007 entry), 1 instructor, 18 departmental GTAs, 10 contract instructors, and 10 contract GTAs. Of the 14 tenure track faculty, 4 have been awarded Distinguished Professorships within the College of Education. Two faculty are members of the AAKPE. AAKPE consists of the top 100 scholars in the field and convenes once a year to discuss issues and to advance the field. Four faculty members are American Colleges of Sport Medicine (ACSM) fellows. A number of our faculty served as administrators of national, regional, and local organizations this past year. The following is an itemized listing of the departmental accomplishments for the 2006 year.

AWARDS

- James Harris was awarded a FASEB MARC/NIGMS Minority Travel Fellowship Award for attendance at the American College of Sports Medicine Conference on Integrative Physiology of Exercise, Indianapolis, IN, September 27-30, 2006
- James Harris received the PGOP Graduate Fellowship from Auburn University.

- Oleg Sinelnikov received the Outstanding International Graduate Student Award, Auburn University, USA
- Oleg Sinelnikov received the Outstanding Graduate Student Award in the Department of Health and Human Performance, College of Education, Auburn University
- Angela Holman received the A. Sydney Sullivan University Award
- Angela Holman received the Outstanding Senior Award, Award in the Department of Health and Human Performance, College of Education, Auburn University, USA
- David Pascoe was elected President of American Academy of Thermology
- Sheri Brock received the 2006 Auburn Alumni Association Undergraduate Teaching Excellence Award.
- Sheri Brock received the 2006 Emily and Gerald Leischuck Outstanding Undergraduate Faculty Teaching Award.
- Peter Grandjean and Mary Rudisill were invited Keynote Speaker at the 13th International Symposium in Health, Exercise, and Sport Sciences, University of Costa Rica, San Jose, Costa Rica.
- Mary Rudisill was invited to contribute two book chapters in the first published Motor Development textbook in China. The authors of this landmark textbook included eight Chinese scholars as well as nine Academy members.
- Mary Rudisill was awarded the Outstanding Woman of Lee County, Early Childhood Advocates, Lee County, Alabama.
- Sharon Huey was awarded the College of Education Outstanding Staff award.
- Wendi Weimar and David Pascoe received National Champions rings for their contributions to the Auburn University National Championship Swim Team.
- Dennis Wilson was invited to participate in Roundtable on Preventive Health at Oxford summer 2007.

INSTRUCTION

During 2006, the Department of Health and Human Performance provided instructional opportunities for undergraduate and graduate students majoring and/or receiving minors in one of the following tracks: Exercise Science, Health Promotion, or Physical Education Teacher Education, as well as students taking physical activity courses.

Complete Doctoral Degrees

Brian Campbell – (Ph.D.) – Southeastern Louisiana State University, Louisiana (Major Professor – Weimar)

Eric Plaisance - (Ph.D.) – Post-Doctoral Program, Auburn University Veterinary School (Major Professor – Grandjean)

Kim Eiler (Ed.D.) – Franklin College, Indiana (Major Professor – Hastie)

Gary Gibson (Ed.D.) – Columbus State University, Georgia (Major Professor – Hastie)

Paul St. Onge, (Ph.D.) U.S. Aeromedical Research Laboratory, Ft. Rucker, Alabama (Major Professor – Rudisill)

Robert B. McAlister (Ph.D.) 2006, Medical College of Georgia, Georgia (Major Professor – Fischman)

Shelby Searcy (Ed.D.) – Huntington College, Alabama (Major Professor – Hastie)

Course Development & Review

All faculty members within the department are committed to teaching and report continued review and reflection of their teaching practices and strategies. Departmental averages for student evaluations range from 3.8 – 5.0 for all items on the AU Student Evaluation Form during 2006.

Other Contributions to teaching

Sheri Brock conducted Physical Best/FITNESSGRAM Specialist workshop for undergraduate Physical Education Teacher Education majors in conjunction with HLHP 4200 & 4300.

GTA Program - A significant emphasis in Jared Russell's teaching responsibilities is the instructional supervision and development of the Department of Health and Human Performance's graduate teaching assistants. Jared's primary focus is to transition the GTA from their initial instructional roles to their prospective occupational positions in higher education (or related field) upon graduation. To date the following changes/additions have been made to the Physical Activity and Wellness Program (PAWP) GTA program to bring it in line with existing research literature and development practices with this focus in mind:

- a. *Redesign of the Physical Activity and Wellness Program (PAWP) GTA orientation:* Orientation now is implemented over two days rather than one day. Its focus is on the GTAs' instructional preparation and their transition from initial instructional roles to their prospective occupational in higher education or a related setting.
- b. *Refinement of HLHP 7950 (Seminar: College Teaching):* Course presents the extant literature, techniques, strategies, and practices that are in-line with contemporary perceptions of the proper methods of developing effective GTA college instructors.
- c. *Continued Development of the GTA Instructional Effectiveness Development and Resource Room:* GTAs have resource room to house their instructional materials and access technology conducive to bettering their instruction.
- d. *Implementation of Videotape Instructional Analysis and Clinical Consultation Instructional Effectiveness evaluation process:* The instructional effectiveness evaluation process now entails: a) two (2) GTA supervisor observations; b) two

(2) GTA videotape instructional analyses; and c) standard GTA course effectiveness evaluation via student evaluations.

Redesigned HLHP 4300 (Physical Education in Secondary Settings) - Jared Russell redesigned HLHP 4300 to include providing students with middle and high school setting field experiences. Moreover, students were required to critique their teaching as well as their classmates with the use of videotape instructional analysis.

