Performance in Motion

Department of Kinesiology—College of Education
Michigan State University

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Message from the Chair
Deborah L. Feltz

During this past summer, I invited a group of faculty in the Department to meet to read and discuss Jim Collins' book, *Good to Great*, for the purpose of determining if there were principles that we could apply to improving the performance of our own department and guiding its future direction. After reading the book, we opened up this dialogue to the entire faculty through a faculty retreat. The book suggests that great companies and organizations understand the intersection of three basic concepts: what it is passionate about, what it can be best at, and what drives its "economic engine" (or generates robust profitability). We had a healthy and energetic discussion about how we define our department around these concepts. We had a few constraints to deal with as we contemplated these concepts, such as the Department of Kinesiology is part of bigger organization (MSU) and that we do not control tuition – the biggest driver of our economic engine. This was not just an exercise for us. Given the retirement age of a number of faculty in our department, understanding these concepts will help us in hiring faculty for the future. Our conclusions were as follows:

*We are passionate about the study of physical activity as it relates to people's health and well-being, especially in children and youth

*We can be best at research, teaching, and outreach in **pediatric kinesiology**, given the research focus of our faculty and the Institute for the Study of Youth Sports

*Given that we have no control over the tuition that comes to MSU, research funding is the economic engine that will sustain our laboratories, equipment, and assistantships to enable us to do what we are best at.

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MSU Sports Skills Program Received Special Olympics Michigan's Outstanding Sports Organization Award for 2007

On November 3, 2007, Gail Dummer, as director of the MSU Sports Skills Program, along with teaching assistants Marty Douglas, Lissa Alexander, and Angela Glossop, accepted the Special Olympics Michigan's Outstanding Sports Organization Award for 2007. The Sports Skills Program was recently nominated for this award by Anne Goudie. The Sports Skills Program is the lab component of KIN 465—Adapted Physical Activity, in which KIN undergraduate students learn to coach persons with disabilities. The program serves approximately 80 undergraduate students and 80 persons with disabilities each semester.

Marty Douglas, Lissa Alexander, Angela Glossop & Gail Dummer pictured left

Institute for the Study of Youth Sports

Dept. of Kinesiology
College of Education
Michigan State University

The mission of the Institute for the Study of Youth Sports is to provide leadership, scholarship and out-reach that "transforms" the face of youth sports in ways that maximize the beneficial physical, psychological, and social effects of participation for children and youth

ISYS Helping to Develop Michigan's Future Leaders

"A community is like a ship; everyone ought to be prepared to take the helm."

Henrik Ibsen

Many people believe that participation in sports helps develop America's future leaders. Research, however, has not shown this to always be the case. Merely participating in sport does not build leaders. Leadership is fostered and taught by competent caring coaches and others invested in the development and well-being of youth athletes who provide environments and direct instruction for doing so.

Recognizing the above, the Institute for the Study of Youth Sports (ISYS) has partnered with the Michigan High School Athletic Association (MHSAA) to develop the MHSAA Captain's Leadership Training Program. For the last several years, one-day workshops have been held around the state in which 100 to 200 student-athlete captains and potential captains have attended each workshop. Each workshop covers a series of topics that are critical to being an effective team captain and leader. The topics include such issues as effective communication, team building, peer modeling, motivation, and sportsmanship.

The workshops are led by ISYS graduate assistants and faculty who engage the student-athletes in various exercises, discussions and activities that teach the participants basic leadership skills. An overarching goal is to create an environment that teaches the critical elements of leadership through introspection and interaction with other captains. Conference participants also receive a guidebook authored by ISYS graduate students and staff that includes applied chapters on key leadership skills.

MHSAA *Becoming an Effective Team Captain: Student-Athlete Guide* Contents

Youth sports—continued

While this year's focus is on standardizing the conference content and writing the guidebook chapters, additional components will be developed. In addition to the student guidebook, the plan is to develop an instructor's guide that will provide direction and materials for adult leaders in the school. The hope of the ISYS and MHSAA is that these adults will use the materials to form a captain's council, which will provide a forum for the student leaders to meet regularly during the school year, to discuss ways to implement what was learned about leadership at the conferences and to apply those lessons to the student athletes' day-to-day experiences as team captains. We are also planning to provide guidance on ways the captains' councils can conduct community service projects off the athletic field.

While the initial focus of this project is on outreach, a strong research component will be included. Doctoral student, Dana Voelker, and ISSY Director, Dan Gould, for example, are conducting a study in which interviews are being conducted with freshman at MSU who were captains in high school. The initial focus of the research is to better understand the experience of being a high school sport captain—especially the challenges captains feel they face, what experiences helped them be successful, any training they received, and recommendations for student-athletes who will become future captains. A second interview study is planned in 2008, where high school coaches who have a reputation for developing effective captains will be interviewed and surveyed with the goal of identifying the best captain development practices these individuals employ. Finally, once these initial studies are conducted and their findings integrated into the training program, a series of studies designed to evaluate the effectiveness of the captain's leadership training program will be planned.

The MHSAA Captains Leadership Training project is a perfect fit for the ISYS as MSU's is a leading land grant university that prides itself in its efforts to advance knowledge and transform lives. It connects the university to an important community partner, provides a venue for MSU students to gain valuable experience as program instructors, and provides opportunities to advance kinesiological knowledge and contribute to the academic discipline. Most importantly, it helps a large number of young people learn to be leaders.

"Leaders aren't born they are made. And they are made like anything else, through hard work."

