Message from the Chair, Deborah L. Feltz

Every year about this time, I reflect back on the past calendar year and the accomplishments we have made. The department spent much of the spring laying out a vision and strategic plan for the next 5 years. This past fall, we started right in with the implementation of those plans. The top five strategic goals for the department are as follows:

1. Increase our external support for research and outreach programs in the department.
2. Improve our recruitment of high quality doctoral students.
3. Increase our funding for graduate students for professional development experiences.
4. Support the work in the Institute for the Study of Youth Sports (YSI) and the Center for Physical Activity and Health (CPAH).
5. Increase the rigor of our undergraduate major.

In external funding, faculty have received grants to study injury risk factors in youth football; to interview and survey junior tennis coaches, professional players and parents of professional tennis players from throughout the United States to determine ways parents both help and hinder the development of tennis players; and to survey Michigan school children on their physical activity and nutrition behaviors as part of the Michigan Action for Healthy Kids program.

We also are working at improving our recruitment of doctoral students. We continue to have a successful doctoral visitation weekend for recruiting top doctoral students to our program. The annual doctoral visitation program is one way for us to encourage very capable students to apply to the program and to facilitate early admission and scholarship/fellowship decisions. This past November marked our third doctoral recruitment weekend. We brought 11 prospective students to campus, admitted 9 of them, and two of them have already been offered Dean’s Scholarships from the College of Education.

Part of recruiting top graduate students is by providing ways to make it possible for them to pursue their educational and professional aspirations, including attending professional conferences and helping to fund student research. Giving from alumni and friends and the use of tuition premium funds have helped us to send graduate students to more conferences than ever before. This fund will also be used to help graduate students defray the cost of their research projects and purchase some equipment that the department does not have.

Our fourth goal, to support YSI and CPAH, has been initiated with funding help for research assistants, new logos, and facility renovation for YSI. YSI has initiated a number of research projects, such as, the role of parents in junior tennis success; an examination of hazing practices in high school athletics; aggression and character in youth soccer; examination of how beginning high school coaches develop; the effectiveness of teaching youth hockey players to play tough but clean hockey; and a curriculum revision for the Michigan High School Athletic Association (MHSAA) coaching development program.

Continued on page 7
Faculty News

Gene Brown, associate professor, presented “Design of a Machine to Evaluate Ankle Joint under Variable Inversion-eversion Torques and Degrees of Plantar-dorsiflexion” at the XXIInd Symposium of the International Society of Biomechanics in Sports held at the University of Ottawa, Canada in August, 2004. This paper was also published in the Proceedings of the XXIInd International Symposium on Biomechanics in Sports. (Brown, E.W., M. Narvaez, T. Tanaka, K. Kotria, and A. Bruenger.)


Jim Pivarnik, professor, was appointed as an Associate Editor to the journal Medicine and Science in Sports and Exercise. He also co-authored “Relationships between the urban built environment, social capital, and human health”. Institute for Public Policy & Social Research at Michigan State University; Oct, 2004 (Pennington, S.R., J.M. Pivarnik, D.W. Thornton, L.L. Nathans).

Alumni News

Angie Doherty (B.S. ’04) is a physical education teacher at L’Anse Creuse Elementary School. CBS national news taped a segment featuring Angie teaching her physical education class. CBS was doing a series on health and physical activity in America.

Enid Friedman (M.A., ’70) received the Higher Education Physical Education Teacher of the Year award at the New York State Association for Health, Physical Education, Recreation and Dance conference held at Hofstra University. Additionally, Professor Friedman appeared on ABC TV. World News Now on August 20, during Olympics week. Professor Friedman did a sports information segment with fencing demonstration and instruction geared to understanding the sport of fencing in the Olympics.

Bomjin Lee (Ph.D. ’04) has accepted an assistant professor position at Silla University in S. Korea.

Cooker Perkins (Ph.D. ’04) accepted a Post-Doctoral fellowship at the Stanford University Prevention Center.