HLHP Course Web-Resource Pages - Jared Russell created website resource pages for HLHP 4300, 2800 and 7950. These resources provided additional literature and information pertaining to the class experiences students were involved in as part of the courses.

RESEARCH AND CREATIVE WORK

Books

Groccia, C., Rudisill, M. E., Taylor, J. B., & Buchanan, A. M. (2006). *The Global Bridges Parent: A Parent Manual for the Global Bridges International Early Childhood Curriculum for Children Three to Five Years of Age*. Auburn University.

Hamilton, Lutgens and Weimar (2007). *Kinesiology: Scientific Basis of Human Movement*, Ed 11. McGraw-Hill.

Rudisill, M. E., Taylor, J. B., Buchanan, A. M., Groccia, C., & Lechner, J. W. (2006). *Global Bridges Learning Themes: A Manual for Integrating the Global Bridges International Early Childhood Curriculum for Children Three to Five Years of Age*. Auburn University.

Taylor, J. B., Groccia, C., Lechner, J. W., Rudisill, M. E., & Buchanan, A. M. (2006). *Global Bridges Early English Learning Approach. Volume 1*. Auburn University.

Book chapters

Coker, C. A., Fischman, M. G. & Oxendine, J. B. (2006). Motor skill learning for effective coaching and performance. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (5th ed.). (pp. 17–39). New York: McGraw–Hill.

Hastie, P. A., & Siedentop, D. (2006). The classroom ecology paradigm. In D. Kirk, D. Macdonald & M. O’Sullivan (Eds.). *The handbook of physical education*. London: Sage.

Pascoe D.D., Mercer J.D., De Werd L. Physiologies of Thermal Signals. Chapter 3, CRC Publications, May 2006.

Purohit R.C. and Pascoe D.D., Infrared Imaging and Veterinary Medicine. Chapter 21, CRC Publications, May 2006.

Rudisill, M. E., Parish, L. E. & Hang, Q. (2007). Prenatal growth and development: The prenatal growth and development: The fetus and the embryo. In Greg Payne & Peixin Geng (Eds.), *Introduction to Human Motor Development*. Beijing, China: People's Education Press.

Rudisill, M. E., Parish, L. E., Hang, Q., Zhou, Q. & Li, G. (2007). Growth of the young child. In Greg Payne & Peixin Geng (Eds.), *Introduction to Human Motor Development*. Beijing, China: People's Education Press.

Article length publications

Brock, S. J., & Hastie, P. A. (in press). Students conceptions of fair play in Sport Education. *ACHPER Healthy Lifestyles Journal*.

Brock, S. J., & Fittipaldi-Wert, J. (2006). Just move Alabama leader's guide: Volley vitals and vittles. Alabama Cooperative Extension System.

Brock, S. J., & Fittipaldi-Wert, J. (2006). Just move Alabama leader's guide: Frisbee fun and food. Alabama Cooperative Extension System.

Fischman, M. G. (in press). Motor learning and control foundations of kinesiology: Defining the academic core. *Quest*.

Fittipaldi-Wert, J., & Brock, S. J. (in press). I can play too: Disability awareness activities for your physical education class. *Strategies*.

Fittipaldi-Wert, J., & Brock, S. J. (2006) Measuring physical activity for individuals with disabilities. *Teaching Elementary Physical Education*, 22-26.

Special Note –Gladden, L. Bruce. Lactate metabolism: a new paradigm for the third millennium. *Journal of Physiology* 558:5-30, 2004 was in the top five most electronically accessed papers in the *Journal of Physiology* from June, 2004 through June, 2006. It was then #9 in July, 2006, #3 in August and October, 2006 and #4 in November, 2006. The *Journal of Physiology* publishes a collection of "Reviews and Perspectives" on an annual basis. In 2005, figures from my review were used on the front and back covers of this collection.

Gladden, L. Bruce, and Michael C. Hogan. Letter to the Editor. Point/Counterpoint: Lactic acid accumulation is an advantage/disadvantage during muscle activity. *Journal of Applied Physiology* 100:2100-2101, 2006. (Invited Letter to the Editor.)

Gladden, L. Bruce. Letter to the Editor. Mammalian skeletal muscle can convert lactate to glycogen. *Journal of Applied Physiology* 100:2109, 2006.

Grassi, Bruno, Michael C. Hogan, and L. Bruce Gladden. Response to Letter to the Editor: Nitric oxide and muscle VO₂ kinetics. *Journal of Physiology* 573:567-568, 2006.

Gropper, S., Blessing, D.L., Dunham, K., and Barksdale, J. Iron status of female collegiate athletes. *J. Biological Trace Elements*, 109, 1-13, 2006.

Hastie, P. A., Sharpe, T., Eiler, K. K.*, Sinelnikov, O. A.*, Mowling, C. M.*, & Brock, S. J. (in press) Kounin revisited: Tentative postulates for an expanded examination of classroom ecologies. *Journal of Teaching in Physical Education*.

Hastie, P. A., & Sinelnikov, O. A *. (in press). The use of web-based portfolios in college physical education activity courses. *The Physical Educator*.

Hastie, P. A., & Siedentop, D. (2006). The classroom ecology paradigm. In D. Kirk, D. Macdonald & M. O'Sullivan (Eds.). *The handbook of physical education*. London: Sage.

Hastie, P. A., & Curtner-Smith, M. D. (2006). Influence of a hybrid sport education-games for understanding model on one teacher and his students. *Physical Education and Sport Pedagogy*, 11, 1-26.