- Vince Lombardi

These pictures are Courtesy of 20/20 Photo

SPARTAN PROFILE

Joey Eisenmann

Dr. Joey Eisenmann spent his first two decades of life in Washburn, ND (population 1,800). These North Dakotan roots account for the nickname ---"Prairie Boy" -- given to him by a London-born colleague. Eisenmann spent his youth as a successful athlete that included earning state and regional honors as the Oscar Mayer/U.S. Baseball Federation Player of Year and a nomination to the North squad of the U.S. Jr National Baseball team. Although his recent interest is more in line with medical issues of child obesity, the early influence of youth sport and an interest in sport physiology, conditioning and performance led him to a career in exercise science.

For various reasons, Eisenmann chose to remain in his home state to play collegiate baseball, which culminated in All-American honors. He double majored in Physical Education and Health (non-teaching) with a minor in biology from Mayville State University in North Dakota. He finished his undergraduate degree with an internship at Red River Valley Sports Medicine/Acceleration Training Program. During the summers, he coached youth baseball teams in Medicine Hat, Alberta, Canada where several players went on to play collegiately, and 3 others played on Provincial or Canadian National teams and eventually signed professional contracts.

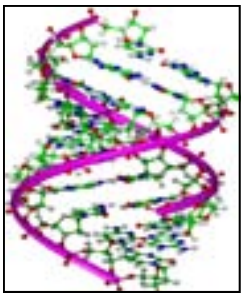
Joe began his graduate work at Northern Arizona University and joined a respiratory physiology laboratory and the High Altitude Training Center. In addition, he was introduced to comparative mammalian physiology. These experiences piqued an interest in oxygen transport of small animals (children) and large animals (adults). He conducted thesis research on the pulmonary function of Navajo Native American children. While in Flagstaff, he enjoyed the beautiful surroundings including the Grand Canyon, Red Rock Canyon, Sedona, and the local eclectic coffeehouses of Flagstaff.

After contemplating various fields of medicine, an interest in the growth of children and pediatric exercise science led him to work on his PhD with Professor Bob Malina, who had recently joined the faculty at MSU as director of the Youth Sports Institute. As a PhD student, Eisenmann worked in the Youth Sports Institute and also fostered a relationship with Dr. Pivarnik in the Human Energy Research Laboratory. During this time, he researched young distance runners and elite Portuguese soccer players. In addition to coursework in human growth, he began coursework in epidemiology which influenced his interested in physical activity, obesity and cardiovascular disease risk factors. This interest led to research with the Quebec Family Study. His dissertation combined his interest in human growth, young athletes, CVD risk factors, and oxygen transport.

In August 2000, Dr. Eisenmann began his first academic position at the University of Wyoming. After 2 years, he re-located to York University (Toronto) for 1 year and then onto Iowa State University where he spent the past 4 years. During this time, the diverse scientist continued his work in the biology of physical activity, physiological function, and health of children and adolescents. In total, he has amassed 61 peer-reviewed publications.

Joe's family includes his partner Beth Herbel-Eisenmann, PhD (assistant professor in Mathematics Education) and child Kaleb, 11 yrs of age. Dr. Eisenmann enjoys being physically active in a variety of ways (running, biking for transportation, swimming, hitting baseballs in the backyard batting cage, ice skating, hockey, basketball, neighborhood walks, yard work, etc.). He stays quite abreast on worldly events and enjoys learning about various cultures. He enjoys reading biographies of Hall-of-Fame baseball players, notable scientists, and world leaders. He also enjoys watching sporting events (especially college football and basketball) and attending Spartan hockey games. And he knows more about the sitcom 'Seinfeld' than most people!

Research in Exercise Physiology



Physical activity, stress, and the metabolic syndrome.
Dr. Eisenmann and his team want to gain an understanding of the role of stressors on the genesis of the metabolic syndrome during puberty. This project has two specific aims: 1) Examine the stress response to psychological and physical perturbations in obese and non-obese adolescents. In this study, measurement of salivary cortisol will be used as an indicator of hypothalamic-pituitary adrenal axis (HPA axis) activity and blood pressure and heart rate will be used as indicators of the sympatho-adrenal-medulary (SAM) axis. The research team hypothesized an exaggerated stress response in obese adolescents compared to non-obese adolescents. 2) Examine the relationships among energy expenditure, cortisol, and atherosclerotic risk factors in obese and non-obese adolescents. Eisenmann and his team hypothesize a direct relationship between baseline cortisol levels and atherosclerotic risk factors, and more specifically that physical activity will modify the relationship between cortisol and atherosclerotic risk factors. This research is supported by the Center for Designing Food and Improving Nutrition, Iowa State University through the U.S. Department of Agriculture.

Biomarkers and Genetics Laboratory (BAGL). *The primary focus of the Biomarkers and Genetics Laboratory is to gain a better understanding of the genesis of the metabolic syndrome during childhood and adolescence. In other words, we are interested in the causes and consequences of obesity and the emergence of Type 2 diabetes and vascular disease during childhood and adolescence. The long-term goal of this research is to elucidate the mechanisms of the metabolic syndrome through the complex interactions of genetics, environmental factors (particularly stress, exercise, diet, and maternal factors), and the neuroendocrine, hormonal, metabolic, hemostatic and inflammatory systems in the growing and maturing obese child. An understanding of these complex interactions in the obese adolescent may provide a better understanding of the etiology of the metabolic syndrome, Type II diabetes and atherosclerosis and the prevention and treatment of these clinical disorders in the obese adolescent.*

Students participating in Kinesiology research

Genetics, physical activity, and obesity-hypertension in young children. The objective of this study is to examine the longitudinal development of the adiposity and blood pressure (BP) phenotypes in young children taking into account physical activity and the angiotensinogen converting enzyme (ACE) polymorphism. The research team chose to study ACE polymorphisms because it is a positional candidate gene that may have pleiotropic effects on adiposity and BP. In the context of human growth, a master gene may have pleiotropic control over somatic growth, obesity and BP. Given the potential roles of adiposity, physical activity and genes and their interactions on the etiology of the hypertension during early life, it is critical to increase the understanding of the genesis of obesity and hypertension and develop appropriate prevention and treatment strategies. This project is currently funded by the American Heart Association. Collaborators include: Dr. Kate Heelan, University of Nebraska-Kearney; Dr. Greg Welk, Iowa State University; Dr. Max Rothschild, Iowa State University; Dr. Adam Baxter-Jones, University of Saskatchewan.

