



WINTER 2014

# Movement

**STUDENT  
SUPPORT**



**VICTORS FOR MICHIGAN**

KINESIOLOGY MOVES THE WORLD

Kinesiology B

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**LEARNING**



**SCHOOL OF  
KINESIOLOGY**

UNIVERSITY OF MICHIGAN

**FACILITIES**  
FOR BOLD IDEAS



FROM THE DEAN

# MOVING FORWARD TO DO GREAT THINGS

Kinesiology can change lives  
and help shape the world

**SINCE 1894 THE SCHOOL OF KINESIOLOGY HAS BEEN ON A REMARKABLE JOURNEY. WE HAVE NEVER STOPPED ADVANCING, INNOVATING, AND LEADING. AND WE NOW FIND OURSELVES ON THE THRESHOLD OF A NEW ERA.**

Today, the School is providing outstanding educational experiences and generating new discoveries—each and every day. Our faculty are highly creative, productive, and engaged in ground-breaking research that spans the continuum of kinesiology. Our students are some of the brightest and able to immerse themselves in research and dialogues that expand their horizons beyond the classroom.

As Dean, it's my job to look ahead—five, ten, even twenty years. When I look at where we are today, the School has arguably never been in a more unique place in time to leverage the impact we have on society.

It's difficult to turn on the television or read a magazine and not hear about obesity, concussion, sport related injuries, or extensive research telling us about the positive influence of physical activity. Or how the business and economics of sport can positively impact economic and urban redevelopment.

With the recent kickoff of the Victors for Michigan capital campaign, we can come together to do great things, because right now the world needs to solve complex health and economic issues. Our world needs breakthroughs. Our world needs the School of Kinesiology.

Our goal is ambitious and we cannot do great things without your support. Only with your help can we reach our goal of raising \$27.5 million to achieve our three campaign priorities:

- **Student Support:** Guarantee that a diverse group of the world's brightest students will be able to study at Michigan.
- **Engaged Learning:** Transform the Michigan Kinesiology education by ensuring academic excellence, and real-world experiences for students that extend beyond the classroom.
- **Facilities for Bold Ideas:** Solving complex societal problems requires learning in the most advanced, state-of-the-art environments that stimulate and challenge undergraduates, graduate students, and faculty to collaborate in ways only Michigan can create.

We have bold goals and bold ideas. While we aim high for the future, we are continuing to drive change today. To keep the School's momentum moving forward, we have made many positive changes. We reviewed and restructured curriculum, added the new Health and Fitness major and minor, enhanced our students' digital and experiential learning experiences, and added international experiences for students including immersive learning opportunities in Rio de Janeiro and London. Most important to note, over the last 10 years we have experienced a 33 percent increase in undergraduate and 50 percent increase in graduate students.

We know the opportunities in Kinesiology are rapidly growing, and it is clear that University of Michigan Kinesiology graduates—in all four of our disciplines—will be valued, sought-after, and well-respected.

The Victors for Michigan campaign will be transformative. We have extraordinary potential for uncovering new insights about physical activity and exercise, health and wellness, and sport management. Together we can change lives and help shape the world—become a Victor the world needs.

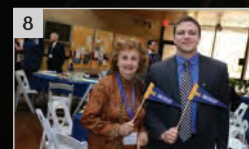
**Hail to the Victors and HAIL to Victors for the School of Kinesiology!**

Ronald F. Zernicke  
Dean



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## VICTORS FOR MICHIGAN

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### Energy, Progress, Positive Change

In all its definitions, the word movement describes the dynamic state of kinesiology today. Movement encompasses the scientific study of human motion, the importance of activity on growth and development, the role of sport in society, the exploration of new directions, and emerging trends. **Movement** brings you research findings and thoughtful insights on developments in kinesiology, as well as continuing updates on faculty, students, and your fellow alumni.

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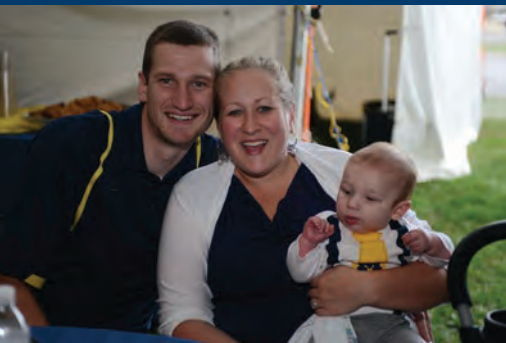
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# ALUMNI, FAMILY, FRIENDS, AND A FRIDAY NIGHT TAILGATE

Homecoming 2013 brought together alumni, friends, and families to the historic U-M Golf Course. The festivities included activities for children, alumni reconnecting, and the Kinesiology Alumni Board conferring their annual alumni awards.

This year, the board was pleased to present Sport Management alumnus **Aaron Shea**, AB '00, director, Player Engagement for the Cleveland Browns, with the Early Career Achievement Award, which is given to a recent Kinesiology alumnus who is excelling in a field related to Kinesiology.

Shea has been with the Browns' administrative staff for six years and is in his third year as the team's director of player engagement. He originally joined the Browns as a fourth-round selection (110th overall) in the 2000 NFL Draft. As a four year letterman (1996–99) at U-M, he appeared as both a fullback and tight end. During his collegiate career, he totaled 68 receptions for 574 yards with five touchdowns, while adding 104 rushing yards on 27 attempts.

He helped Michigan capture the 1997 National Championship.

**Dean Ron Zernicke** also awarded the Dean's Medal to alumnus **Roger Zatkoff**, AB Ed '64, founder of Zatkoff Seals and Packings, for his exemplary individual service and contributions to the community, society, and disciplines associated with the School of Kinesiology. The medal is given in recognition of his lifetime professional accomplishments, service, and involvement with Kinesiology.