Hastie, P. A., Martin, E., & Buchanan, A. M. (2006). Stepping out of the norm: An examination of praxis for a culturally relevant pedagogy for African-American children. *Journal of Curriculum Studies*, 38 (3), 293–306.

Hastie, P. A., & Sharpe, T. (2006). Introducing a changing criterion design to hold students accountable in structured physical activity settings. *Journal for Evidence-Based Practices for Schools*, 7 (1), 73-91.

Hastie, P. A. & Sinelnikov, O. A.* (2006). Russian students' participation in and perceptions of a season of Sport Education. *European Physical Education Review*, 12(2), 131-150.

Killingsworth, R., McCurry, N., & Hastie, P. (2006). The effect of class size on course and curriculum level performance for construction students. *International Journal of Learning*, 13 (2), 125-130.

Krasil'nikov, V. P., & Sinelnikov, O. A., (2006). Northern Russian "people" games for children. *Teaching Elementary Physical Education*, 17(5), 8-12.

Mestek, M.L., Plaisance, E.P. & Grandjean, P.W. The relationship between pedometer-determined and self-report physical activity and body composition variables in college-aged males and females. *Journal of American College Health* (Accepted & In Press) June 2006.

Mowling, C., Brock, S. J., & Hastie, P. A. (2006). Fourth grade students' drawing interpretations of a sport education soccer unit. *Journal of Teaching in Physical Education*, 25, 9-35.

Parish, L. E., Rudisill, M. E., & St. Onge, P. M. (in press). Mastery motivational climate: Influence on physical play heart rate and intensity in African American toddlers. *Research Quarterly for Exercise and Sport*.

Plaisance, E.P., Taylor, J.K., Hilson, B.D., Alhasson, S., Abebe, A., Mestek, M.L., Garner, J.C., and P.W. Grandjean. *Cardiovascular fitness & vascular inflammatory markers following acute aerobic exercise*. International Journal of Sports Medicine. (Accepted & In Press) June 2006.

Plaisance, E.P. and P.W. Grandjean. *Physical Activity and High Sensitivity C-reactive Protein*. Sports Medicine, 2006. 36 (5): 443 – 458.

Russell, J. (In press). Reading Between the Lines: Investigating the Impact of Organizational Culture on the Instructional Supervision, Management and Socialization of Collegiate Physical Education Graduate Teaching Assistants. *The Educational Research Journal*.

Sinelnikov, O. A *, Hastie, P. A., & Prusak, K. A . (in press). Situational motivation during seasons of Sport Education. *ICHPER Research Journal*

Sinelnikov, O. A.*, & Hastie, P. A. (2006). Fitness tests in the schools of the United States of America: modern tendencies. In E. M. Osmanov (Ed.), *Proceedings of the III All-Russian scientific and practical conference. Physical education and sports: the basics for a healthy mode of life*. (pp. 245-247). Tambov, Russia: Tambov State University.

Sinelnikov, O. A.*, Hastie, P. A., & Sychev, A. V. (in press). Programmi testirovaniya fizicheskoi podgotovlennosti shkolnikov v Soedinennih Shtatah Americi [Programs of fitness testing for school-aged children in the United States of America]. *Fizicheskaya Kultura: Vospitane, Obrazovanie, Trenirovka*.

Sinelnikov, O. A., Bowers, A., & Hoelscher, K. (2006). ACL injuries in female athletes. *The Sport Supplement*, 14(4). Retrieved October 23, 2006 from http://www.thesportjournal.org/sport-supplement/vol14no4/07_Sinelnikov.asp

Sinelnikov, O. A *, Hastie, P. A., & Prusak, K. A . (2007). Situational motivation during seasons of Sport Education. *ICHPER-SD Research Journal*, 2 (1), 43-47.

Sinelnikov, O. A.*, Terenteva, O. S., & Tarasov, D. A. (2006). Sravnitelniy analiz system podgotovki i organizatsionnih strustur futbolnih arbitrov v Rossii i SSHA [Comparative analysis of preparation systems and organizational structures of football officials in Russia and USA]. *Medico-biological Aspects of Physical Education*, 3, 96-99.

Sinelnikov, O. A.*, & Terenteva, O. S. (2006). Sovremennie aspekti formalizatsii detskogo footbola v Rossii i SSHA [Modern aspects of formalization of youth football in Russia and USA]. *European Science of XXI Century: Strategies and Prospects of Development*, 10(2), 38-44. Smith, JW*. Molloy JM*, and Pascoe D.D. The Use of a Compressive Laminar Flow Body Suit for Use in Competitive Swimming. *Journal of Swimming Research* (In press).

*Stodden, D. & Rudisill, M.E. (2006). Integration of biomechanical and developmental concepts in the acquisition of throwing: Effects on developmental characteristics and gender differences. *Journal of Human Movement Studies*, 51, 117-141.

Wade C., Davis, J., Marzilli, T.S., Weimar, W.H. (2006). Information processing capacity while wearing personal protective eyewear, 49(10), 955 – 967.

Wadsworth D.D., & Hallam J.S. (2006, in press). The use of the processes of change across the exercise stages of change and across varying intensities and frequencies of exercise behavior. *American Journal of Health Promotion*.

Published Abstracts

Araya-Ramírez, F., Briggs, K., Bishop, S.R., Miller, C.E., Moncada-Jiménez, J. Plaisance, E.P. & P.W. Grandjean. *Who benefits most from a phase II cardiac rehabilitation program?* American Heart Association Meeting, Charleston, WV, September, 2006.

