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Sport Goes to Church

Amy Rose and Shirl Hoffman

Tebow-mania may have subsided after the Broncos lost to the New England Patriots in the recent NFL playoffs, but the link between sport and American religion is as strong as ever. In many ways, it is a natural connection. As historians point out, sport made its first appearance in culture as a form of religious ritual and, while the smoking altars that occupied the athletic grounds at Corinth, Nemea, and Delphi have long since been extinguished, religion remains an important feature of modern sports.

Using sport as an arm of the Christian ministry dates back over a century, but the idea didn't really catch on in the United States until the 1950s when groups such as the Fellowship of Christian Athletes (FCA) and later Athletes in Action (AIA) and Pro Athletes Outreach were formed. Estimates are that more than 60 religious organizations organize ministries around sport.

While some are small, others, like FCA and AIA, have large staffs and enthusiastic supporters. AIA has a presence in



Courtesy of Baylor University Photography

over 150 campuses; FCA held more than 33,000 events across the country last year for nearly 1.5 million attendees.

Goals of sport ministry programs are far ranging, from evangelizing athletes and fans to counseling athletes through difficult personal and sport-related problems, to teaching about ethical conduct in sport. Pro Athletes Outreach bills itself as a ministry of pros to pros; it serves the spiritual and emotional needs of athletes and their families through conferences and seminars.

President's Message

Charting the Course: The Road Ahead for the American Kinesiology Association

Wojtek Chodzko-Zajko, AKA President



Wojtek Chodzko-Zajko

n behalf of the new AKA executive committee (Wojtek Chodzko-Zajko, president; Phil Martin, vice president; Penny McCullagh, secretary-treasurer), I am excited to take this opportunity to inform the readers of

Kinesiology Today about current and future developments at the American Kinesiology Association. Thanks to the extraordinary efforts of the outgoing executive committee, we have inherited a strong and vibrant organization that is making great strides as the primary organization that advocates for kinesiology departments in universities and colleges around the country. We have a debt of gratitude to pay to our outgoing officers, Gil Reeve, Waneen Spirduso, and Jim Morrow. Under their watch. AKA has grown in stature and reputation and has initiated a number of projects and initiatives that will set the course for academic kinesiology for years to come.

January 2012 was an important month for AKA. It marked both the annual meeting of the AKA board of directors as well as the AKA Administrator Workshop that were held at the Marriott Solana Hotel in Dallas, Texas. The AKA board of directors consists of 15 members, 3 officers, an executive director, a business office representative, and the editor of Kinesiology Today. This group met over the last weekend in January 2012 to review current and future AKA projects and initiatives. In this month's column I will attempt to provide you with a brief glimpse into the activities of the AKA with the goal of providing you with greater insight into the day-to-day functioning of the association.

AKA Standing Committees: The Workhorse of Our Association

When describing the activities of the AKA, there is no better place to start than discussing the activities of our various committees. The AKA is organized into five standing committees plus several ad hoc committees. These committees are charged with

implementing the vision for the AKA. The following section contains an overview of the mission and major responsibilities of each of our committees.

The AKA membership committee oversees the recruitment and retention of AKA member departments. It also assists with the development of recruitment and promotional materials about the AKA. The committee works collaboratively with the AKA executive committee and business manager to maintain current lists of member departments. In the January board meeting the committee outlined a number of strategies to recruit new member departments into the association. One approach will be to encourage existing members to contact and recruit peer institutions by informing them about the many services and resources offered by the AKA to member departments.

The AKA **workshop committee** is responsible for the organization and implementation of the annual AKA administrator workshop. The goal of the workshop is to provide opportunities for current, future, and

Trouble Sleeping? Try Exercising

netting asleep and staying asleep are problems for an estimated 35% of the U.S. population. According to the National Sleep Foundation, over 56 million prescriptions for sleeping pills are written each year. Now it appears that physical activity may be related to improved sleep patterns. Using a nationally representative sample of 18- to 85-year-olds, kinesiologists Paul Loprinzi of the department of exercise science at Bellarmine University in Kentucky and Brad Cardinal of AKA member program in exercise science and sport science at Oregon State University assessed the association between measures on 20 sleeping-related questions and physical activity as measured by accelerometers. The results, published in Mental Health and Physical Activity, found that, after controlling for age, BMI, health status, smoking status, and depression, the relative risk of feeling overly sleepy during the day compared to never feeling overly sleepy during the day decreased by a factor of .65 for participants who met physical activity guidelines (150 minutes of moderate or 75 minutes of vigorous intensity per week or a combination of the

two). Similar findings were observed for not experiencing leg cramps or not having decreased concentration when tired. Those meeting physical activity guidelines also fell asleep 3 minutes faster and were less likely to inform their physicians that they were having trouble sleeping, falling asleep, or waking too early in the morning.

While Loprinzi and Cardinal point out that falling asleep 3 minutes faster is likely of little clinical significance, particularly in that the overall amount of sleep was not different between the two groups, they do note that improved sleep quality is important in our increasingly sleep-deprived culture. Furthermore, their findings are in line with previous studies that have shown physical activity to be positively related with improved sleep using self-report measures of physical activity or smaller, nonrepresentative study samples. The authors acknowledged that the possibility that those who naturally sleep better may be more inclined to exercise cannot be discounted. Also, the researchers did not assess more direct measures of sleep quality, such as slow-wave sleep (i.e., non-REM) or REM. Potential mechanisms through which physical activity may

have sleep-promoting effects continue to be investigated as well

[Note: Paul Loprinzi, a former doctoral student mentored by Brad Cardinal and lead author of the report, was named "Scientist of the Week" by Laboratory Equipment Magazine on December 8, for this article.]

Loprinzi, P.D. & B. J. Cardinal (2011) Association between objectively-measured physical activity and sleep: NHANES 2005-2006. Mental Health and Physical Activity 4(2) 65-69

—SJH

IHRSA Releases Top Health Club Trends for 2012

The International Health, Racquet & Sportsclub Association (IHRSA) has released its list of health club trends for 2012: the list is based on feedback from over 3,000 club and fitness businesses. The top trend is a 10% increase in number of people working out in clubs. Although only 16% of the American population are members, club membership has grown to a reported 50.2 million members, in spite of a poor economy. The second and third top trends are age-specific and populationspecific programming at clubs, including those aimed at baby boomers and those aimed at children. Membership for those under age 18 grew from 3.8 million in 2007 to 6.1 million in 2010. The next most noticeable trend is the demand for group exercise, including cycling, strength training,

dance-related workouts, and fusion classes that combine yoga, Pilates, ballet, other forms of dance, and surfing.