In 2007, Zatkoff and his wife Elaine established the Roger and Elaine Zatkoff Endowed Scholarship Fund to provide need-based support for School of Kinesiology undergraduates who assist the Women's Club Lacrosse team. In 2010, Roger created the Zatkoff Family Endowed Scholarship Fund for Women's Volleyball, and in 2012, Roger established the Gary and Ann Moeller Scholarship Fund to provide support for Detroit-area undergraduates. He is also a 2012 recipient of the David B. Hermelin Award for Fundraising Volunteer Leadership.

Dean Zernicke noted at the event, "I want to thank Roger Zatkoff, Aaron Shea, and all their family and friends for coming to celebrate their achievements with us this evening. These gentlemen are examples of the outstanding alumni we are honored to have associated with the School."

## DID YOU KNOW?

ALL ALUMNI ARE WELCOME TO NOMINATE DESERVING INDIVIDUALS FOR THESE AWARDS WHICH ARE ANNUALLY BESTOWED BY THE ALUMNI BOARD. TO NOMINATE SOMEONE OR INQUIRE ABOUT THE KINESIOLOGY ALUMNI BOARD, CONTACT THE DEVELOPMENT OFFICE AT (734) 615-9678.



**Homecoming 2013 (from top to bottom):** Jarrett Irons AB '96, AM '99, Coach Lloyd Carr, and Aaron Shea, AB '00; KAS Board member Liz Enselman, BS '07 with husband David and their son; The Zatkoff Family; Recent alumni having fun in the photobooth; Norman Niedermeier, BS '56, MS Ed '58, Clare Canham-Eaton BS '75, and Don Eaton BS '74, with Associate Dean Pat Van Volkinburg, MS Ed '85.

## SHAPING TEACHING STYLES FOR THE NEXT GENERATION: ENGAGED AND IMMERSIVE



### NEW SPIN ON FAMILIAR COURSES

Examples of professors and instructors employing engaged and immersive learning techniques in their courses.

#### MOVEMENT SCIENCE 250

**Dr. Sean Meehan** prepares video tutorials that students view before class explaining how to use Excel spreadsheets to calculate statistics, freeing up class time for questions related to "why?" rather than "how?"

#### MOVEMENT SCIENCE 425

**Dr. Dale Ulrich's** course gives students the opportunity to apply theory to the real-world when they assist infants, children, and young adults with cognitive and/or physical challenges during physical activities.

**EVEN WITH MORE THAN 4,000 MILES OF SEPARATION**, a classroom in Germany is able to interact with the leaders and best at the School of Kinesiology's Sport Management 313 (Comparative Sports Organizations). Students in Students in **Dr. Dae Hee Kwak's** Sport Management 439 (Sponsorship-Linked Marketing) are working to develop new ideas and concepts to showcase the rich history of the Detroit Tigers for fans including concept ideas, graphic renderings, and financial costs—all in an effort to engage them in the community and make their learning experience more relevant and immersive. The School of Kinesiology is taking part in another higher-education revolution that is changing the ways in which students learn, develop, and grow in their chosen fields—engaged and immersive learning.

**Dr. Melissa Gross**, associate professor of Movement Science, and the new director of innovative teaching and learning in Kinesiology, is no stranger to the immersive and engaged learning environment. In her new role, Gross is responsible for helping faculty navigate new classroom technologies and supporting their innovative approaches to teaching and learning.

Gross says, "Engaged learning is a real benefit of a U-M residential education. Students are literally face-to-face with other students or community members with different points of view—learning the skills that will serve them well when they leave U-M."

**Dr. Stefan Szymanski**, the Stephen J. Galetti Professor of Sport Management, said when he moved from London to Ann Arbor he wanted to bring international experiences into the classroom by setting up a course with a European university. He felt the best match was the German Sport University Cologne, mainly because Germany has the biggest economy in Europe and a strong sport business model. "Because the German model of sport is fundamentally different than the U.S., I felt the differences would spark great interaction and discussion of how each manages sports."

Harrison Clifford, a sport management junior in the class, said, "I enjoy the class because we share ideas with students from Germany. I have gained important views of the world. Sharing ideas with students from different cultures has made this class more valuable than any other I have been a part of."

Szymanski noted, "I definitely see how class time has become more flexible and creative in what we, as professors, can do. It's even more rewarding to see how technology has helped change the way we can teach. Instead of going to the library to check out a book, you can offer students many different ways to learn before they even set foot in the classroom." Szymanski said he is looking forward to a similar course in the Winter semester that will be taught jointly with Professor Takeo Hirata and students from Waseda University in Tokyo.

As for Gross, she has been on the immersive learning band wagon with her Movement Science 437 course where students collaborate in teams to ask and answer biomechanical research questions, using motion capture technology to collect data, animation software to visualize results, and video reports to communicate findings.

"I think that the typical classroom in Kinesiology in 10 years will look and sound different than it does now. The landscape of higher education is changing rapidly, and it is a good bet that technology use will continue to increase as instructors and students have more tools available to them to facilitate teaching and learning."



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# MOVING IN A HEALTHY DIRECTION

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THE EVOLUTION OF HEALTH  
AND FITNESS AT MICHIGAN

By Pat Materka



Above: Student "pushball" contest, 1918. University of Michigan News Service. Courtesy Bentley Historical Library, University of Michigan, BL000263

Right: Michael Stack, BS '04 (right), works one-on-one with individuals to maximize their fitness goals. "As the owner of a personal training studio, I couldn't be any more excited about the new Health and Fitness major."