Tiffanye Vargas-Tonsing (Ph.D. ’04) won the annual Outstanding Dissertation Award given by National Association of Sport and Physical Education. for 2004.

James S. (Jim) Walton (M.S. ’70) was elected by his peers to serve a six-year terms as the US National Delegate to the International Congress on High-Speed Photography and Photonics. In this capacity, Walton will represent the interests of U.S. Engineers and Scientists using and developing high-speed imaging techniques.

Stacey Wesolek (2002) was recently promoted to Director of Operations for the Michigan Athletic Club in Okemos, MI. Her position entails the oversight of the fitness, aquatics, child care, locker room & service departments.

Student Publications


Student Presentations

Francis, R.M., Ph.D. student, CM Layman, M.S. student, PM Johnson, Ph.D. student, PR NagelKirk, Ph.D. student, CJ Womack, Faculty, and JT Lemmer, Faculty. “Effect of age and aerobic training status on plasma tPA activity”. Presented at Midwest ACSM, Purdue University, November 2004

Ryan Hedstrom, Ph.D. student, and Todd Gilson, Ph.D. student, co-presented “Put me in coach!: The effect of athlete/coach interaction time and feedback on youth sport experience” at the Association for the Advancement of Applied Sport Psychology in Minneapolis, MN.

Jeremy Knous, Ph.D. student, presented “Comparison between on and off ice physiological testing of collegiate hockey players.” at the 2004 annual meeting of the Midwest Chapter of the American College of Sports Medicine.

Peggy McCann, Ph.D. student, and Ryan Hedstrom, Ph.D. student, co-presented “Children’s views of their specific and global competencies in sport” at the Association for the Advancement of Applied Sport Psychology in Minneapolis, MN.

Lanay Mudd, Ph.D. student, presented “Neonatal correlates of ventilatory responses to exercise in 8-10 year-old children born with very low birth weight” at the 2004 annual meeting of the Midwest Chapter of the American College of Sports Medicine.

Nicholas Myers, Ph.D. student, co-presented “An evaluation of the psychometric properties of the coaching efficacy scale for American coaches” at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity in Vancouver, B.C., Canada.


Josh Ode, Ph.D. student, presented “Running economy in male and female collegiate basketball players” at the 2004 annual meeting of the Midwest Chapter of the American College of Sports Medicine.

Craig Payment, Ph.D. student, and Nick Myers, PhD student co-presented “The reciprocal relationship between collective efficacy and team performance in women’s collegiate ice hockey” at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity in Vancouver, B.C., Canada.

Dissertation Defense


Bom Jin Lee (Fall 2004) Parental values and concerns about participation in physical activity by persons with intellectual disabilities. Director: Gail Dummer.


Other Student News

Tecreshia Hoover of Detroit received the Michigan State University Most Outstanding SUPER Student Award in the Spring of 2004. Tecreshia is studying kinesiology and specializing in athletic training. She volunteers with several campus organizations, is involved with the MSU Athletes in Action (AlA) and plans to tutor students.

Sean Newsom, a senior majoring in kinesiology was one of four students who was selected for inclusion in the 2004 list of Who’s Who Among Students in American Universities and Colleges because of their academic accomplishments and scholastic contributions.

Kinesiology Study Abroad Program

KIN’s Study Abroad Program at York St. Johns in the U.K. is in its fourth year, with a record 28 applications for this fall. The program is a reciprocal exchange during the fall term. That is, exercise science and sport students from York St. Johns attend MSU and our KIN majors attend classes at YSJ. Coursework contributes directly to the requirements of each student’s degree program.

In March 2004, I visited York, met the faculty and administrators and met with the five former YSJ students who attended MSU as part of the exchange program and the two “new” students who were here fall 2004. (See picture.) Exercise physiology and biomechanics have state of the art equipment, housed in a new facility.