The hiring of personal trainers is at an all-time high: In 1999 4 million Americans were using personal trainers; now 6.5 million do. The IHRSA notes that growth has come not from one-on-one personal training but from small-group personal training. Technology is another trend: More and more club members rely on interactive workout programs and devices to track distance, calorie burn, heart rate, and exertion. Another trend is for health clubs to adapt to the needs and schedules of their patrons. Rounding out the top 10 trends are a focus on corporate benefits of exercise, the use of suspension and gravity training, and physician-prescribed exercise.

Top 10 Health Club Activities

- 1. Free weights
- 2. Abdominal machines
- 3. Treadmills
- 4. Stationary cycling
- 5. Resistance machines
- 6. Low-impact aerobics
- 7. Elliptical trainers
- 8. Yoga
- 9. Stretching
- 10. Stair-climbing machines

Source: Top health club trends for 2012. January 11, 2012. www.ihrsa.org/media-center/2012/1/11/top-health-club-trends-for-2012.html.

—SJH

EXECUTIVE DIRECTOR'S CORNER

Don't Forget About the AKA Student Recognition Awards

Amelia Lee, AKA Executive Director



Amelia Lee

Don't let the onslaught of demands that are foisted on departments each spring semester keep you from taking advantage of one of AKA's greatest services. All member depart-

ments have the privilege of submitting nominations for the three National AKA Awards given to honor undergraduate and graduate students for academic excellence, leadership, and scholarship. We believe these awards provide an excellent way to showcase the academic talents of students in kinesiology, and many member departments have taken advantage of this opportunity. If you have not already done so, I encourage you to nominate your students for this year's awards.

Because departmental faculty are most familiar with students' accomplishments, they will have major input in deciding who receives the awards, although final approval will be by the AKA scholar awards committee. More information about the awards, including selection criteria, can be found on the AKA website: www.americankinesiology.org. Awardees will receive certificates, and their photos will be published on the AKA website. Announcements of awardees will be sent to chairs and deans of the students' institutions soon after a decision is made. The awards committee started the review process for the 2012 scholar awards on January 1 and will continue until the May 1 deadline. The review process for the writing awards will start after the deadline of March 15, 2012.

The AKA board of directors has been impressed with the outstanding achievements of students in kinesiology, and the awards are offered as public recognition of their accomplishments. I encourage you to take advantage of this opportunity if you have not already done so.

---- Welcome ----New AKA Members

Southern Nazarene University Kinesiology Department

University of Delaware Department of Kinesiology and Applied Physiology

University of Texas, Brownsville Department of Health and Human Performance

For a complete list of AKA members, go to www.americankinesiology.org.

Sport Problems Gussy Up a Dismal Science

ow well does Q-school (qualifying school) predict success on the professional golf tour? Not all that well, according to a recent article in the *Journal of Quantitative Analysis in Sports* (JQAS). It turns out that Q-school quite accurately can identify those who go on to play in the upper ranks of the tour, but for players of a lesser stature, Q-school isn't a very good predictor.

A statistics journal devoted to sports? Yes, indeed. Long considered a drag by mathematically challenged undergrads forced to sit through lectures on true mean, confidence interval, t-tests, and analysis of variance, statistics has found new life—thanks to sports. In their efforts to link numbers to real-life events and make statistical problems more relevant, statisticians are increasingly using problems centering on free-throw percentages, nine-hitter batting-order possibilities from a 12-player roster (there are 79,833,600), and risks involved in going for 2 points after a touchdown.

Professors of statistics have long appreciated the potential of sport as a teaching device, extending back at least to 1988 when Gabriel Costa in the mathematics depart-

ment at Seton Hall taught what is believed to have been the first course devoted to the study of sport statistics. Four years later, the American Statistical Association founded the Section on Statistics in Sports, aimed at filling a need to foster the development of statistics and its application to sports. Since 1994, the association has published Journal of Quantitative Analysis in Sports. Now statisticians have a peer-reviewed journal in which to publish articles bearing such formidable titles as "A Hierarchical Bayesian Variable Selection Approach to Major League Baseball Hitting Metrics," "Using Tree Ensembles to Analyze National Baseball Hall of Fame Voting Patterns," and "Predicting the Atlanta Falcons Play-Calling Using Discriminant Analysis."

Why sport? Mostly because it offers relevant and familiar problems whose answers can be found in statistical applications. In their introduction to Anthology of Statistics in Sports (2005), authors Jim Albert and Jay Bennett point out that statistics professors often describe concepts in a context that is foreign to students. They say that students are "much more likely to understand concepts in probability and statistics if they

are described in a familiar context. Many students are familiar with sports either as a participant or a spectator."

At Stanford, the course Stats 50: Mathematics of Sport is on the books; at Ohio State University, students can enroll in Stat 201.01: Statistics in the Sports World. With the spread of courses devoted to sport, a solid market has developed for statistics textbooks that use sport as a central reference point. Baseball has been a favorite, thanks to its affinity with statistics and statistical analysis. What true baseball fan can't spout statistical data regarding a favorite team? A new term has been coined: sabermetrics, the basis for the popular film Moneyball, uses empirical evidence, specifically baseball statistics, to measure in-game activity. It is the basis for Costa's 2007 book Practicing Sabermetrics: Putting the Science of Baseball Statistics to Work. Other texts, such as Jim Albert and Jay Bennett's Curve Ball: Baseball, Statistics, and the Role of Chance in the Game (2003) and Albert's Teaching Statistics Using Baseball (2003), also are in use. A new text for high school students—Statistical Reasoning in Sports—will be released in a few months.

To Your Health: The Sport of Golf

Siv Schwink, KT writer

Recreational golfers who play a round of 9 holes once a week may be improving more than just their swing—especially if they can forgo riding in a golf cart. According to emerging data from an ongoing pilot study out of the department of kinesiology, recreation, and sport studies at Carolina Coastal University, golfers who walk, either carrying or pulling a golf bag, expend enough energy to meet the 2008 Physical Activity Guidelines published by the U.S. Department of Health and Human Services.

This is potentially very good news for golfers, who may find it easier to stick with an exercise regimen involving golf, over the traditional gym protocol three days per week, says Dr. G. William Lyerly, lead investigator of the ongoing pilot study and assistant professor of exercise science and sport studies at CCU.

"The problem with the traditional approach is that a lot of people don't adhere to it. We are looking at an alternative method to get that activity in," says Lyerly. "The results of the study will be used to determine if golf is a viable alternative form for producing the same health benefits."