*It's been nearly 150 years since the Regents urged the establishment of a Department of Hygiene and Physical Culture, declaring: "There is no other spectacle of a want of symmetry in the development of a human being so glaring and so painful as that of a cultivated mind inhabiting a neglected, feeble, and incompetent body."*



When **Brian Townsend**, BA '91, BS '96, reflects on his role as U-M's assistant athletic director, you won't hear him mention business school courses or even his years as a coach and an athlete. Instead, he talks about the value of Physical Education (PE).

For Townsend, a career in sports was practically predestined. Born the fifth of six boys, he grew up watching his athletic brothers performing in high school and then college. He came to Michigan on a football scholarship and helped lead the Wolverines to four Big Ten Titles and four Bowl Games. Unlike most college athletes, he was drafted by the pros. "That lasted two seasons. My pro football career was as short as my hair," he says with a laugh. "But I was prepared. Beginning with my junior year in sport management, I focused on TV production, behind the camera. Even when I was with the Los Angeles Rams, I worked

"The field of kinesiology is exploding with interest," declares Dean and Professor **Ron Zernicke**. "According to a statistic from *Inside Higher Education*, the number of Kinesiology majors in the U.S. grew 50 percent from 2003–2008, to 26,000 students, making it one of the fastest growing majors in the country.

That interest is driven by demographics—the aging but active baby boomer population—and converging trends of epidemic obesity and soaring health care costs. "Insurance companies, employers and governments are urgently seeking ways to curb costs by convincing people to lead healthier lifestyles," Dean Zernicke observes.

One would think that the responsibility to raise awareness begins with the school system, in which nearly one-fifth of all K–12 students are identified as obese. Indeed, the World Health Organization states

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## The field that spawned movement science, sport management, and athletic training, now known as Kinesiology, is a hot ticket, attracting more students every year.

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with the Orange County Network. After my pro ball career ended I joined a CBS affiliate in Cincinnati." It was while televising some high school sports events that he found himself disagreeing with some of the coaching decisions. And he began to think, "What am I doing on this side of the action? I should be working directly with kids in the game as opposed to covering it." He returned to Michigan and earned a second bachelor's degree and teaching certificate in Physical Education.

It was a natural fit for Townsend, who was hired to teach and coach boys basketball at Ann Arbor Pioneer High School after earning his second degree. Over the next five years, his teams won multiple titles and conference championships. His administrative post with U-M Athletics marks the fourth phase of a career that is barely at midpoint. It illustrates the versatility of opportunities for people interested in health and fitness. The field that spawned movement science, sport management, and athletic training, now known as Kinesiology, is a hot ticket, attracting more students every year.

that physical activity classes and school sports can promote healthy eating and prevent risky behaviors like smoking, drug use, and alcohol abuse.

Even so, health education in the schools is disappearing even as child and adult obesity is climbing. But rather than bemoaning the irony, Kinesiology is taking steps to address it.

### DECLARING A NEW MAJOR

The School approved a new Health and Fitness major that will prepare students for such careers as corporate wellness, recreation leadership, personal training, and fitness promotion as well as Physical Education Teacher Certification. Associate Dean for Academic Programs **Pat Van Volkinburg** describes the new major as "a kind of a hybrid of PE, drawing upon the strengths of Movement Science, Athletic Training, and Sport Management."

Van Volkinburg, who began her career as a PE teacher and still chairs the program, is realistic about her chosen field. "Kinesiology is extremely popular, but the subset



of students who want to teach physical education is dwindling. Of 883 undergraduates, 15 are PE majors. "For years, I could guarantee with the utmost confidence that all of our PE graduates would find teaching positions. Unfortunately I can't say that today with schools cutting physical education positions, right alongside art and music, because of budgetary constraints."

In devising the new Health and Fitness major, the Physical Education faculty, which also includes **Dr. Weiyun Chen**, **Dr. Dale Ulrich**, and **Kerry Winkelseth**, were responding to observable trends in student interest. A 2011 survey of some 600 current or prospective Kinesiology students indicated 60 percent were "somewhat likely" or "very likely" to consider careers in recreation, personal training, coaching, corpo-

mid-90s, and watched interest in the field evolve and grow. "We're definitely seeing more students interested in becoming fitness instructors, as well as students who just want to know more about health and nutrition for their own wellbeing," she says.

"Functional fitness is really popular right now—using your body weight to provide resistance, as opposed to working with machines in a gym." Tait developed what she calls the "soccer mom workout" that promotes exercise that can be done using stadium stairs or a park bench. "It's a sort of back-to-basics approach to building agility, strength, and core fitness."

Technology can play a key role in promoting fitness, she notes, referring to pedometers, heart-rate monitors, and the many health-related websites that help

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## "Employment of health/fitness educators is expected to grow by eighteen percent over the next five years."

RON ZERNICKE, PROFESSOR AND DEAN

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rate wellness, fitness center ownership, and health promotion. Sixty-five percent also expressed interest in choosing a major that would support these career goals.

According to the 2010 National Academy of Kinesiology, 11 of the top 15 schools offer an undergraduate degree in "health and fitness." U-M is well positioned to join their ranks, providing evidence-based, top-caliber education and research in health and physical activity/fitness.

"Employment of health/fitness educators—people who can teach others to live healthy lives and avoid costly treatments for illnesses such as cancer, heart disease, diabetes, and depression—is expected to grow by 18 percent over the next five years," says Dean Zernicke, citing the U.S. Bureau of Labor. "That's faster than the average for all occupations."

### A GROWING INTEREST IN WELLNESS

Gail Tait, MS '86, is a Kinesiology alum and former faculty member who teaches physical education and trains fitness instructors. Now Associate Professor of Physical Education at the College of Du Page in Illinois, she's revised or created more than 25 classes in fitness and exercise science since the

users keep track of their goals and progress. Tait was the first in her department to offer an online class, "Living with Health." Most recently she developed "The Science of Nutrition," reflecting another national trend—the importance of healthy eating as part of fitness and wellness.