The cultural history of York is rich with both Viking and Roman influence. Additionally, York is the home of the famous Minster, the largest Gothic cathedral in northern Europe and has numerous artistic, musical and cultural events. York is located approximately two hours north of London, on the eastern side of England. (V. D. Ulibarri, Study Abroad Coordinator.)
The Human Energy Research Laboratory, in its various forms and locations, has been the site of most of the investigations related to exercise physiology conducted under the auspices of Michigan State University during the last half century. The history of the laboratory provides a nostalgic review of past and present accomplishments. It is hoped that a series of brief reports featured in upcoming issues of our newsletter will provide readers with a historical perspective of “HERL” and its many contributors. For a more detailed treatment of the history of the entire department, the reader is directed to 100 Years of Kinesiology: History, Research, Reflections, 1999. To purchase this text please contact the Kinesiology Office (room 134 in the IM Circle) at 517.355.4730.

The series started with the early years (1950s) in the Jenison Fieldhouse basement, progressing to the Quonset Huts around the mid-1950s, and then on to the Women’s Gymnasium. The series has followed the building of a successful research program on human subjects supported by numerous national agencies and the introduction of the animal model for exercise research. Last issue ended with a description of some of the difficulties in using motor-driven treadmills with rats.

Swimming was next, but to avoid having the dominant animals climb on top of the other animals as well as to prevent the animals from bobbing in shallow water (a very relaxing and enjoyable activity as any competitive swimmer can verify), each animal had to be placed alone in water at least 30 inches deep. Consequently, plexiglass tubes, 12 inches in diameter and 36 inches tall, were used so as to provide a small “swimming pool” for each animal.

To achieve a measurable and progressive workload, swimming times gradually were increased and lead fishing weights, of 1% up to 8% of the animal’s body weight, were attached to the base of each animal’s tail. However, each animal’s fur trapped varying and unknown amounts of air—a problem which neither shaving the animals nor using a detergent in the water satisfactorily solved. In summary, although it was used in some of the earlier studies, swimming was very difficult to control and thus was considered to be a gross exercise stressor, certainly not an ideal independent variable for precise experimental work.

It was known from the voluntary activity data that, in contrast to the results obtained using a treadmill, rats will run in wheels. Therefore, so as to be able to impose specific workloads, a motor-driven exercise wheel was constructed. However, some of the animals apparently considered this apparatus to be an amusement park Ferris wheel. They held onto the bars that formed the floor of the wheel and rode happily around. The motor, not the rat, was doing the primary work.

The intriguing concept of an exercise wheel could not be dismissed easily, so a rat-driven wheel became the next project. A training device, eventually called a “controlled running wheel”, was developed which could be programmed to conduct automatically an entire exercise session consisting of one or more bouts of exercise with specified rest periods between bouts. Each bout, in turn, could consist of one or more work intervals alternated with an appropriate number of rest intervals during which the wheel would be braked. The required running speed during the work intervals could be preset and controlled as could the durations of the work and rest intervals. For example, on a given day one animal, which was being trained for sprint running adaptations, might have been expected to complete three bouts of exercise with 5 min of rest between bouts where each bout consisted of 30 repetitions of a 10-sec work interval alternated with 29 repetitions of a 20-sec rest interval. In this case, the animal might have been required to run at the relatively fast pace of 6.5 ft/sec during each of the 30 brief work intervals. Another animal, which was being trained for endurance running adaptations, might have been expected to complete only one bout of exercise consisting of a single continuous work interval of 60 min at the relatively slow pace of 2.0 ft/sec.

The critical design problem, of course, was how to get the animal to comply with a desired exercise routine when the rat, not a motor, was controlling the speed of the wheel during the work intervals. That problem was not as difficult to solve as it might appear. A small electric current was applied as needed through the bars forming the running surface of the wheel. A shock received via the bars was neither painful nor harmful to the animal (i.e., a person placing the palm of a hand on the bars would experience only a mild tingling feeling). However, the sensation was disturbing to the animals; and, in order to avoid the slight shock, they instinctively ran. Thus this electrical stimulus was used as the basis for a conditioned response. At the beginning of each work interval, the brake on the wheel was released and a light came on as a signal to the animal that the shock would soon follow. The animal quickly associated the preceding light signal with the following shock and began to run as soon as the light came on.