The health gains associated with meeting the government's guidelines for physical activity include a reduced risk of cardiovascular disease, diabetes, hypertension, high cholesterol, and other chronic diseases associated with inactivity. Yet, according to a report from the Centers for Disease Control and Prevention, more than 50% of American adults do not regularly get those recommended 150 minutes, and 25% of American adults are sedentary.

Few studies have looked at the potential health benefits of recreational golf. Working with his colleague Dr. Greg Martel, associate professor of exercise science and sport studies at CCU, Lyerly says this study applies the government's 2008 guidelines from a different approach: Instead of counting minutes and intensity of work, the golf pilot study looks at overall calories burned by an average-weight individual engaged in the recommended 150 minutes per week of moderate-intensity physical activity, or 75 minutes per week of vigorous-intensity exercise.

This would require a weekly exercise routine with an energy expenditure of 9.5 kilocalories per kilogram of body weight.



William Lyerly, Carolina Coastal University

According to the data collected from the pilot study, walking while golfing 9 holes expends 7.66 ± 0.29 kilocalories per kilogram.

In addition to calories burned, Lyerly and Martel looked at the heart rates of the golfers and found that these fell into the light to moderate exercise range: Individual heart rates increased to an equivalent of 42.5% of age-predicted maximal heart rate for cart riders and 52.3% for walkers.

Says Lyerly, "We are predicting based on the 2008 Activity Guidelines that with the amount of minutes and the amount of

The Physical Education Futurist



Steve Jefferies

Steve Jefferies is a name long familiar to physical education teacher education (PETE) faculty and public school teachers. His website www. pelinks4u.org (now in its 13th year) is a monthly source of commentary

and links to news and information about physical education. With a list serve of 30,000 plus, his columns and those of his many contributors have helped unite professionals who have a common interest and investment in physical education.

When he became NASPE president in 2010, Jefferies wanted to have an impact on the field but wasn't certain where his energies should be directed. After a bit of soul searching and reflecting on his 26 years of experience as a PETE professor at Central Washington University, he realized how little those in the field have thought and planned for the future. A lot of questions crossed his mind, among them: What are we doing in public school physical educa-

tion today, and why are we doing it? If we hadn't inherited the format and methods we use in physical education, what alternative forms might have developed?

Eventually Jefferies was brought to what might have been the most important question: What challenges lie in wait for physical education in the future and what should be our response to them?

The outgrowth was Project 2020, an effort he launched in 2009 that would eventually engage hundreds of people in thinking about what the future might bring and how the profession should respond. In August 2009 the NASPE board approved Jefferies' plan for Project 2020, and a few months later a website was up and running (www.aahperd. org/naspe/about/relatedLinks/pe2020). The site continues to solicit vision statements from physical education teachers, professors, and others regarding the challenges that will confront physical education in the next decade and how the profession should respond. A year and a half after laying the groundwork, a forum was convened at the annual AAHPERD convention. Over 200 people came to offer their visions of the

future and their implications for physical education. Vision statements were synthesized and used in compiling a report titled *National Initiatives Proposal*, which is available on the pe2020 website. The report identifies emerging issues such as pedagogical-technological developments, the importance of collaborating with community programs, the possibility of engineering drastic reforms in teacher education, and the need to develop a national curriculum to ensure consistency across school programs.

Jefferies believes that the vitality of public school physical education—and perhaps its existence—will depend to a large extent on how teachers and professors adjust to critical social, technological, and political developments. And, while he remains confident that such adjustments can be made, he is adamant that more needs to be done. Further discussions are planned for the AAHPERD convention in Boston.

—SJH

EDITORIALLY SPEAKING

The Perils of Front-Porch Athletics

Shirl Hoffman, Editor of Kinesiology Today



Shirl Hoffman

The disgrace that has swallowed up Penn State, coupled with one of the most scandalous years in college sports (UNC Chapel Hill, Ohio State University, USC, Oregon, to cite just a few) prompted the

Chronicle of Higher Education to lead its December 16 edition with this stark headline: "What the Hell has Happened to College Sports?" The litany of ethical catastrophes has reminded us once again of the incalculable risks taken by schools that allow their athletic programs to shape their public images. Branding schools with the aura of their athletic programs may seem like a good idea when its teams are winning, donations and admission applications are on the rise, and coaches and players are on their best behavior. But when athletic programs become morally derailed, all too often institutional images become hostage to the not always honorable workings of the athletic culture.

Even worse, media-driven athletic programs have a way of relocating the academic accomplishments of institutions to the cheap seats, at least in the eyes of avid team supporters. Who can blame fans who visit the campus only on Saturday afternoons for being confused by administrations' grandiloquent pronouncements about their commitment to academic excellence on one hand, and the mega-stadiums, megasalaries, wink-and-nod admission practices. and tutoring enterprises skewed to athletic department interests on the other? Nobel prizes, NIH grants, lifesaving research, and other academic accomplishments may be admired by the few, but for the masses, big-time universities are about sports.

In a sense, then, maybe commentators shouldn't have been surprised that students rioted in State College, Pennsylvania, when the late Joe Paterno was fired or that, according to a poll, 43% of Pennsylvania voters disagreed with his firing while 75% of them agreed with the decision to fire President Graham Spainer. Symbolic dispatches had been sent out for years telling them that Paterno was the "the heart and

soul of the school," the man who reporters from the *New York Times* claimed "made Penn State a prestigious national brand." To students' way of thinking, firing Paterno was an assault on the core mission of the institution. The president of the school was merely the president.

Obviously athletics can shower a lot of desirable attention on universities that can help it in many ways. But, as we have seen in recent weeks, it can also hurt them. NCAA president Mark Emmert likes to say that "athletics is the front porch of the university" as a way of pointing out that athletics (like a front porch) give a school curb appeal. Just as a well-designed porch invites visitors to the interior of a house, so athletics welcomes visitors to the interior of the university where they can explore its academic riches.

But the metaphor fails in three important ways: First, most who step onto this front porch never go inside. As a result, generations of people are able to recite the most arcane knowledge about a university's football or basketball team but are able to tell you virtually nothing about what goes

Practice of Yoga Relieves Fibromyalgia Symptoms

Siv Schwink, KT writer

Pain, stiffness, muscle weakness, poor balance, fatigue, poor sleep, depression, poor memory, anxiety—the most common fibromyalgia symptoms pose daily physical and mental challenges for millions of Americans, creating obstacles to normal living that the rest of us cannot see.