### THE FUTURE OF HEALTH AND FITNESS

With the launch of the new major, students who complete the health and fitness leadership track receive a Bachelor of Science degree. Required courses include: Biomechanics of sport; exercise, nutrition and weight control; psychological aspects of sport and exercise; prevention and care of athletic injuries; and managerial ethics in the sport and fitness industries.

President Mary Sue Coleman said, "Physical inactivity among Americans is a major contributor to the burden of chronic disease, both in quality of life and cost of health care. The School of Kinesiology's new major has emerged from the growing need to train and prepare the next generation of health and fitness educators and professionals who will ensure regular physical activity is a worthwhile choice for people of all ages and all abilities."

Current Health and Fitness freshman Brooke Bremner has always been fascinated with movement and the human body, and the new major was a perfect fit for her interests. "Because of the courses, my passion for health and fitness, and the growing need for health and fitness professionals, the program was a natural choice for me," she said. "I am extremely excited to see where the Health and Fitness program takes me and what I will learn along the way."



Brooke Bremner  
Health & Fitness Major



Gail Tait  
MS '86



Brian Townsend  
BA '91, BS '96



Pat Van Volkinburg  
Associate Dean



# CHANGING LIVES ONE DEGREE AT A TIME

## Galetti gift expands two transformative scholarship funds

By Linda Fitzgerald



Jeannine Galetti and  
Sport Management Junior  
Albert Karschnia

### UNTIL FIVE YEARS AGO LUKAS VARNEY, BS '13, HAD NEVER HEARD OF JEANNINE GALETTI, AM '55.

But in 2008, he became the first student to receive a four-year, need-based scholarship from an endowment established by Jeannine in memory of her late husband, longtime Kinesiology faculty member Professor Stephen Galetti.

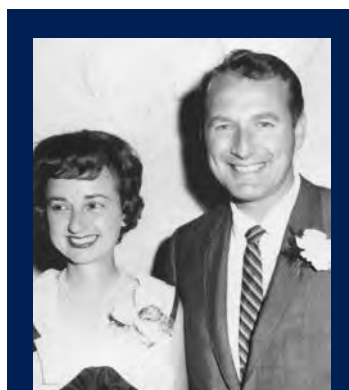
For Varney, the Jeannine and Stephen Galetti Endowed Scholarship Fund hasn't just made a difference. It's made all the difference. "Because of Jeannine Galetti's generosity, I was able to attend one of the greatest institutions of higher education in the world," Varney says emphatically. "Her charitable giving to the School of Kinesiology provided me with that opportunity. Thanks to her, I was able to learn from some of the most knowledgeable professors in the field of sport management, people who gave me the skills and knowledge I needed for my current endeavors. I am now out in the world putting my degree to good use, and I will always be grateful for the Galetti scholarship. Jeannine is an amazing person and someone I am very honored to know."

Varney is one of four sport management students who have received a Galetti Scholarship in the last five years. The endowed fund was established two years after Professor Galetti's death. Mrs. Galetti had been searching for a way to honor her husband in perpetuity and, through the School's development officers, learned about the *Michigan Matching Initiative for Student Support*, a need-based scholarship fund launched as part of the Michigan Difference Campaign that matched donor contributions, dollar for dollar.

Delighted at the prospect of doubling her gift, she established the Stephen and Jeannine Galetti Endowment. Each year since then, the \$400,000 endowment has awarded four-year scholarships of \$5,000 each to three students.

"Back in our day, college was very affordable," Mrs. Galetti says. "But today, with tuition costs so high, students are under tremendous pressure. They have to worry about many things that Steve and I were spared. That's why funding scholarships is so satisfying. It's such a worthwhile experience to help a young person get ahead. And I knew I was giving to a school that has proven itself and is moving in positive new directions."

In 1988, the year Professor Galetti retired from the U-M, his division colleagues established the Stephen J. Galetti Award, to be given to a promising undergraduate student. It was a fitting tribute for a man who loved teaching and devoted his life



JEANNINE AND  
STEPHEN GALETTI

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For Varney, the Jeannine and Stephen Galetti Endowed Scholarship Fund hasn't just made a difference. It's made all the difference.

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to educating the next generation of kinesiology, physical education, and sport management professionals.

This year, as part of the Victors for Michigan Campaign, Mrs. Galetti decided to make a \$100,000 gift to the School. A portion of her contribution will be used to permanently endow the Stephen Galetti Award, with the remainder going to the Stephen and Jeannine Galetti Endowed Scholarship Fund. The Michigan Matching Initiative for Student Support will bring her total gift amount to \$125,000 and will make it possible to support four students a year, with awards going to one freshman, sophomore, junior, and senior annually.

What motivated this second act of generosity? "First, it was very important to me to keep the Galetti Award alive, and the only way to ensure that was to create an endowed fund," she explains. "As to the Stephen and Jeannine Galetti Endowed Scholarship Fund, I can't think of a better use for money. I've been very satisfied with the outcome of my earlier gift. I've met with the scholarship recipients and all of them have responded in very kind ways. In fact, I'm pleased with everything that's happening in Kinesiology right now. The School is pursuing areas of research that are truly important to our world today. And I'm delighted at the quality of both students and faculty."

# OUT OF THIS WORLD WITH DR. RACHAEL SEIDLER

By Pat Materka

## Exploring the effects of microgravity on the brain



**MOST OF US HAVE SEEN THE EFFECTS OF MICROGRAVITY IN MOVIES OR TELEVISION**, watching astronauts floating and somersaulting inside their spacecraft.