The brief programmable interval between the light and the shock was called the “acceleration time”. If the animal started to run and brought the wheel up to the preset speed during the allotted acceleration time, the light turned off automatically and the animal received no shock. If the preset speed was not reached during the acceleration time, the light stayed on and the animal did receive shock until the desired speed was achieved—at which time both the light and the shock were discontinued. If at any time during a work interval the wheel speed dropped below the preset value, the light and shock sequence was repeated. This procedure worked surprisingly well. The animals quickly learned to respond to the light signal in order to avoid the shock. Typically, after three 45-min learning periods, at least 95% of the animals ran shock-free for at least 95% of the total work time.
Feeling gratitude and not expressing it is like wrapping a present and not giving it. ~William Arthur Ward

The Department of Kinesiology is pleased to feature Ms. Jo Ann Janes in this issue of *Performance in Motion*. In fact, we owe a tremendous debt of gratitude to Jo Ann for her exemplary service over the past 43 years.

Jo Ann joined the department in 1962 when she was hired by the late Professor Wayne Van Huss as a laboratory assistant in the Human Energy Research Laboratory (HERL). Over the next several years, she assisted the exercise physiology faculty with research projects by operating the EKG recorder for treadmill tests for a Van Huss study on the effects of vitamin C; helping with treadmill, flexibility, and strength testing for a Wessel study on physical activity by older women; conducting lactate testing involving MSU intercollegiate athletes; and feeding the rats and hamsters used in Heusner and Van Huss research on muscle physiology.

Jo Ann operating the treadmill for a Wessel research project on women and physical activity

Soon after assuming her duties as a laboratory assistant, the HERL secretary left, and Jo Ann’s position morphed into a combination laboratory assistant and secretary. In her secretarial role, she has assisted David Anderson, Jeanne Foley, Bill Heusner, Kwok-Wai Ho, Jeff Lemmer, Henry Montoye, Jim Pivarnik, Sam Reuschlein, Carol Rodgers, Marc Rogers, Arthur Steinhaus, Dianne Ulibarri, Wayne Van Huss, Bob Wells, Janet Wessel, and Chris Womack (as well as numerous graduate students) with their work in the laboratory and the classroom.

When asked about Jo Ann’s impact, Janet Wessel responded that “most of all she was very talented, very dependable, very responsible, as well as supportive always and in all ways for each of us and our work.” Current faculty members added these comments: “she takes great pride in everything we do, and is truly an integral part of our success” (Jim Pivarnik); “Jo Ann is the rare breed of person who performs her job exceptionally, but doesn’t expect any praise or recognition in return” (Jeff Lemmer); “ Jo Ann is “the biggest constant that HERL has EVER had!!!” (Chris Womack).

As department needs changed, Jo Ann’s job description also changed. At present her position is ½-time HERL secretary and ½-time graduate studies secretary. She has served three graduate studies coordinators, namely John Haubenstricker, Gene Brown, and Gail Dummer, using her institutional knowledge to cut through the red tape of the university to help students solve problems that would otherwise keep them from reaching their goals. Gene Brown summarized Jo Ann’s contributions by noting that, “we might call her the graduate program guru.”

Current students offered these testimonials:
- “I have never met anyone so willing to drop everything to help me with any task, no matter how trivial.” (Paul Nagelkirk)
- “Those of us in Room 1 always know we can ask Jo Ann a question, and if she can’t answer us or help us, she will find someone who can ... the best part is she does it with a smile and usually by the end of the day.” (Bridgette Laskey)
- “Jo Ann is one of the sweetest women I know. She is so considerate. She would even give you the mouse trap from her office for yours if you needed it [true story]. I know everyone will have positive things to say about her, as she represents MSU and our department with pride.” (Maggy Moore)
- “Jo Ann is absolutely fabulous. You walk into her office with a problem and you know she will always fix it. She takes care of us better than anyone else. She is the best!” (Aaron Moffett)

The common theme is that Jo Ann truly cares about people and wants to help them succeed. Deb Feltz captured this sentiment by noting that “Jo Ann’s heart and soul play a big part in the success of this department. She just shines through it all.” And Jo Ann gets the last word. When asked what she likes most about working in the Department of Kinesiology, Jo Ann replied “the people – working with the graduate students, staff, and the faculty.”