"It's invisible; that's what's so frustrating," says Kim D. Jones, PhD, RN, and member of the fibromyalgia research and treatment team at Oregon Health and Science University, housed in the schools of nursing and medicine.

To compound that frustration, drug therapies have proven only about 30% effective in relieving FM symptoms and 20% effective in improving function. But there is hope: Jones and her colleagues on the OHSU research team are finding other therapies to help in the management of FM.

In 2010, the research team published the promising findings of a pilot study that suggest daily practice of yoga could prove an important component of successful FM management plans. In the study, participants in an eight-week Yoga of Awareness program noted significant alleviation of FM

symptoms, improvements in function, and improved coping strategies.

The Yoga of Awareness program, developed by research team members James W. Carson, PhD, and Kimberly M. Carson, MPH, eRYT, emphasizes the full discipline of yoga, including physical postures (asana), meditation (dhyana), breathing exercises (pranayama), the study of pertinent topics (swadhyaya), and group discussion (satsanga). All exercises were modified for people with FM.

Participants in the study were divided into two groups. The first group was directly enrolled in the yoga program, while the second wait-listed group (the control) began the same yoga program after the first group was done. All 53 participants were female (women make up 80 to 90% of all FM patients), with a mean age of 53.7 years, and an average time since diagnosis of 11.6 years. All were required to have maintained a stable regimen of treatment (drug or nonpharmacological therapy) for the management of their FM for at least three months before the study.

While enrolled in the yoga program, par-



Kim D. Jones, PhD, RN, and member of the Fibromyalgia Research and Treatment Team at Oregon Health and Science University

ticipants attended a weekly 2-hour session and were encouraged to practice yoga for an additional 20 to 40 minutes per day at home, using a specially produced DVD featuring FM patients.

Each weekly session included about 40 minutes of gentle stretching poses modified for FM, 25 minutes of meditation, 10 minutes of breathing techniques, 20 minutes of instruction applying yogic principles for optimal coping, and 25 minutes of group discussion.

Jones says the data from the study

And a Little Child Shall Lead Them

new fitness guru has made a splash in recent months, touring the country to lead exercise groups composed of young people, some as young as 6 years. He is a bit young himself for this sort of thing. Ten-year-old C.J. Senter, armed with a passion for exercise and a series of workout videos, has become a minor celebrity of fitness. He became hooked on calisthenics while playing Pee Wee football at the age of 5 and, without any prodding from his parents, has continued ever since. His missionary zeal for getting his peers off the couch and into the gymnasium, coupled with an extraordinarily well-developed musculature, has caught the attention of mainline media who have featured him in national telecasts. In an interview with ABC's Nightline he sounded impressively mature, telling reporters, "I just want to get my message out to kids so they can get on their feet and have fun and learn new exercises." He and his parents are outspoken critics of weightlifting for youngsters. He has developed his impressive frame

by doing nothing more than calisthenics. Pediatricians have cautioned parents about exerting too much pressure on kids to excel in physical activity, noting the increase in overuse injuries in youngsters they are treating. C.J.'s parents would agree. His father told CBN news, "The only thing I push C.J. into doing is going to school, making great grades, and respecting others and treating them the way that he'd want to be treated."



10 year-old fitness guru C.J. Senter

See videos at

http://abcnews.go.com/Health/10-year-fitness-guru-complete-pack-teaches-kids/story?id=14708131

www.cbn.com/cbnnews/ healthscience/2011/October/Workout-Kid-Motivates-Young-People-to-Exercise

-SJH

Survey of Provosts Offers Interesting Insights Into Their Perspectives on Higher Education

t seems that anytime academics have a chance to commiserate, talk inevitably turns to the perennial topics of accreditation, academic rigor, teaching loads, students' unwillingness to study, and plagiarism. Now provosts and chief academic officers have chimed in on these and many other topics via a new survey sponsored by the *Chronicle of Higher Education*. Here is sample of the results:

- 1. Only 66% of officers at all levels of higher education believe their institution offers high-quality undergraduate education. (Only 51% of provosts at public doctoral institutions believe this.)
- Only 50% of academic officers rank making sure that academic programs prepare students for jobs as very important.
- 3. Overall, less than 40% believe their institution does a good job of assessing student outcomes. (Surprisingly, only 30% of provosts at private baccalaureate institutions believe this.)

- 4. Only 16% of academic officers believe that academic rigor has fallen at their institutions, while 72% believe it poses significant problems elsewhere. Nearly 38% believe that academic rigor is difficult to maintain because of a desire to keep students happy. That number rises to 46% and 48% among provosts at private master's and baccalaureate institutions
- 5. An overwhelming number (83%) believe that students don't spend enough time studying; 66% believe that students shy away from courses deemed to be difficult, and 67% believe that cheating and plagiarism are on the rise.
- 6. Given an opportunity (and with cooperation with key decision makers on campus), 56% say they would dismiss underperforming tenured faculty; 48% said they would cut underperforming academic programs.

7. On the matter of accreditation, 69% said that regional accreditation significantly contributes to the quality of academic programs; an even larger percentage (76%) said that specialized accreditation does this

Read entire report at Inside Higher Education: www.insidehighered.com/news/survey.

Women and STEM: Breakdowns in Undergraduate Education

new survey sponsored by Bayer (Why **≺**Aren't More Women Graduating With STEM Degrees?) asked 413 STEM (science, technology, engineering, mathematics) department chairs at the top 200 research universities in America that question. Eightytwo percent indicated that they believe American women entering college are the best prepared to graduate with a STEM degree, yet 8 in 10 reported disproportionately fewer women and minorities in both introductory (77% of respondents) and upper-level or major-level (83%) STEM courses. Fifty-nine percent believed that discouragement of STEM careers for women is an important issue, and an overwhelming 84% believed the issue important to their institution's chancellor or president. And 7 in 10 said the issue has reached a point where it needs to be addressed by the highest institutional leadership, including trustees and regents, presidents, provosts, deans, and department chairs. More than a third gave their schools a grade of C or below for retaining and graduating underrepresented minorities.

Dr. Mae C. Jemison, astronaut, medical doctor, chemical engineer, and Bayer's longtime Making Science Make Sense spokesperson sounded the alarm:

"By department chairs' own account, female students arrive at college the best prepared academically for STEM degree success, but graduate at lower rates than their male counterparts. And while half the chairs considered underrepresented minorities (URMs) least prepared, they acknowledged that even minority students well prepared academically for STEM success graduated at lower rates. So clearly there is something about the interaction and engagement of women and URM students at colleges themselves that affects the students adversely—whether it is courses that disproportionately weed out students. too few female professors, or discouraging those who are not the stereotype of a successful STEM student."