But researchers know that weightlessness can also reduce an astronaut's muscle mass and bone density, with longer term consequences to posture, locomotion, and motor control. If microgravity alters the composition of the body, **Dr. Rachael Seidler** wonders, does it also cause structural changes to the brain?

The Associate Professor of Movement Science has been awarded over \$2.5 million in research grants to study the issue. Her findings may have implications not only for astronauts but for the rest of us earth-bound humans.

**Pat Materka for Movement Magazine (MM):** You've actually been funded for two separate studies—one looking at astronauts, and a second study using lay volunteers to simulate some of the effects of space travel by spending 70 days in bed rest. How are the studies similar or different?

**Dr. Rachael Seidler (RS):**

All of my work is focused on how the brain controls movement, both in healthy populations as well as people who are aging or coping with disease. I'm interested in how people learn new motor skills as they adapt to new situations or environments.

For the astronaut group, we know that motor control changes in space flight. There's no gravity, so the limbs become lighter. You need to use far less muscle force to move your body when you're in space. Changes also occur in the balance organs of the inner ear, which enable the body to stay upright. After a space flight, astronauts have difficulty with balance and coordinating eye and head movements until they learn to readapt to gravity. We have anecdotal evidence that long spaceflights in an isolated and confined environment can affect concentration, memory, and cognitive task performance; that's our area of focus. The new work, funded by the NSBRI (National Space Biomedical Research Institute), has a similar objective. But instead of space flight, we'll be looking at motor control changes that occur with long-term bed rest. Volunteers will spend 70 days in bed with their heads tilted at an angle six degrees below their feet. This mimics another aspect of space flight: Without gravity keeping you upright, a lot of the fluid in your body flows to your head. The increased pressure flattens the back of the eye and in some cases may reduce sharpness of vision. Some returning astronauts report vision problems; it's not clear yet whether or not they are permanent.

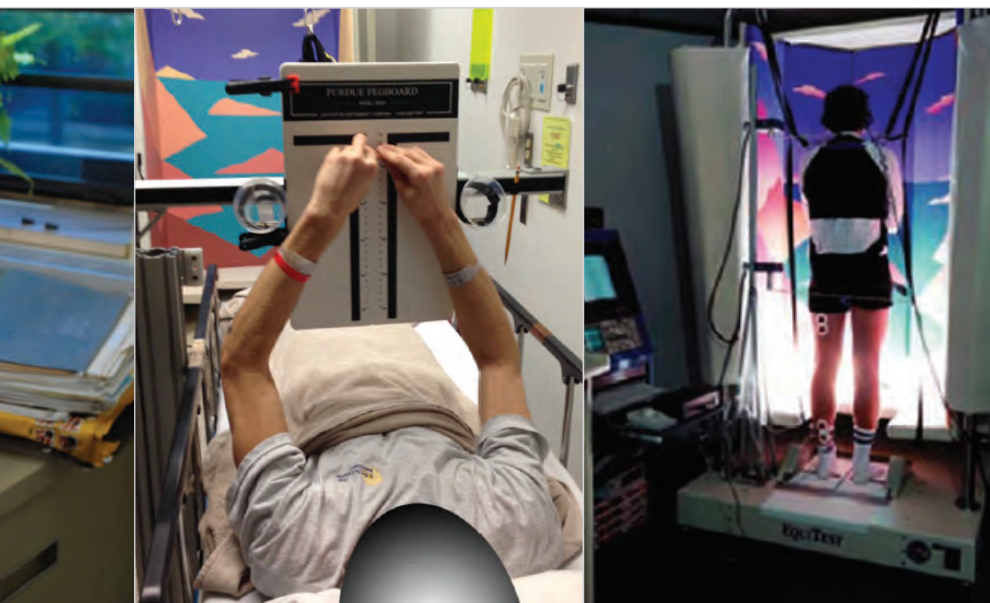
**MM:** One can see how impaired vision can affect thinking and concentration. And the research subjects actually spend 10 weeks in bed! Are they students?

**RS:** No, these are paid volunteers at a large facility at UTMB (University of Texas Medical Branch) in Galveston. NASA frequently uses this model, called a "space flight analogue," which simulates the conditions experienced by astronauts. The bed rest subjects are selected to match the demographics of the astronauts, males and females, aged 35 to 60. We'll look at the brain structures of both groups before, mid-way through, and after the time periods. Studies of rodents have shown that long periods of space travel produce significant changes to the cerebellum, which plays a role in balance and motor coordination. So that is a structure we'll be looking at in humans.

**MM:** Except you won't be dissecting the brains of the astronauts or the bed rest subjects.

**RS:** (smiles) We could never have done studies like this without magnetic resonance imaging (MRI), which have only been around since the late 1980s. I've always been curious about how the brain works, particularly in relation to motor behavior. Looking at MRIs, I've been fascinated by how different each person's brain looks. There are huge individual variations, which helps to explain why each of us has different abilities and talents.





The illustrations depict data collection and preliminary results from Dr. Seidler's NASA and NSBRI projects.

**MM:** And what led to your interest in astronauts?

**RS:** When I was a graduate student, I received a NASA research fellowship. I'm still collaborating with some of the same people at the Johnson Space Center. Ten years ago we wrote a grant proposal to look at brain changes due to microgravity, but it didn't get funded; then for the past several years, there was no call for proposals in this area. This time our interests got a better reception. It's even more gratifying to say that this is something I've wanted to study for 10 years!

**MM:** \$2.5 million in funding seems even more impressive, given the cutbacks in the space program.

**RS:** Despite its reduced funding, NASA is being very creative in using its resources to ensure safe and productive human spaceflights. With the retirement of the U.S. Space Shuttle program in 2012, Americans are flying on the Russian Soyuz space crafts. So issues related to health and performance in space are still relevant.