This work will identify potential antecedents in early life that affect the metabolic syndrome.

Genetics, adolescent fatness and fitness as predictors of adult metabolic syndrome. In this study, Dr. Eisenmann and his colleagues address whether adolescent growth is related to subsequent adult disease by following subjects from the Saskatchewan Growth and Development Study (SGDS, 1964-1973) who are now approaching the age of 50, which is about the time that the clinical manifestations of CVD and Type 2 diabetes occurs. Given the longitudinal design of the SGDS they can also investigate the influence of longitudinal growth trajectories during adolescence on adult health outcomes. Unlike cross-sectional associations between one-time adolescent and adult measures used in previous studies, the proposed study design allows the calculation of growth trajectories, which incorporate change over the entire period. This work will identify potential antecedents in early life that affect the metabolic syndrome. Funding for this project is from the Canadian Institutes of Health Research (Co-investigator with Dr. Adam Baxter-Jones, University of Saskatchewan).

Joe Eisenmann (right) with Kelly Laursen, PhD student, Iowa State University who assisted Joe with earlier study.

Effects of physical activity on the metabolic syndrome during postnatal development in mice selectively bred for high capacity running: An ontogenetic model of the metabolic syndrome. An alternative to longitudinal studies of human children and adolescents is the postnatal animal model. Dr. Eisenmann has begun collaborations with Dr. Ted Garland (University of California-Riverside) to use a novel animal model to examine the unique and combined contributions of genetics and physical activity on the postnatal development of the metabolic syndrome. In this project he is using mice that have been selectively bred to run voluntarily on wheels almost 200% more than non-selected lines (controls). The objective of this study is to gain an understanding of the role of genetics and physical activity on the genesis of the metabolic syndrome during postnatal development using a novel animal model. This project has two specific aims: 1) Examine the ontogeny of the metabolic syndrome in two strains of mice – one selectively bred for high levels of voluntary exercise and a control line. 2) Examine the effects of physical activity (access to a running wheel) on the ontogeny of the metabolic syndrome in both strains of mice. This work is currently supported from a Michigan State University Seed Grant.

Crystal Branta Goes to China to Promote Motor Development Book

Dr. Crystal Branta was invited to China by the People's Education Press (PEP) as one of nine motor development scholars from the United States. The purpose of the trip was to introduce the sub-discipline of motor development to various universities around China and to promote the first motor development book to be published in Mandarin. Each scholar wrote chapters for the book. Specifically, the group arrived in Beijing on 10/13/07, and conducted workshops at three locales. Dr. Branta lectured at the National Motor Development Congress at the PEP and she also met several graduate students who want to come to MSU for their PhD work. The general format was that groups lectured for 3 or 4 sessions (1 -2 days) and then were treated to local site-seeing. On 10/17, the larger group divided into 4 traveling groups and went to various parts of China to deliver the workshops and lectures. Crystal's travel partner was Dr. Nancy Getchall from the University of Delaware and translator, Bai Seng, a third year graduate student at Beijing Normal University.

Dr. Branta's second stop was Hebei Normal University in Shijiazhuang, the capital city of Hebei Province. She had wonderful interactive sessions with the faculty and graduate students, many of whom understood and spoke English.

After four days in Hebei, the travel team rode the train to Shanxi University in Taiyuan, the capital city of Shanxi Province.

Few individuals spoke English at Shanxi, and the American scholars' Mandarin was almost non-existent, so they really worked their translator. The sessions went very well and Dr. Branta received some excellent questions on motor development and research in general from the attendees.

Crystal Lecturing in Beijing

Lunch in Ping Yao

Gail Dummer in China with USA Swimming Team

Gail Dummer and four of the swimmers she coached at the World Games

Dr. Gail Dummer served as an assistant coach to the USA swimming team at the World Special Olympics Games in Shanghai, China, October 2-11. the World Games attracted over 7,500 athletes in 21 sports from over 160 nations. In addition to the competition, coaches and athletes were treated to a four-day host town experience during which they visited local communities and families. Go to http://edweb6.educ.msu.edu/kin866 to view a presentation about the World Games.

Sports-Related Concussion Project

Dr. Tracey Covassin is an assistant professor in the Department of Kinesiology and the undergraduate athletic training program director. Her research focus is sports-related concussion and factors that may or may not be related to recovery from this injury. She is currently in collaboration with distinguished professional medical, sports, and educational organizations in the mid-Michigan region and across the country in an effort to educate coaches and sports medicine professionals on the assessment and management of sports-related concussion. These relationships have offered valuable opportunities to collect data from concussed athletes for the purpose of better understanding the acute and potential long-term effects of this injury in high school and collegiate athletes.