Often cited as a contributing factor are the rigorous introductory courses designed specifically to weed out students with limited potential. Asked if these courses were generally harmful to women, 27% said yes. And 57% thought them harmful to URMs. Nevertheless, a majority (57%) did not see a need to significantly change their introductory instructional methods in order to retain more STEM students; 87% of respondents were male; 87% were Caucasian.

Source: U.S. female students enter college most prepared for STEM studies, according to survey at America's top research universities in a new Bayer study. December 7, 2011. www.bayerus.com.

Short Shots

Children Shouldn't Participate in Boxing

In what some might view as the ultimate "duh" statement of the century, the American Academy of Pediatrics—after a careful review of the literature—declared boxing inappropriate for children. Citing the vulnerability of children's brains, the longer time for their brains to heal, and possible memory impairment from repeated head traumas, the group published a statement in a recent issue of Pediatrics. Laura Purcell, a pediatric sports medicine physician at McMaster University in Hamilton, Ontario, and lead author of the report, told My Health News Daily, "We needed to take a strong stand against boxing in youth athletes because of the risk of head injuries...Not only are children more susceptible to concussions, but repeated concussions also present the theoretical risk of a fatal condition called second impact syndrome." The National Electronic Injury Surveillance System contains reports of 1,263 boxing-related injuries in children and adolescents aged 5 to 14 years and 8,082 in adolescents and adults aged 15 to 24 years in 2007. While support from prestigious professional groups is to be applauded, one wonders if we really

need any more data to convince us that the deliberate pounding of heads is likely to cause some brain damage—in adults as well as in children.

The formal statement reads as follows:

The American Academy of Pediatrics and the Canadian Paediatric Society recommend that pediatricians

- vigorously oppose boxing for any child or adolescent;
- educate patients who may be engaged in or considering engaging in boxing, as well as parents, caregivers, teachers, and coaches, regarding the medical risks of boxing;
- encourage young athletes to participate in alternative sports in which intentional blows to the head are not central to the sport, such as swimming, tennis, basketball, and volleyball; and
- 4. advocate that boxing organizations ensure that appropriate medical care is provided for children and adolescents who choose to participate in boxing, ideally including medical coverage at events, preparticipation medical examinations, and regular neurocognitive testing and ophthalmologic examinations

Statement can be accessed at Pediatrics (2011) Pediatrics, 128 (3), 617-62.

Ominous Clouds Continue to Hang Over Physical Education

The school board in Bellingham, Washington was sued by parents in 2010 for not offering enough PE taught by certified teachers. Apparently the district has resolved the dispute without going to court by adding a specialist for children in kindergarten through second grade. The Franklin Pierce school district in Tacoma cut its budget by \$350,000 after it faced a \$4.8 million budget shortfall last year, resulting in the reassignment of physical education teachers to other subjects. Seven physical education positions were eliminated. To make up the shortfall, the district signed a \$100,000 contract with the local YMCA to offer classes to students. The district savs that the YMCA personnel "coach," not "teach," and that they provide "structured physical activity," not physical education. A district spokesperson told the McClatchy Newspapers that the transition has been functioning well but is not ideal. "We would love to have the money to fund our PE specialists and the many other positions which have been lost over the past five years," he said. "But we are also faced with living in the new normal."

In the current issue of "The Views," the school district's newsletter, Superintendent Frank Hewins points to the YMCA arrangement as a "positive." The issue features snapshots of "students receiving physical activity at the elementary schools, 'coached' by YMCA staff."

Short Shots

Gym Musings

Jason Gay of the *Wall Street Journal* offers some homespun philosophy for people vowing to start the year with a renewed commitment to visit their local gyms. Here are a few:

- A gym is not designed to make you feel instantly better about yourself. If a gym wanted to make you feel good about yourself, it would be a bar.
- No one in the history of gyms has ever lost a pound while reading the New Yorker while slowly pedaling a recumbent bicycle. No one.
- Gyms have two types of members: members who wipe down the machines after using them, and the worst people in the universe.
- You can take 10-Minute Abs, 20-Minute Abs, and 30-Minute Abs. There is also Stop Eating Pizza and Sheet Cake Abs—but that's super tough!
- Fact: Thinking about going to the gym burns between 0 and 0 calories.

Source: Gray, J. (2012) The 27 Rules of Conquering the Gym. *Wall Street Journal*, January 5.

Leg Fatigue in Heart Failure Should Be Treated With Warm-Up Exercise

Researchers at the University of Leeds have discovered a link between leg muscle fatigue and heart failure. The study, reported in the Journal of Applied Physiology, found that patients with the most severe symptoms of heart failure face problems not only from the heart but from dysfunction in the legs themselves. Using a near-infrared laser to measure oxygenation of the leg muscles, they were able to determine that warm-up exercises led to increased activity of skeletal muscle enzymes but the adaptation was less pronounced in patients with the most severe symptoms of heart failure. D. Harry Rossiter of the faculty of biological sciences told Science Daily, "Many chronic heart failure patients complain of leg fatigue during exercise, and this can prevent them from being active. Our study shows that by warming up properly, patients can improve the oxygenation and performance of their leg muscles, which is beneficial in promoting exercise tolerance."

Source: Science Daily, Oct. 31, 2011; Bowen, T.S., et al. (2011). The intramuscular contribution to the slow oxygen uptake kinetics during exercise in chronic heart failure is related to the severity of the condition. *Journal of Applied Physiology*, October 27 (ahead of print).

You're Not Tired; It's Only in Your Head

That coaching adage may have some basis after all, at least so say researchers from the University of Zurich who believe that the brain may have a final say over whether you continue to engage in a tiring performance. In a series of experiments reported in the European Journal of Neuroscience, Kai Lutz and colleagues found that nerve impulses from the muscle have an inhibitory effect on the motor regions of the brain during intense, quadricepscontracting exercise. However, when the spinal cord was anesthetized, cutting off the inputs from nerves, this inhibition was reduced. In follow-up studies they have been able to locate a region of the brain (the insular cortex) that appears to mediate motoric activity when muscles are fatigued. Increases in fatigue from maximum exertions on a bicycle ergometer

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led to increased communication between the insular cortex, and the primary motor area of the brain increased.

Source: Hilty, L. (2011) Fatigue-induced increase in intracortical communication between mid/anterior insular and motor cortex during cycling exercise. European *Journal of Neuroscience*, 34(12), 2035-2042.