Astronauts are spending six months at a time at the International Space Station, which is currently slated to be in commission through 2018. So my space flight study has been extended through 2019. This is very exciting, because even though we are sending up fewer astronauts, I'll have several years to get the sample size I need.

**MM:** And how will your findings affect the general public?

**RS:** If we see changes in brain structure resulting from the 70 days of bed rest, this has implications not only for space travel but inactivity in general, which is so prevalent in our society. I'm interested in brain plasticity of people with movement disorders such as Parkinson's, but also in healthy individuals who spend hours sitting in front of computers or television. The astronauts make up the perfect experiment group. In my lab, I might get research subjects to practice a task for an hour a day; maybe they might return a few times and create longitudinal data. But in space, I have subjects exposed to microgravity 24 hours a day for six months. On the flip side are the bed rest participants who have no health issues or neurological disorders that might confound the results. This is a model for studying extreme inactivity in healthy individuals and how it affects brain structure and function.

**MM:** Maybe your findings will be an incentive for very sedentary people to get moving.

**RS:** It's an interesting public health challenge. We know that physical activity is good for the heart and the body. And now a number of studies show that exercise boosts cognitive function across the life span, from adolescents to the elderly. You increase the blood flow and delivery of metabolites to the brain. Yet, despite all of the evidence of activity's benefit, we still have an obesity epidemic.

So while I'm excited to publish and promote the results, I confess to being a little bit cynical in terms of changing the culture. Convincing people to be more active is an ongoing challenge, and I'm not sure this one piece of research will tip the balance. But, it's another log to add to the fire.

## MOVING ON...



Movement Science Professor **Dr. Vic Katch** is retiring from the School in 2015 after 41 years. Katch began his career in academia in 1971 as an Assistant Professor of Physical Education at the University of California, Santa Barbara. It was in 1972 that he made his way to U-M as an Assistant Professor of Physical Education and was the first

Head Coach for the Women's Basketball Team at U-M in 1973. In 1982, he became Professor of Movement Science and Associate Professor of Pediatric Cardiology at the U-M School of Medicine.

Katch has co-written several books, including the widely used *Essentials of Exercise Physiology* and several popular magazine columns over the span of his career, including monthly columns in *Shape* and *Muscle and Fitness* magazines, and was a regular contributor to *Glamour*, *Vogue*, and *Mademoiselle* magazines.

Katch received a Bachelor of Arts in Political Science and Bachelor of Science in Physical Education from California State University, Northridge, and a Master of Science in Physical Education and Doctor of Education in Physical Education from the University of California, Berkeley.



Movement Science Professor and former Dean of the School **Dr. Beverly Ulrich** will be retiring from the University in 2014. From the rise in applications, to the increase in funded research, to the growth of the endowment, Dr. Ulrich's years as dean were marked by historic progress.

Ulrich came to the university in 1999 as Professor and Director of the Division of Kinesiology. In 2000, the Regents approved her appointment from Director to Dean, and in 2008, the Division of Kinesiology become the School of Kinesiology under her tenure. After 10 years of deanship, she stepped down to return to teaching and research.

Ulrich is internationally recognized for her pioneering studies related to motor skill development in infants with Down syndrome and spina bifida. She received a Bachelor of Science in Health and Physical Education from East Stroudsburg University, a Master of Education in Physical Education from West Chester University, and a Doctor of Philosophy in Motor Development from Michigan State University.

Thank you **Dr. Katch** and **Dr. Ulrich** for your passion, commitment to excellence, and service to all of the students, peers, staff, alumni, and friends at the University of Michigan and the School of Kinesiology.



### FALLING ASLEEP AT THE WHEEL?

**Dr. Meehan works with Hyundai-Kia America Technical Center to develop in-car highway hypnosis alert system**

**HIGHWAY HYPNOSIS IS A MENTAL STATE IN WHICH A PERSON CAN DRIVE GREAT DISTANCES WITHOUT RECOLLECTION OF HAVING CONSCIOUSLY DONE SO.** According to the National Highway Traffic Safety Administration (NHTSA), 3,331 people were killed in distracted driving-related accidents in 2011, and NHTSA estimates another 387,000 more were injured.

Assistant Movement Science Professor, **Dr. Sean Meehan**, is working with the car company to develop a novel in-car system that would measure drivers' alertness, helping to identify when a driver may start to lose focus and drift off into sleep.

"There has been a lot of press around driver awareness lately, mostly centered on distracted driving (talking or texting while driving). While these are dangerous and important issues to address, what we are looking at is 'drowsy driving' or driving with insufficient sleep," said Meehan.

The difference between this technology and current systems on the market is Meehan's alerting system monitors the electrical activity of the brain to identify when drivers are drifting off and losing focus. Today's in-car technology monitors behavior, including vehicles equipped with cameras that track the lines

in the road and alert a driver when they start to veer away from them. "The problem with these systems is they look at the behavior and at that point it's almost too late. What we are looking to do is measure the brain's activity in the car so we can detect the subtle changes that precede the switch from an alert, attentive state to becoming drowsy and inattentive."

The ultimate goal for this research is to increase the safety of not only drivers, but also passengers in the vehicle, by informing drivers that their brain's ability to turn sensory information into motor commands is being compromised.



## DR. GEORGE WADE CREATES A LASTING LEGACY

By Linda Fitzgerald



Dr. George Wade

**OVER THE COURSE OF THE PAST 40-PLUS YEARS, DR. GEORGE WADE, BS '64, MS '66, HAS TRAVERSED SEVERAL DIFFERENT CAREER PATHS**—from college

track coach to orthopaedic surgeon to sports medicine innovator and entrepreneur. It's a journey that started at the University of Michigan. Now that journey has come full circle, with a \$3 million bequest, to be divided among the three U-M units that changed his life and shaped his career.