P.S. Many times we wait for a person’s retirement to share our appreciation for their work. But this article has nothing to do with retirement. Instead, this Spartan Profile is simply a heartfelt statement of our gratitude for Jo Ann’s commitment and passion to maintaining an excellent Department of Kinesiology at MSU. Feel welcome to contact Jo Ann at janes@msu.edu with your own sentiments.
Congratulations to the following individuals who succeeded in completing their Bachelor’s, Master’s, or Doctorate degrees in Kinesiology in Fall 2003, Spring 2004, and Summer 2004

**Fall 2003**
Elizabeth Andrus
Robert Arnold
Jonas Chandler
Kari Charles
Melissa Ciccarelli
Diana Crea
Amber Deer
Jessica Degraw
Emily Donnellon*
Kristen Donovan
Leigh Drew
Marla Feingold
Benjamin Gillespie
Christine Hunt
Asia Johnson
Christopher Knuff
Stephanie Lauer
Milena Lindsey
Sean Meleod
Aaron McMillan
Derek Ornekian
Chad Paine
Katie Petricevic
Lashan Pritchett
Scott Ryan
Nicole Salazar
Jaime Schneck
Jessica Schneider
Melanie Stein*
Nikia Stinson
Ryan Walentowski
Patricia Way
Hannah Wolfe
Linda Betley
Lisa Bommer*
Kerri Burke*
Christine Chmil
Yamika Cook
Abbie Curtin
Jennifer DeBack
Kendall Dempsey
Kristin Denyes**
Matthew Dickerman
Chanell Dockery
Melisa Fazio
Troy Ferguson*
Gregory Fick
Stephanie Getz*
Veronica Gill
Allison Gonyeau*
Andrea Grajek
Jacqueline Halagarda
Tara Hengesbach
Nicolaas Hoohnhout
Paul Ivkovich
James Jenkins
Michael Keller
Megan Kuehnel
Kelly Lane
Erin Linard
Martin Linclau-Miller
Heather Lopez
Whitney Luke*
Carrie Luscombe
Keith Manning
Katie Marasco
Rebecca Mcandrew
Craig Miller
Brooke Murphy*
Leeann Pellow
Nicholas Pobutsky*
Jesse Posey
Trent Ruthig
Angela Sanders
Elissa Schager
Josephine Schmude
Katherine Senger
Katrina Smith
Julie Sunday*
Rachelle Thomas**
Josh Thornhill*
Lindsay Trainham
Jamie Van Houzan
Lindsey Voth*
Evelyn Warner
Aaron Wilkin
Jeremy Wilson
Shiloh Wint
Jeffrey Wonch
Masters
Aaron Agrodnia, MS
Angela Lound, MS
Lyndsay Wheeler, MS
Doctorate
Jamie Robbins, PhD

**Summer 2004**
Valerie Adamski
Noshir Amaria
Melissa Baughman
Anna Borovich
Matthew Cooper
Tara Davis
Angie Dewolf
Rivka Fountain
Jacqueline Halagarda
Teresa Hupka
Janelle Kirila
Ann Knuff
Justin Kwiatkowski
Caroline Lay
Sean Newsom
Steven Perry
Randall Rosenthal
Kenneth Sailor
Elissa Schager
Valerie Shoppell
Molly Sullivan
Terry Tompkins
Brittany Wallingford
Kendra Wellman
Andrew Zemaitis
Masters
Philip Andre, MS
Brian Bratta, MS
Dana Cortese, MS
Melissa Erwin, MS
Jeremy Knous, MS
Anthony Venute, MS
Doctorates
Becky Battista, PhD
Tom Dompier, PhD
Dawn Lewis, PhD
Candace Perkins, PhD
Tiffanye Tonsing, PhD
Kevin Stefanek, PhD