Children's Play Mimics Scientific Method

Scientists have discovered that children (mean age = 54 months), when presented with problems in a play context, behave very much like scientists, suggesting that they adopt quasi-scientific models to learn about their world. Researchers at MIT and Stanford University gave 60 four- to fivevear-olds a toy that played music when certain beads were placed on it. The children were assigned to two groups—one was shown that four different beads would activate the toy, while the other group was simply told, "Some (beads) make the machine go, and some don't make the machine go." Some of the beads allotted to the group given ambiguous information were locked into pairs. How the children dealt with the inseparable beads was what attracted the investigators' attention. The toy accepted the beads only when placed in a horizontal pattern, but the children in the ambiguous group turned the beads in a vertical direction to test them. Much like a scientist, the children tried to test each bead independently, whether they were locked in a pair or not. By contrast, children given unambiguous information played indiscriminately and rarely looked for candidate causes. The researchers conclude, "These results suggest that preschoolers distinguish not only ambiguous and unambiguous evidence but also potentially informative and uninformative interventions. In cases where there was information to be gained, preschoolers spontaneously selected and designed actions to effectively isolate the relevant variables. Critically, the target experiments were not otherwise part of children's exploratory repertoire; children almost never performed them given unambiguous evidence."

Source: Cook, C., et al. (2011). Where science starts: Spontaneous experiments in preschoolers' exploratory play. *Cognition* 120, 341-349.

Hold That Ice Pack

Athletic trainers who use topical cooling to treat minor injuries on the sidelines before sending players back into the game may want to rethink the practice. In the Australian journal Sports Medicine, an exhaustive review by two independent reviewers of the literature on the topic suggested that immediately after cooling (beyond 20 minutes), performance in strength, speed, power, and agility-based running tasks decreases. There was some evidence that these decreases could be prevented by a short warm-up period. Some studies have also reported decreases in upper-limb dexterity and accuracy. While acknowledging that some of the decreases in performance measures were small, the investigators concluded that athletes "will probably be at a performance disadvantage if they return to activity immediately after cooling," and advise trainers to allow athletes to warm up before reentering the game.

Source: Bleakley, C.M., et al. (2011). Should athletes return to sport after applying ice? A systematic review of the effect of local cooling on functional performance. *Sports Medicine* 42 (1), 69-87.

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Cheering Your Heart Out

With March Madness approaching, it might be a good time to visit your cardiologist to check whether your heart can withstand the excitement. Research published last year in Clinical Cardiology suggests that fandom may precipitate heart-related deaths. Last year, scientists led by Robert Kloner of the Heart Institute at Good Samaritan Hospital and the University of Southern California examined death certificates for the months of January and February from 1980 to 1988, including the days before and after the Super Bowl. After the Los Angeles Rams' loss to the Pittsburgh Steelers in the 1980 Super Bowl there were 27% more heart-related deaths among women and 15% more among men than there were in years when the Rams weren't playing in the Super Bowl. But when the Los Angeles Raiders defeated the Washington Redskins in the 1984 Super Bowl, the rate of cardiac deaths decreased.

Kloner points out that risk probably rises with how intensely fans relate to their team as well as to the excitement created by the game itself. When the Rams lost in the 1980 Super Bowl, the game was very close

and it was played in Pasadena before a devoted fan base since the team had been located in L.A. for years. By contrast, the Raiders were still new to the L.A. area, having relocated from Oakland just two years before the Super Bowl game. In addition, the game was not a nail-biter and it was played on the East Coast, all of which may have led to less emotional investment in the game by fans.

Source: Kloner, R.A., et al. (2011). Role of age, sex, and race on cardiac and total mortality associated with Super Bowl wins and losses. *Clinical Cardiology*, 34 (2), 102-107.

Parents' Physical Inactivity Influences Their Children but Physical Activity Levels Have Little Effect

A recent study from the department of exercise, nutrition and health sciences at the University of Bristol has found that parents' longer TV viewing time was associated with an increased risk of longer viewing time for boys and girls. If parents watched 2 to 4 hours of TV each day, their daughters were 3.67 times and their sons

10.47 times more likely to watch more than 4 hours per day. Interestingly, no associations were found between the time parents spend engaged in physical activity and the time of engagement for their children.

Source: ScienceDaily, May 25, 2010. www.sciencedaily.com/releases/2010/05/100525094910. httm

Heart Incidents for Marathoners on Rise but Still Low Risk

A report in the January 12, 2012, issue of the *New England Journal of Medicine* on the incidence and outcomes of cardiac arrest associated with marathon and half-marathon races in the United States revealed that 59 of roughly 10.9 million marathon and half-marathon runners experienced cardiac arrest between January 1, 2000, and May 31, 2010, an incidence rate of 0.54 per 100,000 runners. Mean age of the runners was 42.

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Cardiac arrests were more likely to occur during marathons (1.01 per 100,000) than half marathons (0.27 per 100,000) and were more common among men (0.90 per 100,000) than women (0.16 per 100,000). The incident rate for male marathon runners during 2000-2004 (0.71 per 100,000) climbed to 2.03 per 100,000 during the period 2005-2010, probably because more runners were participating in marathons. Of the 59 instances of cardiac arrest, 42 were fatal. Complete clinical data were available for 31 cases, which revealed that bystander initiation of CPR and an underlying diagnosis other than hypertrophic cardiomyopathy were the strongest predictors of survival.

Aaron Baggish, lead author of the report, told reporters that he believes the increase in cardiac deaths among males may be caused by a shift in attitudes about who can run long-distance races. A decade ago, marathons were considered appropriate only for very athletic people, but now marathons are thought of as something within anyone's reach, which might be attracting people with family histories of heart disease. Most of the victims, says Baggish, had preexisting conditions that

should have kept them from running such distances.

Source: www.nejm.org/doi/pdf/10.1056/NEJMoa1106468.

Obesity Levels Decline in New York City K-8 Students

As floods of data documenting the prevalence of overweight and obese children wash over us, it is encouraging to learn of incidences where the tide has been stemmed if not decidedly reversed. A report in the Journal of the American Medical Association based on data on children in grades K-8 enrolled in New York City public schools offers hope. The study, conducted by the New York City Department of Health and Mental Hygiene, found that the prevalence of obesity in grades K-8 decreased 5.47% (from 21.9% in 2006-2007 to 20.7% in 2010-2011). Decreases were spread across all age groups and all socioeconomic and racial and ethnic backgrounds, although the decrease was smaller among black children (1.9%) and Hispanic children (3.4%) than among

Asian/Pacific Islander (7.6%) and white (12.5%) children.