Breslin, C. M., Rudisill, M. E., Parish, L.E., St.Onge, P.M., Weimar, W.H., Garner, J.C., Campbell, B.J., (2006). The effects of weight and size of the ball on humeral lag when throwing: Measurement concerns. *Journal of Sport & Exercise Psychology*, 28, S-39. (NASPSPA – Denver, Colorado).

Campbell, B.J., Weimar, W.H., & Garner, J.C. “Counter-moment Effects on “Active Wrist Extensor Muscles During Maximal Gripping.” ACSM. *Medicine and Science in Sport and Exercise*. Supplement, 2006

Fischman, M. G., & *Kilborn, C. R. (June, 2006). *End-state comfort and minimal manipulation effects in the overturned glass task*. NASPSPA, Denver, CO.

Fischman, M. G. (April, 2006). *Unraveling the mystery of the memory drum theory’s “C” response: Revelations from Franklin Henry*. AAHPERD, Salt Lake City, UT.

Garner, J.C., Blackburn, J.T., Weimar, W.H. & Campbell, B.J. “Comparison of EMG amplitude of eccentrically loaded versus concentrically loaded isometric muscle actions.” ACSM. *Medicine and Science in Sport and Exercise*. Supplement, 2006

Grassi, Bruno, Michael C. Hogan, Harry B. Rossiter, Richard A. Howlett, James E. Harris, Matthew L. Goodwin, John L. Dobson, and L. Bruce Gladden. Effects of acute creatine kinase inhibition on skeletal muscle O₂ uptake kinetics. *Medicine and Science in Sports and Exercise* 38:S519-S520, 2006.

Garner, J. C., Weimar, W. H., Campbell, B.J., Breslin, C.M., Rudisill, M.E., Parish, L.E. (2006). Influence of ball weight on ball lag in throwing. *Journal of Sport & Exercise Psychology*, 28, S-71. (NASPSPA – Denver, Colorado).

Harris, James E., Matthew L. Goodwin, Andres Hernandez, Harry B. Rossiter, and L. Bruce Gladden. Accumulated oxygen deficit and VO_{2max} plateau on a continuous incremental test. *Medicine and Science in Sports and Exercise* 38:S508, 2006.

Harris, James E., Andres Hernandez, Matthew L. Goodwin, Harry B. Rossiter, and L. Bruce Gladden. Accumulated oxygen deficit on a continuous incremental exercise test. - *The FASEB Journal* 20(4):A810, 2006.

Hilson, B.D., Plaisance, E.P., Alhassan, S., Garner, J.C., Mestek, M.L., Taylor, J.K. & P.W. Grandjean. *The influence of cardiorespiratory fitness on acute blood lipid and lipoprotein responses to aerobic exercise*. American College of Sports Medicine International Meeting, Denver, CO. Abstracted: Medicine and Science in Sports and Exercise. Vol. 38 (5) No. 2558, 2006.

Mestek, M.L., Plaisance, E.P., Mahurin, A.J. & P.W. Grandjean. *CVD risk markers associated with excess body weight are not altered by cardiorespiratory fitness*. American College of Sports Medicine International Meeting, Denver, CO. Abstracted: Medicine and Science in Sports and Exercise. Vol. 38 (5), No 2611, 2006.

Mestek, M.L., Plaisance, E.P., & P.W. Grandjean. *Pedometer-determined physical activity and body composition in college-aged males and females*. Centers for Disease Control & Prevention: International Congress on Physical Activity and Public Health, Atlanta, GA, April 17-20, 2006.

Plaisance, E.P., Mestek, M.L., Alhassan, S., Mahurin, A.J., & P.W. Grandjean. *Leisure-time physical activity characteristics and cardiovascular disease risk factors in middle-aged men and women*. Centers for Disease Control & Prevention: International Congress on Physical Activity and Public Health, Atlanta, GA, April 17-20, 2006.

Wadsworth DD & Hallam JS. (2006) Differences between subjective and objective observations for college females. *Medicine & Science in Sports & Exercise*. 38(5) Supplement: S554.

Wadsworth DD & Hallam JS. (2006) Evaluation of a social cognitive theory based e-mail intervention to increase physical activity. *Annals of Behavioral Medicine*, 31, S089

Wall, S. J., Rudisill, M. E., Gladden, L. B., & Fischman, M. G. (June, 2006). *Effects of physical activity on cortisol levels in African American toddlers attending full-time daycare*. NASPSPA, Denver, CO.

Weimar, W.H., Campbell, B.J., Garner, J.C. & St. Onge, P.M. "The Influence of Height and Edge Proximity on Balance" ACSM. Medicine and Science in Sport and Exercise. Supplement, 2006

Invited Lectures

Fischman, M. G. (2006). "Motor learning and control foundations of kinesiology: Defining the academic core." American Academy of Kinesiology and Physical Education annual meeting, Tucson, AZ, September, 2006.

Gladden, L. Bruce. A 'lactatic' perspective on metabolism. American College of Sports Medicine Conference on Integrative Physiology of Exercise, Indianapolis, IN, September 27-30, 2006. Also organized symposium on "Current Trends in Lactate Metabolism."

Grandjean, P., *Is regular exercise enough to prevent and reverse metabolic syndrome?* XIII Simposio Internacional en Ciencias del Deporte, el Ejercicio y la Salud, Universidad de Costa Rica, San José, Costa Rica. October 18, 2006.

Grandjean, P., *If childhood obesity is a problem...can physical education help?* Universidad Nacional, San Jose, Costa Rica. October 17, 2006.

Rudisill, M.E. (2006). Mastery Motivational Climate Interventions in Naturalistic Settings. Presented at the 13th International Symposium in Health, Exercise, and Sport Sciences, University of Costa Rica, San Jose, Costa Rica.