Dr. Covassin was an invited member of the Youth Sports Concussion Tool Kit Panel for the Center for Disease Control and Prevention (CDC). She was also asked to conduct a follow-up study to evaluate the CDC's Heads Up: Concussion in Youth Sports Tool Kit. In conjunction with the National Alliance for Youth Sport she has over 1,200 surveys on youth coaches knowledge of concussion, and will send out a post-survey 6 months after the launch of the CDC's Heads Up: Concussion in Youth Sports Tool Kit.

Schools that have agreed to participate in Dr. Covassin's research have had the opportunity to employ a neurocognitive testing battery for use in their clinical practice. ImPACT (Immediate Post-Concussion Assessment and Cognitive Testing) is a computerized neurocognitive testing battery that offers clinicians additional information on the cognitive recovery of the concussed athlete. This measure is growing in popularity across the country, and Dr. Covassin's research offers an opportunity to educate certified athletic trainers in the mid-Michigan area on how to use this diagnostic tool for concussion evaluation and management.

During her first two years at MSU, Dr. Covassin and her doctoral student, RJ Elbin, have developed a research agenda that currently includes nine high schools in the mid-Michigan region as well as various universities and colleges across the country. Dr. Covassin and Mr. Elbin plan to examine the long-term effects of concussion between high school and collegiate athletes. In addition, Dr. Covassin is interested in examining gender and race differences on concussion outcomes in these populations. Over the past 6 months, Dr. Covassin's research team has administered ImPACT testing batteries to approximately 2,000 collegiate and high school athletes participating in baseball, men's and women's basketball, cheerleading, football, women's gymnastics, men's ice hockey, women's and men's lacrosse, men's and women's rugby, men's and women's soccer, softball, volleyball, and wrestling. Post-concussion recovery data are also in the process of being collected on 54 concussed athletes at specific recovery intervals (2 days, 7 days, 14 days, 21 days, 1 month, 3 months, and 6 months). This research is essential in contributing to the science of concussion and will provide valuable information on cognitive status crucial in establishing safe return to sport participation criteria.

Concussions remain a serious public health concern. Dr. Covassin's research offers an opportunity to educate certified athletic trainers in the Mid-Michigan area on how to use the ImPACT Neurocognitive Test for concussion evaluation and management.

Jerry Sarasin, instructor for KIN 108W (Wheelchair Basketball) was one of five individuals who were inducted into the Athletes with disabilities Hall of Fame on 11/1/07. Hall of Fame recognition is extended to individuals who have distinguished themselves as disabled athletes and are positive role models within the community. Jerry plays a very active role on the Michigan Thunderbirds wheelchair basketball Team and has helped lead the squad to multiple national tournaments and one national championship appearance. He is a noted leader in the disability community, mentoring young people with disabilities throughout Michigan. Jerry is also a competitive racer and has been a regular participant in the handcycle division of the Detroit Free Press marathon.

Jerry with some of the KIN 108W students

Dixie L. Durr

Dixie Durr *died Sunday, September 2, 2007 at her home. She was born July 11, 1940 in Allen County near Ossian. Professor Durr began her career as Professor of Dance in the Department of Kinesiology (formerly the Department of Physical Education). In the early 1980s ,she was transferred to the Department of Theatre where she was Artistic Director of the MSU Repertory Dance Company. She chaired the Department of Theater from 1994-2001. After a 41 year career at Michigan State University, Professor Durr retired in 2005. Her Ph.D. in Arts Education was earned at The Ohio State University; one MA from New York University, in the Anthropology of Human Movement, another MA from Michigan State University in Theatre, and an undergraduate degree in Dance from Butler University. She was also a Certified teacher of Labanotation and received her Advanced Certification in Labanotation. Throughout her career, she served on the Board of Directors of the Michigan Dance Association (President), the Congress on Research in Dance (Chair of the Awards Committee), the American Dance Guild, the educational committee of the Dance Notation Bureau, and the Faculty Professional Women's Association (President). She was the recipient of the Paul Varg Alumni Award for Faculty presented by the MSU College of Arts and Letters alumni association. She was recognized by the College of Education in 2006 with a Chrystal Apple award. Throughout her many years of choreographing and directing plays and musicals, she received several Thespie Awards from "Lansing State Journal" for outstanding choreography and/or directing. She is survived by her mother, Maxine E. Durr.*

Published in the Lansing State Journal - September 4, 2007

Alumni Profile

Gym-Jesters is a "dream come true" for **Helen Fry**, who received a BS degree from Michigan State University in Physical Education in 1961 and who was formerly a physical education teacher. Helen and her husband Tom, who is a Heritage High School counselor, have been the driving force behind Gym-Jesters since 1962. The program originated in the Saginaw Township Community Education Program. In 1978, they moved to the Gratiot and Center Road location. In 1986, they moved into their current location at Weiss and Pine. The 18,500 square feet makes their three gym facility and program one of the best in the nation [they checked]. Helen's pre-school program is outstanding. Approximately 900 young people attend annually. They offer patient and individualized instruction at all levels.

Gym-Jester's club was one of the first in Michigan. Andrea Schwartz was their first collegiate athlete at Michigan State University. She was followed in later years by Kit Bunker and Mary Miller. Tammy Roeske competed for Eastern Michigan, Mary Beall for Seminary College, Lisa Hillman for Bowling Green, Holly Voorhies for the University of Alabama, Laura Flecher for Central Michigan University, and Beck Hoppe at Michigan State. Almost all of these athletes received scholarships.

Helen tells us that some of the people who influenced her in her years at Michigan State University were her advisor, Lucille Daly; Dr. Janet Wessel and her motor development program – which she still uses and recommends her motor development books to every preschool she can find; George Szypula, men's gymnastic coach; Vern Seefeldt's youth sports movement was also very influential; Wayne Van Huss gave her a great background to analyze and break down skills in many sports, especially gymnastics; and finally Dr. Bishop, the department chairperson during her era.