### Forging a strong Michigan connection

It was 1960 when Wade enrolled in the School of Kinesiology on a track scholarship—a remarkable achievement for someone who had suffered from polio as a child. After completing a bachelor's degree in physical education, he stayed on to earn a master's while working as an assistant track coach and teaching fellow in physical education.

During those years at U-M, he met a number of people who would become his mentors and friends—among them Professor Emeritus **Dr. Rodney Grambeau**, AM '48, EdD '59, legendary hockey coach **Al Renfrew**, BS '49, and fellow student and future U-M Track Coach **Jack Harvey**, BS '67. Perhaps most important of all was research pioneer of Molecular & Integrative Physiology and Biomedical Engineering, **Dr. John Faulkner**, MS '56, PhD '62, who inspired Wade with his teaching and piqued the young man's latent interest in science and research.

Wade's first "real" job was with a former U-M Professor, **Dr. Andrew Kozar**, MS '57, PhD '61, who directed the men's physical education program at the University of Tennessee in Knoxville. It was Kozar who persuaded him to attend medical school. By 1970, Wade was back at U-M, this time for residencies in physical medicine and orthopaedic surgery. He also served as assistant to Michigan's head team physician Dr. Gerald O'Connor.

An avid athlete and outdoorsman, Wade was drawn to the rugged landscape of Idaho. It was there, in Boise, that he opened his orthopaedic practice. Within a short time, he was named team physician for Boise State University.

In the early 1980s, Wade founded the Idaho Sports Medicine Institute (ISMI), launching a revolutionary new team approach to sports medicine that combined orthopaedic surgery and physical medicine and rehabilitation. Currently located on the campus of Boise State, ISMI has become a model for university athletic programs nationwide.



DR. GEORGE WADE (BACK) AND LONG-TIME FRIEND JACK HARVEY (FRONT), FORMER U-M TRACK TEAM MEMBER AND HEAD COACH.

### Giving back in a big way

In January 2013, Wade retired and began doing some serious thinking about his legacy. A few months later, he announced a \$3 million commitment to the Victors for Michigan campaign. The gift will be split equally among the Athletics Department, the School of Kinesiology, and the Department of Orthopaedic Surgery.

As he explains, "I wouldn't be where I am today if it weren't for the University of Michigan. It was my track scholarship from Athletics that made it possible for me to attend Michigan and laid the groundwork for my philosophy of sports medicine. The six years I spent as an undergraduate and graduate student in Kinesiology—or as I still think of it, the Department of Physical Education—gave me a lot, including some great mentors, and helped me in my future sports medicine work. The Department of Orthopaedic Surgery rounded out my career. I believe in giving back. I also believe in taking control of one's resources and directing them in the most effective way possible, to organizations that will make a difference."

Wade notes that the U-M Office of Development made it easy for him to give by suggesting that he bequeath part of his retirement fund to the University. As Director of Gift Planning Renee Winkler notes, "Donors are often surprised to discover how many different options there are for making gifts to the University of Michigan. Depending on their circumstances and philanthropic goals, they might choose to explore bequests, charitable gift annuities, or charitable remainder trusts."

# EVERY DOLLAR MATTERS

It's not just the large gifts that make a difference

By Joan Witte

**PROFOUND, PERSONAL, GRATEFUL, AND LIFE-CHANGING ARE A FEW OF THE WORDS** students and alumni use to describe giving and receiving at the University of Michigan (U-M). While raising more dollars for students is the number-one priority of the Victors for Michigan campaign, the true benefit is much larger.

Over the past ten years the price for an education at U-M has grown slower than at comparable public universities. U-M has reduced the net costs for students through cost containment measures and endowments. But beyond the basics of tuition, books, room, and board there are many other options such as study abroad and research projects that play a vital role in providing a top-tier education.

Professor and Dean of the School of Kinesiology, [Ron Zernicke](#), stresses the importance of the new Victors for Kinesiology Fund, "Students represent our future. Unrestricted gifts provide support for scholarships, program development, and experiential learning opportunities. These real-world experiences are critical to prepare the next generation of innovative leaders."

Sport Management student [Kiomari López](#) shows her U-M pride in Brazil.



## Small gifts change lives

Donor and graduate, [Dr. Tom Templin](#), PhD '78, professor and former head of the Department of Health and Kinesiology at Purdue University,

strongly believes that donations create a pathway for others to succeed and to have an outstanding education. He shares why he gives, "I will be ever grateful for the support I received, which was influential. It certainly helped me in my role as a professor at Purdue University."

"My wife and I give in honor of the outstanding faculty that shaped our own careers. People like Paul Hunsicker, Ruth Harris, Joe Vaughn, Dr. Dee Edington, and [Dr. Vic Katch](#) opened my eyes to the importance of research. I feel it's my duty to honor them by investing in the future of Kinesiology at U-M," Templin explains.

Templin and his wife make it a habit to give monthly to help support graduate students pursue research or experience international learning opportunities. "The thank you letters I receive about a student's travel to a foreign country or a conference are truly a pleasure to read. Most stress that without assistance they wouldn't have been able to participate in these types of programs."

Other alumni tell similar stories. Sport Management graduate and General Manager at Oregon IMG Sports Marketing, [Brian Movalsen](#), AB '90, says, "The experience I had at U-M and



my degree empowered me. If I can, even in the smallest way, help someone else have a successful future and continue the success of U-M, I want to do it." He started giving to Kinesiology 15 years ago by allocating a little each month.



"When I started in my career, giving a small amount, less than \$300, was personally rewarding," says

Movalson. "As I have become more involved with the School as a member of the Sport Management Advisory Board, I am able to see firsthand how small amounts significantly add up. Scholarships are a great example of where the whole is indeed greater than the sum of its parts."