Rudisill, M.E. (2006). Mastery Motivational Climate Interventions Workshop: How to implement mastery climates in early childhood physical education. Presented at the 13th International Symposium in Health, Exercise, and Sport Sciences, University of Costa Rica, San Jose, Costa Rica.

International Papers or Lectures

Hastie, P. (July 2006). Tentative postulates for an expanded examination of classroom ecologies. 2006 World Congress of the International Association for Physical Education in Higher Education, Jyvaskyla, Finland.

Pascoe D.D., Strecker E., Foster B., Purohit R.C. Regional Human Skin Temperatures after Caffeine Ingestion, 10th European Congress of Medical Thermology, Zanopane Poland, September 2006

Pascoe C.A., Wolfe D.F, Navarre C.B., Abrams M., Pascoe D.D., Purohit R.C. Thermographic Evaluation of Cervical Dermatome in the Bull. 10th European Congress of Medical Thermology, Zanopane Poland, September 2006.

Rudisill, M.E. (2006). Mastery Motivational Climate Interventions in Naturalistic Settings. Presented at National University, Heredia, Costa Rica.

Rudisill, M.E. (2006). Mastery Motivational Climate Interventions Workshop: How to implement mastery climates in early childhood physical education. Presented at National University, Heredia, Costa Rica.

Rudisill, M.E. (2006). Exercise Adherence and Motivation. Presented at National University, Heredia, Costa Rica.

D.D. Pascoe, J.W. Smith, J.M. Molloy, R.C. Purohit. 9th European Congress of Thermology. Applying Infrared Thermography to Sports Medicine. Krakow, Poland, June 2003.

D.D. Pascoe, J.M. Molloy, J. W. Smith, and R.C. Purohit. 9th European Congress of Thermology. Influence of Environmental Conditions on Regional Mean Skin Temperature. Krakow, Poland, June 2003.

Purohit R.C. and Pascoe D.D. Research Review of Thermology in Veterinary Medicine. 10th European Congress of Medical Thermology, Zanopane Poland, September 2006

Sinelnikov, O. (April, 2006). *Contemporary fitness testing programs for school aged children in the USA*. III All-Russian Scientific & Practical Conference Physical Culture and Sport as Basis for a Healthy Lifestyle, Tambov State University, Tambov, Russian Federation.

Sinelnikov, O.A. (2006). The effectiveness of immersive continuing professional development when introducing Sport Education. In P. Heikinaro-Johansson & E. McEvoy (Eds.), *Proceedings of AIESEP 2006 World Congress. The role of physical education and sport in promotion physical activity and health*. (p. 30). Jyvaskyla, Finland: Kopijyva Oy.

Sinelnikov, O.*, & Hastie, P. (July, 2006). Situational motivation of Russian students during Sport Education. 2006 World Congress of the International Association for Physical Education in Higher Education, Jyvaskyla, Finland.

Wall, S. J., Rudisill, M.E., Gladden, L. B. & Fischman, M. G. (2006). Effects of physical activity on cortisol levels in African American toddlers attending full-time daycare. *Journal of Sport & Exercise Psychology*, 28, S-187. (NASPSA – Denver, Colorado).

National Papers or Lectures

Buchanan, A. M., Klinkenborg, A., Austin, A., & Shell, T. (2007). Integration, Innovation, and Advocacy: PE Across the Curriculum. Paper presented at the *Share the Wealth Conference*, Jekyll Island, GA, January.

Brock, S., & Sinelnikov, O. (January, 2007). *Games for large groups – dynamic and developmentally appropriate*. Share the Wealth in Elementary, Middle and High School Physical Education Conference, Valdosta State University, Jekyll Island, GA.

Harris, James E., Andres Hernandez, Matthew L. Goodwin, and L. Bruce Gladden. Confirmation of treadmill VO_{2max} in sprinters and long distance runners. Presented at American College of Sports Medicine Conference on Integrative Physiology of Exercise, Indianapolis, IN, September 27-30, 2006.

Mowling, C., Brock, S. J., Fittipaldi-Wert, J. (April, 2006). Minority students' representations of personal and social responsibility in physical education. American Education Research Association Annual Meeting, San Francisco, CA.

Sinelnikov, O. (July, 2006). *The effectiveness of immersive continuing professional development when introducing Sport Education*. 2006 AIESEP World Congress,

International Association for Physical Education in Higher Education, Jyvaskyla, Finland.

Sinelnikov, O., & Hastie, P. (July, 2006). *Situational motivation of Russian students during Sport Education*. 2006 AISEP World Congress, International Association for Physical Education in Higher Education, Jyvaskyla, Finland.

St. Onge, P., Chanceya, V.C., McEntirea, B.J., Mandoa, V.J., Rudisill, M.E., Brozoskia, F.T. (2006). Pressure distribution and transmissibility testing of helicopter seat cushions. Injury Biomechanics Symposium, Ohio State University, Columbus, Ohio.

Sutherland, S. & Russell, J. (October, 2006). *Mentoring Tomorrows Teachers and Scholars (Part 2): Using Reflection to Promote High Quality Instruction*. Paper presented at the National Association for Physical Education and Physical Education (NASPE) conference on Physical Education Teacher Education. Long Beach, CA.

Regional and State Papers and Lectures

Brock, S. J., Pucci, G., Leroux, D., Fittipaldi-Wert, J., & Thornburg, R. (November, 2006). Motivation is the key: innovative activities for physical education. New York State Association for Health, Physical Education, Recreation and Dance State Conference, Rye Brook, NY.