Thank you Helen for sharing your accomplishments with us. Your achievements should help encourage our undergraduate students to keep up their studies so they too will be able to share their knowledge with students in the future.

Helen Fry

This student is swinging from rings which are above a foam pit. The rings are on pulleys and can be raised or lowered.

The girls pictured were having their Christmas tree picture taken. Gym-Jesters has two trees covered with "picture ornaments" every year.

Faculty Publications in 2007

Battista, R.A., **Pivarnik, J.M., Dummer, G.M**., Sauer, N., & Malina, R.M. (2007). Comparisons of physical characteristics and performances among female collegiate rowers. *Journal of Sports Sciences, 25*(6), 651-657.

Benham, R., and Gould, D. (Spring, 2007). Michigan State University Online Coaching Certificate Reaches International Schools. *The International Educator,* Vol. XXI (3) p 36.

Chow, G.M., & Feltz. D.L. (2007) Exploring new directions in collective efficacy and sport. In M. Beauchamp & M. Eys (Eds.), *Group dynamics advances in sport and exercise psychology: Contemporary themes,* (pp. 221-248). New York: Routledge.

Coe, D.P., K.A. Pfeiffer, & **J.M. Pivarnik**. (2007). Cardiovascular disease risk factor profiles and physical fitness/ activity in charter school children. *MAAHPERD Journal*, Winter, 4-7.

Coe, D.P., **Pfeiffer, K.A.,** & Pivarnik, J.M. (2007). Cardiovascular disease risk factor profiles and physical fitness and activity in charter school children. *Michigan Alliance of Health, Physical Education, Recreation and Dance*, p. 4-7.

Covassin, T., Schatz, P., Swanik, B. (2007). Sex differences on neuropsychological function and post-concussion symptoms of concussed collegiate athletes. *Neurosurgery.* 61(2): 345-351.

Covassin, T., Weiss, L., Powell, J., Womack, C. (2007). The effects of VO2 max on cognitive function in recreational athletes. *British Journal of Sports Medicine.* 41(6):370-74.

Dick, R., **Covassin, T**., Agel, J., Marshall, S., Nassar, L. (2007). NCAA injury surveillance system: Commentary on women's gymnastics. *Journal of Athletic Training.* 42(2):234-40.

Donohue, B., Silver, N., Dickens, Y., **Covassin, T**., Lancer, K. (2007). Development and initial psychometric evaluation of the sport interference checklist. *Behavioral Modification.* 31(6):937-57.

Dowda, M., Dishman, R.K., **Pfeiffer, K.A.,** & Pate, R.R. (2007). Family support for physical activity in girls from 8th to 12th grade in South Carolina. *Preventive Medicine*, 44, p.153-159

Dowda, M., **Pfeiffer, K.A.**, Dishman, R.K., & Pate, R.R. Associations among physical activity, health indicators, and employment in 12th grade girls. (2007) *Journal of Women's Health*, 16(9), p. 1331-1339.

DuBose, K**, Eisenmann**, **JC**, & Donelly, JE, (2007). Aerobic fitness attenuates the metabolic syndrome score in normal weight, at-risk-for-overweight, and overweight children. *Pediatrics* 120(5):e1262-e1268.

Eisenmann, **JC**, Welk, GJ, Ihmels, MA, & Dollman J. (2007). Fitness, fatness and cardiovascular disease risk factors in children and adolescents. *Medicine Science Sports Exercise* 39:1251-1256.

Eisenmann, **JC**, DuBose, K., & Donnelly, JE. (2007). Fatness, fitness, and insulin resistance among 7-9 yr old children. *Obesity* 15 2135-2144.

Eisenmann, **JC,** & Wickel, EE (2007). Estimated energy expenditure and physical activity of adolescent distance runners. *Int J Sports Nutr and Exerc Metabol* 17:178-188.

Eisenmann, **JC,** Welk, Wickel, EE & Blair, SN. (2007). Combined influence of cardiorespiratory fitness and body mass index on cardiovascular disease risk factors among 8 -18 year old youth: The Aerobics Center Longitudinal Study. *International Journal of Pediatric Obesity* 2: 66-72.

Eisenmann, **JC,** Laurson, K, Wickel, EE, Gentile, D, & Walsh, D. (2007). The utility of current pedometer step recommendations for predicting overweight in children. *International Journal of Obesity* 31(7):1179-82.

Eisenmann, **JC,** Malina, RM , Tremblay, A, & Bouchard, C .(2007). Adiposity and cardiac dimensions in youth: the Quebec Family Study. *Journal of Human Hypertension* 21(2):114-9.

Eisenmann, JC, Arnall, DA , Kanuho, V., C Interpreter & Coast, JR . (2007). Obesity and pulmonary function in Navajo and Hopi children. *Ethnicity & Disease* 17: 14 -18.

Eklund, R. C. & **Gould, D**. (2008). Emotional stress and anxiety in the child and adolescent athlete. In Hebestreit, H., & Bar-Or, O. (eds.), *The Encyclopedia of Sports Medicine - The Young Athlete* (pp. 319-334). Oxford: Blackwell Science.

Gould, D., Collins, K., Lauer, L., & Chung, Y. (2007). Coaching life skills through football: A study of award winning high school coaches. *Journal of Applied Sport Psychology*, 19 (1), 16-37.