Annual giving is vital to enhancing the student experience through student activities and programs. "Every gift matters. Eighty-seven percent of donors to the Victors for Michigan campaign have made gifts for \$1,000 or less. This is why we have established the Victors for Kinesiology Fund," explains Zernicke.

### Why contributions of all amounts matter

Sport Management student, Kiomari López, agrees with Movolson and Templin, "Every single dollar matters and helps to pay for expenses like textbooks or opportunities beyond the classroom experience, such as study abroad. I was able to study in Brazil with help from Kinesiology's Go Global Travel Award. If it were not for this support, I would not have been able to acquire the knowledge and experience I had in Rio." Many students, like López, come from families that cannot afford to contribute to learning extras such as study abroad.

U-M Undergraduate Admissions reports over half of U-M undergraduate students need to work at least 10 hours per week while in school. Most student jobs only pay minimum wage, and a payout of \$74 a week before taxes doesn't go very far. On average students need an additional \$2,054 for miscellaneous school expenses and another \$1,048 for books, supplies, and other classroom resources.

In general, the Kinesiology international program office estimates a non-tuition based study abroad program runs approximately \$1,000 per week, plus airfare. This means the typical six week summer experience costs a student an estimated \$6,000 or more plus airfare. Tuition based programs cost more and range from an estimated \$14,000 for an in-state student to more than \$24,000 for an out-of-state student.

Annual giving can open doors for students like senior Matthew Hillebrand, who is working on a dual degree from Kinesiology in Sport Management and from the College of Literature, Science, and the Arts (LSA) in Economics. "I can't say thank you enough...The President of Big Ten Network (BTN), Mark Silverman, gave a speech on campus. At the time, I was working on a sport economics independent study. I was able to discuss with him the impact of adding teams to the Big Ten conference." As a result of his brief conversation with Silverman, Hillebrand received an invitation to visit BTN in Chicago, which ultimately led to a summer internship.

### Continuing the legacy

The sense of community—especially Kinesiology's close-knit, small school experience—is often cited as the highlight of a student's educational experience. U-M is known for its unique campus culture that fosters student success. The university has been heralded as one of only 20 schools nationwide recognized for the quality of its student life.

**Jennifer Buckingham**, BS '99, a senior pharmaceutical sales representative at Eli Lilly and Company, notes she gives to the



Victors for Kinesiology Fund as a way to honor the donors who gave her the support she needed for an exceptional education

at the School. "While I was a student, the School was like an extended family while away from my own family. The love, support, and education even beyond the classroom really laid the foundation for my future. Because of my own personal experience, I know that when I give more students

will benefit from the home away from home that I experienced while I was there."

Movalson also underlines the importance of preserving the sense of community that drives the U-M culture and preserves its academic leadership, "To keep a community vibrant you can't just take from it. What makes a community great is our investment. If we all only take withdrawals from Michigan such as your degree or the pride from wearing the block M, there won't be anything left in the future. It's important to continue Kinesiology's legacy of leadership and the benefits we all received when we were students."

## 4 WAYS TO MAKE A DIFFERENCE

**An individual can easily contribute any amount online to four different Kinesiology programs.**

- 1 Victors for Kinesiology Fund**  
*Provides unrestricted support for scholarships, program development, engaged learning opportunities, and support for special projects, at the discretion of the Dean.*
- 2 Undergraduate Need-Based Scholarship**  
*Provides critical student support for tuition, textbooks, and other needs.*
- 3 GoGlobal Awards**  
*Funds study abroad opportunities.*
- 4 Graduate Student Research Assistance Support**  
*Provides funding for graduate and Ph.D. students.*

**[www.kines.umich.edu/alumni-amp-friends/giving](http://www.kines.umich.edu/alumni-amp-friends/giving)**

## ANNUAL SPORT CONFERENCE CONVENES EXPERTS TO EXPLORE *SPORT: THE BLUEPRINT FOR ECONOMIC AND BRAND GROWTH*

### MSBC Executive Committee Members

Co-President: Michael Freedman, Kinesiology Sport Management Senior

Co-President: David Herman, Kinesiology Sport Management Junior

Vice President of Event Planning: Jeremy Ross, Ross Business Administration Senior

Vice President of Marketing: Joey Fox, Ross Business Administration Senior

Vice President of Partnerships: Blake Bogdanovich, Ross Business Administration Junior

Vice President of Speakers and Executives: Chelsea Pezzola, Kinesiology Sport  
Management Senior

Vice President of Team Relations: Mark Wagner, Ross Business Administration Senior

Brand Manager: Liz Nagle, Ross Business Administration Junior



In its second year, the Michigan Sport Business Conference (MSBC) kicked-off a full day of activities with a presentation by U-M Donald R. Shepherd Director of Athletics **Dave Brandon** and a key note conversation with John Skipper, president, ESPN and co-chairman, Disney Media Networks and moderated by ESPN Commentator Mike Tirico.

The conference, held October 18 at the Ross School of Business, was organized by a 32-member School of Kinesiology and Ross School of Business student planning committee. During the past year, the committee worked to organize and successfully implement the event. Other notable speakers included CBS Sports Anchor Dana Jacobson; Tom Garfinkel, president and CEO of the Miami Dolphins; Tom Lewand, president of the Detroit Lions; Len Komoroski CEO of the Cleveland Cavaliers and Quicken Loans Arena; and Dennis Mannion, president and CEO of the Detroit Pistons and Palace Sports & Entertainment.

Michael Freedman, co-president, MSBC said, "Our goal this year was to connect as many of our attendees with top sport business executives. Internships, jobs, and most importantly, relationships, start with a handshake and we wanted to facilitate as many of those handshakes as possible."

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