Fittipaldi-Wert, J., Brock, S. J., & Auburn University Undergraduate Physical Education Majors. (November, 2006). Everyone can play: Successful inclusion tips. Alabama State Association for Physical Education, Recreation and Dance State Conference, Birmingham, AL.

Invited Presentation: *Sickle Cell Trait: Influence on Exercise Performance & Considerations for Exercise Safety*. Athletic Trainer's Conference, Baptist Health Sports Medicine, Montgomery, AL, July 22, 2006.

Invited Presentation: *Healthy Exercise as You Age: Resistance Training for Sedentary Adults*. Lee-Russell County Council of Governments: Caregiver Meeting, East Alabama Medical Center Human Resource Center, Opelika, AL, March 17, 2006.

Symposium: *Exercise and Metabolic Syndrome*. (with Dr. Stephen Crouse, Texas A&M University) Texas American College of Sports Medicine Meeting. Texas Woman's University, Denton, TX, Feb 24, 2006.

Invited Presentation: *The Role of Exercise in Lipid and Lipoprotein Health*. Texas American College of Sports Medicine Meeting. Texas Woman's University, Denton, TX, Feb 24, 2006.

Russell, J. Facilitate Formative Dialogues between Graduate Teaching Assistants (GTAs) and their Supervisor via Clinical Consultation Cycles. Auburn Forum on College Teaching and Learning Spring 2006. Auburn University.

Funding (Grants or contracts)

Internal Funding

GTA Contracts (11) with the following agencies and schools: East Alabama Medical Center (1), Lee County Schools (3), Lee County Youth Development Center (1), Kenny Howard Fellowship -Hughston Clinic (6).

A.U. Title VI Summer salary Assistance Program Grant. Awarded April 2006. Amount: \$15,000 (P.I., J. Russell).

A.U. Office of Outreach Discretionary Grant: Awarded August 2006. Amount: \$2,000 (P.I., J. Russell).

Daniel F. Breeden Grant, Provide opportunities for students to develop exercise prescriptions for member of the University community. Principal Investigator: Danielle D. Wadsworth, Funding Amount: \$1660.00

National Advisory Council Mini-Grant Proposal, Determine the effect of two outdoor play climates on cortisol levels of children with Autism Spectrum Disorder. Principal Investigator: Danielle D. Wadsworth; Co-Investigator: Mary Rudisill, Funding Amount: \$2000.00

\$2000 from the COE Dean's office for general research purposes. (Peter Hastie)

Undergraduate Research Fellowship Program (2006) – Research project with camp counselors and students with vision impairments at Camp Abilities in Tucson, AZ. (\$1800 – funded) (P.I., S. Brock).

Auburn University Competitive Research Grant (2006) to conduct research with camp counselors and students with vision impairments at Camp Abilities in Tucson, AZ. (\$3000 – funded) (P.I., S. Brock).

Daniel F. Breeden Endowment for Faculty Enhancement (2006) for Auburn Undergraduate Physical Education majors to volunteer as counselors to students with vision impairments at Camp Abilities in Tucson, AZ (\$2000 – funded). (P.I., S. Brock).

College of Education Research Support (2006) – Research project with camp counselors and students with vision impairments at Camp Abilities in Tucson, AZ. (\$1000 – funded). (P.I., S. Brock)

Sinelnikov, O. (2006). Discretionary Travel Award, “The effectiveness of immersive continuing professional development when introducing Sport Education,” College of Education, Auburn University \$500 – funded

Participated on grant writing team through the Biggio Center for Teaching Excellence to fund Partners in Community Service – with James Groccia, P.I., Donald Mulvaney, Holly Stadler, Emily Myers, Sharon Roberts. Not funded. (Buchanan)

External Funding

Overfelt, R, Weimar, W. & Chivukula, K. Bioeffects of Precision Electrical Shocks to Peripheral Nerves. Department of Defense Joint Non-Lethal Weapons Directorate. Funded (\$120,000). Funded.

KOS Pharmaceuticals, February 2006, PIs: Peter W. Grandjean, Eric Plaisance . *The effects of extended-release niacin (Niaspan) and a single session of aerobic exercise on fasting and post-prandial blood lipids*. AMOUNT: \$26,200. STATUS: Funded

National Science Foundation. “Center for Modeling Integrated Metabolic Systems (MIMS) – subcontract to Case Western Reserve University entitled ‘Control of mitochondrial oxidative metabolism in skeletal muscle at contractions onset’.” September 1, 2007 – June 30, 2012. Direct Costs requested = \$160,000. Indirect Costs requested = \$73,600. Total Request = \$233,600. (Gladden) (Pending)

Apparel Product Development for Plus-Sized Teen and Tween Male Market. L.J Connell. P. Ulrich, K. Simmons, D. Pascoe, D. Bruner, S. Mellain, S. Rider . National Textile Consortium (2006-2007); Pending. (Pascoe)

Validity of a multi-sensor device for estimating resting metabolic rate, Determine the validity of a device to estimate resting metabolic rate. Principal Investigator: Scott Owens, Co-Investigators: Danielle Wadsworth, Jeff Hallam, Melinda Valiant. Direct sub-contract site at Auburn University, Funding source: National Institutes of Health, Sub-Award Funding amount: \$217,243, Funding Amount: \$471,276 (Pending)

Preschool Physical Play: Implementing Mastery Motivational Climates. Special Education Research - Early Intervention, Early Childhood Special Education, and Assessment for Young Children with Disabilities, APPLICATION R324A07068, Department of Education. \$750,000. *P.I.* M. E. Rudisill & Wadsworth. (Not funded.)