Theauthors of the study cautiously suggest that a policy initiated in 2005 by NYC Public Schools that requires annual measurements of BMI of public school students in grades K-12 and dissemination of results to parents as part of an overall fitness program may be at least partially responsible. The authors conclude, "Because of the nature of this analysis, a causal relationship cannot be inferred between the BMI and fitness interventions implemented by New York City in schools and the decrease in prevalence of child obesity described in this report. Nevertheless, the trend toward reduced prevalence of obesity is encouraging."

Source: Berger, M., et al. (2012). *Journal of American Medical Association*, January 25, 307 (4), 335-421.

Fighting Over the Fighting Sioux

College mascots have always stoked a great deal of passion in fans, and sometimes controversy. In Grand Forks, North Dakota, they are fighting about the Fighting Sioux

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logo, long a symbol for athletic programs at the University of North Dakota, whose hockey team has won seven NCAA national championships. In 2005 UND sued the NCAA after the organization threatened to cut off the school's access to lucrative postseason play unless it ditched the logo—a headshot of an Indian warrior designed by an American Indian alumnus. The settlement in the case allowed UND to keep the logo if both the Spirit Lake tribe (closest to the university) and the Standing Rock tribe, another reservation in the state, approved. Spirit Lake put the matter to a vote of its tribe and, by a 2-1 margin, it supported allowing UND to continue to use the mascot. Standing Rock's tribal council, which did not put the question to a full tribal vote, voted to eliminate the name. The school has yet to select another mascot while the fight continues. Spirit Lake and 1,000 members of Standing Rock recently filed a federal lawsuit against the NCAA, claiming violation of religious rights. Stay tuned.

Source: Time Magazine, January 23, 2012.

"Physical Education Teachers Are Not Smart"

Those aren't our words but the title of a blog by Razib Khan, a science writer for Discover Magazine. In a piece that has sparked a heap of scornful comments, Khan points to a dated 2007 report published by the Educational Testing Service that shows below-average verbal and math SAT scores for students majoring in education. The two lowest-scoring certification areas (compared to other certification areas) were special education and physical education. The authors of the report pointed to "the relatively weak SAT scores and GPAs of those who seek elementary, physical, or special education certifications. Although the SAT scores and grades of these groups also improved during the last eight years, their SAT scores still lag behind those of other college graduates." In an unjustifiable and breathless extrapolation of these data. Khan concludes that "there's a sharp discontinuity between two groups of teachers here. Physical and special education instructors, as well as elementary school teachers, are less intelligent than the average college graduate." A

torrent of comments followed—most of them critical of Khan's article, but some reflecting disparagingly on their own physical education experiences—this one, from "JunJay"stood out:

Razib,

"As a PE teacher with a BA in Philsophy and a MA in Physical Education, I would have to classify you as smarter then 99% of the population for the simple fact that you call us PE teachers and not Gym teachers."

Read blog at Discover Magazine: http://blogs.discovermagazine.com/gnxp/2012/01/physical-education-teachers-are-not-smart

Teacher quality in a changing policy landscape: Improvements in the teacher pool. www.ets.org/ Media/Education Topics/pdf/TQ full report.pdf

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Practice of Yoga Relieves Fibromyalgia ...

revealed significant improvements for the group engaged in daily yoga. Specifically, self-reported measurements of pain, fatigue, and emotional distress decreased by about 20% of baseline, while relaxation increased by a similar degree.

What's more, the team found a direct correlation between individual improvements in FM symptoms and the length of time spent practicing yoga, says Jones. Not surprisingly, maintaining the discipline of daily practice is critical to maintaining the benefits:

"Three months after the study ended, home practice slacked off a little bit. During the study, participants averaged 40 minutes per day. This dropped to 31 minutes at the three-month mark," says Jones. "We are going to look at novel ways to promote adherence so patients can maintain those gains."

A larger follow-up study is planned. Jones says the research team has a grant application currently under review by the National Institutes of Health to fund a Yoga of Awareness study on a much larger sample of people with FM. She says this study would attempt to correlate which particular portions of yogic practice would best alleviate specific FM symptoms; the proposed study would additionally focus on sleep

and weight problems with FM.

Jones says the research team has a separate grant application under review to fund yet another study that would test whether couples would benefit from enrollment in the yoga program, where one partner has FM and the other does not: "We did a study with couples who suffer from FM, and we found that in couples where one spouse doesn't have FM, when that spouse accurately rates the pain and fatigue of the spouse with FM, there is generally higher marital satisfaction, better congruence, and better decisions centering on health care. Anything that can get a couple on the same page is going to be a benefit."

In the meantime, the research team has kept busy investigating the potential benefits of tai chi for FM patients. Jones says this newly completed study, funded with a grant from the National Institutes of Health, produced results similar to those for the yoga pilot study. The study enrolled 98 participants who attended a tai chi class for 90 minutes twice a week over a 12-week period; participants also attended a fibromyalgia education class for the same amount of time.

Jones says the team's findings on tai chi for FM patients build on those of Chenchen Wang and colleagues, with more focus



on balance, multitasking, and laboratorybased functional mobility testing. A paper on this completed tai chi study is due to be published in the upcoming months in the *Journal of Rheumatology*.

Jones says the team's future studies look at the benefits of tai chi for men with FM who have been to war and who may additionally have suffered head traumas or have PTSD.

[The yoga pilot study was published in the August 2010 edition of *Pain*. It was funded by a grant from the Oregon Health and Science University Medical Research Foundation; additional resources for the study were supplied by the Fibromyalgia Information Foundation. Authors of the study are James W. Carson, PhD; Kimberly M. Carson, MPH, eRYT; Kim D. Jones, PhD, RN; Robert M. Bennett, MD; Cheryl L. Wright, PhD, RN; and Scott D. Mist, PhD.]

Continued from page 1

Sport Goes to Church

All Major League Baseball teams welcome Baseball Chapel, Inc. into their locker rooms each Sunday morning to lead services for players. Many who minister to teams do so as chaplains. Recognizing how easily moral compasses can become skewed in a fiercely competitive and glitzy profession, some NFL coaches view chaplains as part of the support team, often supplying them with tickets to games and providing them with offices in the team complex.

But these sport ministries focus on a much bigger picture than big-time sports. Church athletic leagues were first formed over a century ago, but in recent decades, churches—and especially megachurches—have taken the idea to a new level, building sport and fitness complexes that rival many small liberal arts colleges and hiring professionally trained staff to oversee activities.