Gould, D., & Carson, S. (2007). Psychological preparation in sport. In B. Blumenstein, R. Lidor & G. Tenenbaum (eds.). *Psychology of sport training* (pp. 115-136). Oxford: Mayer & Mayer.

Gould, D. (2007) (editor). *Becoming an effective team captain: Student-athlete guide*. East Lansing, MI: Michigan High School Athletic Association.

Laurson, K. & **Eisenmann, JC,** (2007). Prevalence of overweight among high school football players. *Journal of the American Medical Association* 297(4):363-4.

Malina,R.M., Dompier, T.P., **Powell, J.W**., Barron, M.J., & Moore, M.T. (2007). Validation of a noninvasive maturity estimate relative to skeletal age in youth football players. *Clinical Journal of Sports Medicine* 17:362-368.

McCrindle, BW, Williams, RV, Mital, S., Clark, BJ, Russell, J., Klein, G., & **Eisenmann, JC.**. (2007). Decreased levels of physical activity in pediatric survivors of Fontan procedure. *Archives of Disease in Childhood* 92(6):509-14.

Mudd, L.M., W. Fornetti, & **Pivarnik**, **J.M.** (2007). Bone mineral density in college female athletes: comparisons among sports. *J Athl Train* 42: 403-408.

Myers, N. D., & **Feltz, D. L**. (2007). From self-efficacy to collective efficacy in sport: Transitional issues. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology (3rd ed.),* (pp. 799-819). New York: Wiley.

Myers, N.D., Paiement, C. A., & **Feltz, D. L**. (2007). Regressing team performance on collective efficacy: Considerations of temporal proximity and concordance. *Measurement in Physical Education and Exercise Science, 11*, 1-24.

Myers, N.D., **Feltz, D.L**., & Wolfe, E.W. (2007). A Confirmatory study of rating scale category effectiveness for the Coaching Efficacy Scale. *Research Quarterly for Exercise and Sport*.

Nagelkirk, P.R., Franklin, B.A., Coughlin, A.M., Hassouna, H.I., Fink, G.D., **Pivarnik**, **J.M.** & C.J. Womack. (2007). Discordant hemodynamic and fibrinolytic adaptations following a 6-week cardiac rehabilitation program. *Prev Cardiol* 10: 196-203.

Ode, J.J., **Pivarnik, J.M**., Reeves, M.J., & Knous, J.L. (2007). Body mass index as a predictor of percent fat in college athletes and non-athletes. *Med Sci Sports Exerc* 39: 403 -409.

Perkins, C.D., **Pivarnik, J.M**., Paneth, N., & Stein, A.D. (2007). Physical activity and fetal growth during pregnancy. *Obstet Gynecol* 109: 81-87.

Pfeiffer, K.A., Lobelo, R.F., Ward, D.S., & Pate, R.R. (2007). Endurance trainability of children and youth. In *The Young Athlete, Volume XIII of the Encyclopaedia of Sports Medicine,* Hebestreit and Bar-Or (Eds), Blackwell Publishing: Oxford, UK, p.84-95.

Pfeiffer, K.A., Dowda, M., Dishman, R.K., Sirard, J.R., & Pate, R.R. (2007). Cardiorespiratory Fitness in Girls - Change from Middle to High School. *Medicine and Science in Sports and Exercise*, 39(12).

Pivarnik, J.M., The role of physical activity on obesity prevention. (2007). In: Obesity in America. H. Fitzgerald, D. Davies (eds.). Westport, CT: Praeger Publishers, 2007

Rolo, C. M. D .C. & **Gould, D**. (2007). An intervention for fostering hope, athletic and academic performance in university student-athletes. *International Coaching Psychology Review,* 2(1), 44-61.

Saksvig, B.I., Catellier, D.J., **Pfeiffer, K.A.,** Schmitz, K.H., Conway, T., Going, S., Ward, D., Strikmiller, P., & Treuth, M.S. (2007). Travel by walking before and after school increases physical activity among adolescent girls. *Archives of Pediatric and Adolescent Medicine,* 2007, 161(2), p. 153-158.

Swanik, C., **Covassin, T.,** Stearne, D., Schatz, P. (2007). The relationship between neurocognitive function and non-contact ACL injuries. *American Journal of Sports Medicine.* 35(6):943-48.

Taylor, M., **Gould, D**., Hardy, L., Woodman, T., & LaCaille, R. (2007). Factors influencing physical risk taking in rock climbing . *Journal of Human Performance in Extreme Environments,* 9(1), 15-26.

Thomas, J.R., Clark, J.E., **Feltz, D.L**., Kretchmar, R.S., Morrow, J.R., Reeve, T.G., & Wade, M.G. (2007). The Academy promotes unifies and evaluates doctoral education in kinesiology. *Quest, 59*, 174-194.

Timmons, B.W., Naylor, P.J., & **Pfeiffer, K.A**.,(2007). Physical activity for preschool children - how much and how? *Appl. Physiol. Nutr. Metab.* 32 (Suppl 2E)/Can. J. Public Health 98 (Suppl 2): S122-34

Vaughn, D., & Brown, E. W. (2008). The Influence of an In-Home Based Therapeutic Exercise Program on Thoracic Kyphosis Angles. *Journal of Back and Musculoskeletal Rehabilitation.*

Weinberg, R.S., **& Gould, D**. (2007). *Foundations of sport and exercise psychology.* (4th ed.). Champaign, IL: Human Kinetics.

Welk**,** GJ**, Eisenmann, JC**, Trost, Schaben SG & Dale, D. (2007). Calibration of the Biotrainer Pro Activity Monitor in Youth. *Pediatric Exercise Science* 19(2):145-58.