Implementing Inclusive Mastery Motivational Climates in Physical Education. Department of Health and Human Services Public Health Service. Intervention Grants to Promote the Health of People with Disabilities. RFA-DD-06-004. Centers of Disease Control and Prevention. \$890,000. *P.I.* M. E. Rudisill & D. Wadsworth (Not Funded.)

National Science Foundation. “Control of mitochondrial oxidative metabolism in skeletal muscle at contractions onset.” July 12, 2007 – July 11,2010. Direct Costs requested = \$331,965. Indirect Costs requested = \$147,736. Total Request = \$479,736. (Not funded.) (Gladden)

National Textile Consortium (NTC) Grants: The mission of the National Textile Center is to promote academic research for the continuing viability and competitiveness of the U.S. Textile industries in the world market. The grants strongly encourage collaborative research efforts between the major Universities with textile programs and interdisciplinary that promotes a comprehensive approach to a research question. The money is made possible through the United States Department of Commerce and The National

Textile Center. Yearly review is needed to obtain each year's funding. Each year the project is peer reviewed by CEO's and leaders in the textile industry.

On the NTC grants listed below, David Pascoe solely responsible for the grant work related to humans (clothing-human comfort, clothing-human heat transfers, clothing manikin/human modeling, etc), with the exception of body dimension imaging scanning.

Climatic Conditions (Heat Stress during the Fall Football Season. Co-Investigator University of Georgia, National Athletic Training Association, \$500/year (2005-2007). (Pascoe)

OUTREACH

Programs and Activities

Pete Grandjean oversees the *TigerFit* outreach program that is a curriculum-based program designed to provide hands-on training for students in Health & Human Performance and to provide comprehensive health and fitness profiles for Alabamians. In addition, the *TigerFit* Program has been designed for conducting research in cardiovascular disease risk reduction through exercise and physical activity interventions. The *TigerFit* Program is a collaborative effort between the Department of Health & Human Performance, Baptist Health Care Family Medicine Residency Program and Hughston Clinic. Health & fitness assessments include a physician exam, complete blood profile, pulmonary function & body composition assessments, graded exercise test with blood pressure and ECG and an orthopedic evaluation. Clients are provided their results and an individualized exercise prescription. Current client groups include the Lee County Sheriff's Department, Auburn University Police, the Auburn City Fire and Police Departments and many individuals from all over the Southeast.

Adapted Physical Education Program for Children and Youth with Disabilities. Serves from 15-30 children who have been identified by the school district as having a disability. (Alice Buchanan)

Teacher Development in the Implementation of Sport Education in Tambov Region Schools, Russia, Part 2. – continued teaching teachers in Russian schools how to deliver the Sport Education model; also taught in schools in Tambov Region. (Peter Hastie)

Lyman Ward Physical Education Program – taught after school intramural program. (Peter Hastie)

Conducted Physical Best/FITNESSGRAM Specialist workshop for elementary and secondary physical education teachers in Orange County School District, Orlando, FL (Sheri Brock)

Consultant, Camp Abilities Tucson, AZ (Sheri Brock)

Conducted a training workshop for 4H Leaders in conjunction with Alabama Cooperative Extension "Just Move Initiative" – Columbiana, AL (Sheri Brock)

Infrared and Medical Thermography Outreach Scholarship conducted in the Thermoregulation Laboratory directed by David Pascoe (Mary Rudisill)

Preschool Motor Skills Research Program for underserved children attending Auburn Day Care Centers – (Mary Rudisill)

AU Autism Motor Skills Research Intervention Motor Development Program – (Mary Rudisill & D. Wadsworth)

Russell, J. (Fall, 2003 – to present) *R.O.C.K. Foundation (Reaching Out for Christ's Kids)*. Serve as board member of R.O.C.K. Foundation with responsibilities including coordinating monthly meetings, writing grants for project/activity funding, and serving as a role-model and speaker.

Wendi Weimar conducted an Outreach project in 2005 called “Skill Analysis as a Teaching Tool”. The audience was Auburn City Elementary Physical Education to introduce a more objective method of skill evaluation, and (2) demonstrate how skill analysis is the basis of good teaching. This project was partially funded by the Biggio Center’s Breeden Grant (2004). This grant provided the resources to purchase software that improved Dr. Weimar’s instruction to the Auburn City Elementary Physical Educators. The project was conducted with the assistance of Ellen Martin, EdD, Associate Professor at Columbus State University. Weimar will conduct an outreach workshop at the AAHPERD National Convention in Baltimore, MD, March 2007 to share her knowledge of skill analysis with physical education practitioners.

Danielle Wadsworth Monitored Physiological Responses in Auburn University’s Air Force ROTC cadets and provided the ROTC with opportunities to measure their physical and sedentary behaviors

Wendi Weimar conducted an Outreach project with Opelika High School Basketball Coaches to provide timely, visual sport performance feedback to athletes and their coaches as well as provide AU students a model of evaluation and instruction. Ultimately, the goal of this project is to lead to an assistantship for one of the Biomechanics graduate students, in which they will be a resource for all of the coaches and physical educators at Opelika High School.

Outreach publications

D. Wadsworth provided Material Development (practitioner articles) for the Getting Started packet for Lee County’s “Give It Up” weight loss program.

Other outreach products: videos, job aids, etc.

Sinelnikov, O. A. (2006). Sportivnoe Obrazovanie [Sport Education] [Interactive CD-ROM]. Auburn: Author.