**Spring 2004**
Laura Ambrosier
Steven Baker
Bryan Balog
Masters
Aaron Agrodnia, MS
Angela Lound, MS
Lyndsay Wheeler, MS
Doctorate
Jamie Robbins, PhD

---

*Honors  **High Honors
CPAH also has initiated projects with the Michigan Action for Healthy Kids program and Preventive Approach to Cardiac Health program (PATCH), a program that educates school children on heart healthy habits for daily living. CPAH is evaluating the program’s effectiveness. The Center has also submitted a grant proposal to examine the importance of physical activity and fitness during college on cardiovascular risk, incidence, and death later in life.

We have continually worked to improve the quality of our undergraduate program. Last year we had our athletic training specialization approved for accreditation by the Commission on Accreditation of Allied Health Education Programs. Also, in an effort to help our students be more successful in our upper level kinesiology classes, we have added a higher math requirement (MTH 106 & 114 or MTH 116), trigonometry and college algebra.

In addition to our strategic goals, we responded to an opportunity to promote the sport of wheelchair basketball. During the Fall 2004 semester, Michigan State became the first university in Michigan to offer wheelchair basketball for credit. Our department offered the class through our Basic Instructional Program in a joint venture with the Athletes with Disabilities Hall of Fame. We were also lucky enough to have renown wheelchair athlete Jerry Sarasin to teach the course.

Jerry Sarasin is a Hall of Famer from Oakland County and captain of the Michigan Thunderbirds wheelchair basketball team. Jerry drove almost two hours a week to teach the 10 students in the course who were all provided with sports chairs by Wright and Fillipis. Because of the success of the first class, another class is being offered spring semester 2005, and plans are underway to offer the class again in both semesters of next academic year. The class is valuable for chair users and non-chair users alike. Students with disabilities have an opportunity to develop their athletic skills and participate in an exciting physical activity and able-bodied students learn about the challenges of playing wheel-chair basketball and what the sport is all about.

The Kinesiology Department and the Athletes with Disabilities Hall of Fame are hoping that the interest will go further than just the wheelchair basketball class. Sarasin and others from the Athletes with Disabilities Hall of Fame have already started talking about possibly proposing other disability sport classes, such as sled hockey, and scholarships for people with disabilities at Michigan State. The Kinesiology Department at Michigan State is on the cutting edge of disability sport and by adding new activities it would be a leader in the field.

It has been my tradition to report our enrollment and graduation numbers in every Fall issue. The past academic year we had 118 graduate with bachelor degrees, 15 with master degrees and 10 with doctorates. A list of these students can be found on page 6. Our undergraduate major continues to grow. We are now up to 691 students currently enrolled, a 146% increase from one decade ago. In our graduate programs, we have 62 M.S. and 44 Ph.D. students. Our numbers indicate that the department continues to be a vibrant place to be for the study of kinesiology.
Call for News
Please send updates, information, and comments to the address listed above.

Name___________________________________________ Maiden Name________________________________
Graduation Date/Major____________________________ Spouses’s Name________________________________
Employer_______________________________________ Home Address_________________________________
Position/Title____________________________________ _____________________________________________
Work Address____________________________________ City_________State_______Zip_________
City______________________State_________ Zip_____ Home Phone (         )____________________________
Work Phone (          )_____________________________ E-mail Address________________________________

News about you or 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 enhanc- ing our success as a unit at Michigan State University, alumni and friends of Kinesiology

Published two times a year by the Department of Kinesiology, College of Education, Michigan State University.
Editorial Office: 134 IM Sports Circle
Telephone: (517) 355-4730, Fax: (517) 353-2944
E-Mail: davenp37@msu.edu
Website: http://ed-web6.msu.edu/kin/

Editor:                         Deborah L. Feltz
Editorial Assistant:                         Craig Payment
Editorial Staff:                         Jan Davenport

MSU is an Affirmative Acton/Equal Opportunity Institution