Welk, GJ, McClain, JJ, **Eisenmann, JC**, & Wickel EE. (2007). Field validation of the MTI Actigraph and BodyMedia Armband Monitor using the IDEEA monitor. *Obesity* 15(4):918-28.

Wickel,EE, Welk, GJ & **Eisenmann, JC**. (2007). Predictive validity of an age-specific MET equation among youth of varying body size. *Eur J Appl Physiol* 101(5):555-63.

Wickel, EE & **Eisenmann, JC.** (2007). Contribution of youth sports to total daily physical activity. *Medicine Science Sports Exercise* 39(9):1493-500.

Wickel, EE, **Eisenmann, JC,** et al. (2007). Do children take the same number of steps every day? *American Journal of Human Biology* 19(4):537-43.

Honors and Notables

In November 2007, the MSU Sports Skills Program directed by **Gail Dummer**, (the KIN 465 lab) received the *Outstanding Sports Organization Award from Special Olympics Michigan.* See article on page 1. She also received the Stephen Tsai Educator of the Year Award from the Autism Society of Michigan.

Deborah Feltz received the 2nd Annual *Research Quarterly for Exercise and Sport* Lecture Award from the Research Consortium of AAHERPD at its 2007 convention in Baltimore, MD. She was invited to present her research on "Efficacy belief in sport: Research on athletes, teams, and coaches." She also received the 2007 Dorothy Harris Memorial Scholar Lecture Award from the Department of Kinesiology at her Alma Mater, Penn State University.

In addition she was appointed to the Board of Directors of the American Kinesiology Association for a 3-year term.

Daniel Gould and **Larry Lauer** were named among the 100 Most Influential Sports Educators in America by the Institute for International Sport. Gould is a professor of kinesiology and director of MSU's coaching education and development.

Karen Pfeifer is the President-Elect of the Midwest American College of Sports Medicine.

Alumni News

Kraig Conyer, a 2000 kinesiology graduate, was among the Chicago-area educators to receive a prestigious Golden Apple Award for Excellent in Teaching in May 2007. Winners were selected by the Golden Apple Foundation from a pool of more than 800 nominees and received a tuition-free sabbatical at Northwestern University, among other benefits. Conyer oversees the adapted physical education program at Hinsdale South High School in Darien, IL.

Dr. Jayne Martin, a 1991 physical education and exercise science graduate, received the Clinical Faculty Excellence Award from the MSU College of Osteopathic Medicine, where she is an associate professor, Martin, who also received her osteopathic medical degree from MSU in 1996, now practices general neurology in the Department of Neurology and Ophthalmology.

George Perles, who coached the MSU football team from 1983 to 1994, was inducted into the MSU Athletics Hall of Fame on Sept. 8, 2007. Under his leadership, the Spartans captured the Rose Bowl victory in 1987. Perles, who sits on MSU's Board of Trustees, received his bachelor's degree in physical education in 1960.

Retired Faculty

Grady Peninger, an associate professor of intercollegiate athletics in the College of Education from 1960 to1991, also was inducted into the MSU Athletics Hall of Fame for his role as wrestling coach. Peninger coached the team for more than 20 years and, in 1967, claimed MSU's first and only National Championship in the sport.

George Szypula, an associate professor of health, counseling psychology and human performance from 1947 to 1989, and his wife June received the East Lansing Educational Foundation Award for distinguished service to East Lansing Public Schools.

Chair's message cont.

We will keep these three intersecting concepts in mind as we strategically plan our teaching, research, outreach and hiring efforts.

While those of us in the field of kinesiology are passionate about the study of physical activity, whether it is at the cellular or society level, there hasn't been an organization to represent the overall field like there is for other disciplines, such as physiology (American Physiology Society), history (American Historical Association), or psychology (American Psychology Association). However, starting in 2008, the American Kinesiology Association (AKA) was formally established to promote and enhance kinesiology as a unified field of study, to provide a strong national voice for kinesiology as a discipline, and advance its many applications.

AKA seeks membership from academic departments of kinesiology (and exercise science, sport science, human performance, or physical education departments) rather than individual memberships. It also seeks affiliation with all academic and professional organizations in sub-areas of kinesiology (e.g., sport psychology, exercise physiology, and sport biomechanics). I am pleased to report that our department is a member of AKA. You can find out more about this new association at: www.americankinesiology.org

Adopted Families for Christmas

Every year the department faculty, staff, and students donate money toward the adopted family project. This year we were able to support two different organizations. Under the direction of Jan Davenport in the chair's office, the department and the Phi Epsilon Kappa fraternity, we were able to raise $900. We are very pleased with the support we receive from the department.

Bod Pod and Other Fitness Testing at the MSU Human Energy Research Lab. (HERL)

The MSU Human Energy Research Laboratory (HERL) has a long history of working with the Department of Intercollegiate Athletics. As a brief history, we began this relationship soon after former ice hockey coach/athletic director Ron Mason arrived in 1979. Few people know this, but Ron was very close to obtaining a PhD in exercise physiology from the University of Pittsburgh when he decided to pursue a career in hockey coaching instead. To make a long story short, Ron believed that laboratory testing could help enhance his coaching and conditioning strategy. Thus, our relationship was born.

Since we began testing the varsity athletes as part of their physical evaluations, HERL members have performed treadmill and body composition testing on ice hockey athletes for nearly three decades. In the late 1990's we expanded to include men's basketball and field hockey. More recently, we have done intensive testing on women's basketball, women's tennis, and crew. If we just consider body composition, we test nearly every varsity team at least once a year.