Oleg Sinelnikov and Peter Hastie were featured in the television program “*Students’ Voice*,” KTV-8 (Russia), aired Thursday, December 14, 2006, “Sport Education for students.”

Oleg Sinelnikov and Peter Hastie were featured in the television program “*Sport Pages*,” KTV-8 (Russia), aired Wednesday, December 1, 2006, “Sport Education in Kotovsk.”

SERVICE

2006 Professional Service

Member, Southeast Chapter of the ACSM Nominating Committee (B. Gladden)
Associate Editor-in-Chief for Basic Sciences, Medicine and Science in Sports and Exercise, effective July 1, 2006 – Handling 25-35 papers per year (B. Gladden)
Reviewer, *European Journal of Applied Physiology* (B. Gladden)
Reviewer, *Acta Physiologica Scandinavica* (B. Gladden)
Reviewer, *Journal of Physiology* (B. Gladden)
Reviewer, *Journal of Applied Physiology* (B. Gladden)
Reviewer, *Annals of Biomedical Engineering* (B. Gladden)
ACSM – Fit Society Newsletter Editorial Board (P. Grandjean)
ACSM, Southeast Chapter Board, Member-at-Large (P. Grandjean)
Reviewer, *Medicine & Science in Sport & Exercise* (P. Grandjean)
Reviewer, *Metabolism* (P. Grandjean)
Reviewer, *Canadian Journal of Applied Physiology* (P. Grandjean)
Reviewer, *British Journal of Medicine* (P. Grandjean)
Reviewer, *International Journal of Sports Medicine* (P. Grandjean)
Reviewer, *International J. of Sport Nutrition & Exercise Metabolism* (P. Grandjean)
Reviewer, *Preventative Medicine* (P. Grandjean)
Member, AAHPERD Research Consortium Credentials Committee (M. Fischman)
Reviewer of abstracts in Motor Behavior for the AAHPERD Convention (M. Fischman)
President-Elect of American Academy of Thermology (D. Pascoe)
Vice President of American Academy of Thermology (D. Pascoe)
Reviewer, *Research Quarterly for Exercise and Sport* (P. Hastie)
Reviewer, *European Physical Education Review* (P. Hastie)
Review Board Member, *Physical Education and Sport Pedagogy* (P. Hastie)
Tenure & Promotion, External Reviewer, UNC - Greensboro (M. Rudisill)
Reviewer, *Research Quarterly for Exercise and Sport* (M. Rudisill)
Reviewer, *Adapted Physical Activity Quarterly* (M. Rudisill)
Southeastern American College of Sports Medicine - Past- Presidents Advisory Group- Strategic Planning; Scholarship Provision (D. Wilson)
Advisory Board, Alabama Institute for Sport and Fitness Management (D. Wilson)
Advisory Board, Human Performance and Rehabilitation Center, Auburn (D. Wilson)
NCAA Self Study Committee (D. Wilson)
Consultant, Healthy Lee County – citywide weight loss program, East Alabama Medical Center and Blue Cross Blue Sheild (M. Rudisill)
Member of the Auburn University Biggio Center for the Enhancement of teaching and Learning Assistant Director search (J. Russell)
Reviewer for *Journal of Graduate Teaching Assistant Development*. Published by New Forums Press (J. Russell)

Reviewer for *Journal of Faculty Development*. Published by New Forums Press. (J. Russell)

External reviewer for special theme issue of *Journal of Graduate Teaching Assistant*
Published by New Forums Press. (J. Russell)

Member of the Auburn University Health Fair Committee (D. Wadsworth)

Judge at the A.U. Graduate Student Forum (D. Wadsworth)

2006 University Service & College Service

Auburn University Institutional Review Board for the Use of Human Subjects in
Research, Member 2001 – 2004, Chair (P. Grandjean)

University Senate Nominating Committee (B. Gladden)

University Faculty Senator, 2004-present (A. Buchanan)

Concessions Board, Member (D. Blessing)

Chair, Governance and Resources Committee, 2006-present (A. Buchanan)

Member, University Budget Advisory Committee (M. Rudisill)

Member, University Health Committee (M. Rudisill)

University Health Fair Committee (M. Rudisill)

Member, Administrative Council (M. Rudisill)

Chair, Coordinator in Partnership Search Committee (A. Buchanan)

Committee to review Adult Education Program, Fall, 2006 – Spring, 2007 (B. Gladden)

Member, College of Education Program Review Committee (M. Fischman)

Member, University Grievance Committee (M. Fischman)

COE Awards Committee Representative for HLHP (A. Buchanan)

Education Partnership Committee, 2006-present (A. Buchanan)

NCATE Standard I Committee, 2004-2006 (A. Buchanan)

University Senate Committee on Retention (A. Buchanan)

Dean's University Council (S. Brock)

College of Education Diversity Committee (S. Brock)

Member, Curriculum Design Unit Assurance Seminar Committee (S. Brock)

Member, NCATE Assessment Sub-Committee (S. Brock)

Member, NCATE (Standard 2) Assessment Committee (S. Brock)

College of Education Awards Committee (P. Hastie)

College of Education EFLT Chair Search Committee (P. Hastie)

Member of University Safety Committee (W. Weimar)

Member of University Insurance and Benefits Committee (W. Weimar)

Self-defense consultant to the Football Hosts and Hostesses (W. Weimar)

Biomechanics & Self-defense Consultant, AU Marching Band (W. Weimar)

Current Committees- Member, COE Campaign for Auburn Campaign (D. Wilson)

Biomechanics & Martial Arts Consultant, 9 time National Champions AU Swim Team
(W. Weimar)