This relationship has benefited all involved. The teams benefit from the additional knowledge we provide the head coaches about their athletes. Test results provide important information to strength and conditioning coaches and athletic trainers who are responsible for workout/ treatment protocols. The athletes benefit because it helps them understand some of the science behind their training and/or rehabilitation. It benefits our undergraduate students because the testing provides many opportunities for them to learn how to use the laboratory equipment in a "real world" setting. Finally, we are able to develop anonymous databases that lead to research publications and presentations by graduate students and faculty.

In short, we feel extremely fortunate to have forged this relationship at MSU, as we have many colleagues at other universities who have virtually no interaction with their athletic departments.

Sparty gets his body weight and fat percentage calculated in the Bod Pod at the HERL Lab.

Student Publications

Gilson, T. A., Chow, **G. M**., & Ewing, M. E. (in press). Defining success in strength training using achievement goal orientations. *Journal of Sport Behavior*.

Gilson, T. A., **Chow, G. M**., & Ewing, M. E. (in press). Using goal orientations to understand motivation in strength training. *Journal of Strength and Conditioning Research*.

Staurowsky, E. J., Lawrence, H., **Paule, A.,** & Reese, J. (2007). Travelers on the Title IX compliance highway: How are Ohio's colleges and universities faring? *Women in Sport and Physical Activity Journal*, 15, pp. 46-82.

National Strength and Conditioning Association Grant (NSCA). "The effect of amino acid-carbohydrate versus carbohydrate supplementation prior to sequential bouts of resistance training on resting metabolism." Kyle J. Hackney, **Adam J. Bruenger**, and Joseph J. Carlson. March 2007, ($2,500)

Student Grants

Melissa G.F. Alexander has received funding for her dissertation research from the Special Olympics Healthy Athletes Program which in turn is funded by the U.S. Centers for Disease Control and Prevention. Melissa's project is titled *Social Skills and Sports (S3) Program: A Problem-Solving Approach to Developing the Social Skills of Young Adult Special Olympians*. For more information, contact Melissa Alexander at fraserm1@msu.edu.

Mary Martha Douglas has received funding from the Organization for Autism Research for her project titled *Physical Activity for Children with Autism: Parent Perspectives*. For more information, contact Marty Douglas at dougl119@msu.edu

"Assessment of Certified Athletic Trainers' Levels of Cultural Competence in the Delivery of Health Care". NATA Ethnic Diversity Advisory Committee. (2007) PI– **Jeremy Marra,** Co-PI Tracey Covassin, 1 – Year Study, ($3,129).

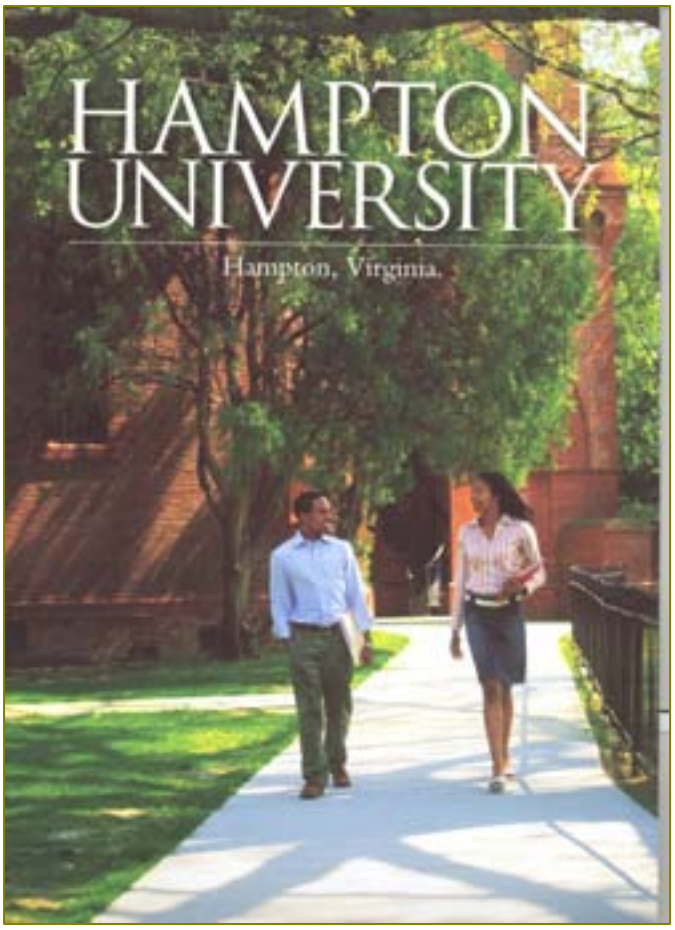
Diversity in Sport Dissertation Grant – Award by the Laboratory for Diversity in Sport at Texas A&M University, **Amanda Paule**, ($250.)

Hampton University Exchanged Students

As previously noted in our spring 2007 issue, we hosted our first exchange student from Hampton University last spring. Fall 2007 we sent 2 of our Kinesiology students to Hampton University and they came back to MSU with stories of their experiences. Currently, our exchange students who attended Hampton last semester are talking about their experiences at Hampton University with our Foundations of Kinesiology classes.

Our student exchange program is open to students majoring in Kinesiology and Athletic Training at Michigan State University. The exchange program is offered fall of every year for one semester.

If you have any questions about our program, you may contact Patricia Hampton at phampton@msu.edu or 355-4763.



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News about you and other alums: (memberships, publications, promotions, honors, awards, etc.)

Performance in Motion

A newsletter distributed to members of the Mentor Society, the generous contributors who are enriching and enhancing our success as a unit at Michigan State University, alumni and friends of Kinesiology

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