The Cecil B. Day Sport and Fitness Center at Dunwoody Baptist Church in Atlanta, for example, enrolls as many as 500 kids in its soccer league, 250 in its basketball program, and 1,000 in its summer sport and activity camps. The Second Baptist Church in Houston sponsors 64 softball teams, 48 basketball teams, 6 bowling lanes, and a first-rate fitness center overseen by a team of professionals. Last year Upward Sports, a nationwide Christian youth league, enrolled

more than 550,000 elementary school children in its basketball, flag football, soccer, and cheerleading experiences.

In many cases, co-opting sport is a logical outgrowth of the desire of churches to relate more directly to their local communities; they see sport programs as a way of fostering this relationship. "The church is learning that they need to meet people in their communities," says Steve Conner of Sports Outreach International. "There are few genuine relationships anymore. Sport can be used to engage parishioners and also the non-churched by providing an activity in a safe environment where all can thrive physically, socially, and emotionally." Adds Ron Rainwater, a professor of sport ministry at Hardin-Simmons, "I don't know that there is anything more visibly powerful than bringing people together through sports. It automatically builds community, and if you can infuse that with a message, it becomes more powerful."

As the demand for religious professionals trained to serve the athletic and broader community has grown, so have undergraduate and graduate programs for preparing them, some of them anchored in kinesiology departments. At Hardin-Simmons University's two-year-old sport ministry graduate program, ethics are blended into life lessons taught through sport.



John White, director of chaplaincy and sport ministry program at Baylor University (photo courtesy of Baylor University)

"Every second, athletes have an opportunity to make decisions, and they are often ethical decisions," says Dr. Bob Moore, director of the kinesiology, sport, and recreation program at HSU. "Even students who go on to jobs in the secular areas of sport and recreation will have a strong ethical base to guide them when interacting with others, making ethical decisions, and coaching young athletes through their development."

The recently founded chaplaincy and ministry program at Baylor University housed in the George W. Truett Theological Seminary will offer its first full load of courses in the fall

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Sport Goes to Church

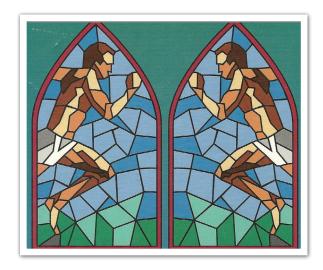
of 2012. The fledgling program is directed by Dr. John White, a sports enthusiast who spent 16 years working with AIA before earning his PhD in theology at the University of Edinburgh. White has given much thought to the ethics of sports: "All through the program we're thinking about sports historically, theologically, and culturally." The program also teaches students a holistic approach of ministering to a person's mind, body, and spirit through sport and physical activity. "There are certain values, whether you are Christian or not, that people know are important," White says. "These are the values that need to be integrated into our sport programs through athletes, coaches, and administrators."

Sport ministries owe their recent resurgence in part to the apparent failure of sport to bolster the character of athletes. While some sport sociologists point out how difficult it is to evaluate the character-building effects of sport, Peter Walters, president of the Christian Society for Kinesiology and Leisure Studies (CSKLS), believes ethical guidance is necessary. "If sports alone improved character, professional athletes would be the most outstanding people on earth, because of their years spent in athletic training and competition," he says. "But through athletic programs designed intentionally to teach character, kids can be taught such life les-

sons as how to win and lose through grace, how to continue to persevere and never give up and have respect for others on your team and competing against you." White says that Baylor University would like to eventually offer continuing education workshops and symposiums for sport professionals that might be struggling with ethical issues and need more guidance in handling these situations.

Many sport ministry programs have an international outreach through missionary and service organizations. The International Sports Coalition is a network of organizations that facilitate sport ministry around the world. Conner tells of an ISC project involving Ethiopian pastors who went into an area of Ethiopia known as a garbage town. "These are the poorest people of a poor country and the area is ruled by gangs," Conner says. "The gang members had a weight room where they worked out and gathered. The pastors began by just working out in the weight room with the gang members. Eventually, they not only converted a few of the gang members to Christianity, but they helped in the conversion of a house of prostitution into a church and a drug house into offices for their thriving sport ministry program."

Conner also says that more and more Christian college sport teams in the United States are being encouraged to take service



trips to underdeveloped countries during their spring break, not only as a service to others but also a team-building exercise. "When your team is down in the fourth quarter, who do you want in there, a team that has relaxed on the beach together or a team that has dug latrines in South Africa alongside each other?" asks Conner.

Academia, churches, and athletes are finding that there are many ways that sport and faith can blend in education and life. Through these new avenues of study and thought, leaders are striving to create a more ethical generation of students. These future leaders will be prepared to tackle the complexity of sport and competition while also being a positive influence in the culture-shaping arena of sport so that it can continue to flourish.

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Charting the Course: The Road Ahead for ...

past kinesiology administrators to meet to discuss issues related to administration in the field. The 2012 workshop theme was What's in a Name? Branding Kinesiology at Our Institutions. Approximately 60 faculty and administrators from a variety of institutions came together for a series of discussions focused on the way that kinesiology programs advertise, or "brand," our major. During the January 2012 board meeting, a decision was made to select Diversity Issues and Challenges for Kinesiology Programs as the theme for the next AKA workshop that will be held in Orlando, Florida, in January 2013.

The research and analysis committee is charged with conducting surveys for the AKA on topics related to kinesiology. A biannual survey of kinesiology departments is conducted to generate comparative data on topics such as faculty and GA salaries, number of majors, number and types of degrees offered, and faculty size and educational background. This information is circulated to AKA member departments and is extremely useful for comparative purposes during strategic planning and budget exercises. In addition, the committee also conducts occasional ad hoc surveys on topics of current inter-

est to kinesiology programs. At the 2012 meeting, a decision was made to collect data for the next edition of the biannual survey in 2012.

The AKA communications committee is the group responsible for the oversight of the AKA communication strategy. This group oversees the AKA website, e-mail communications, and the AKA social networks. They also work collaboratively with the communication committee to help to develop and deliver recruitment and promotional materials to kinesiology departments around the country. During the past 6 months, the AKA conducted its first webinar that discussed career opportunities for kinesiology students. In the January BOD meeting, the AKA made a commitment to develop and disseminate more webinars, and the communications committee agreed to oversee this important outreach effort of the association.

The **publications committee** oversees the publications of the AKA. In the January 2012 AKA board meeting it was decided that this committee would assume responsibility for the oversight of the AKA's electronic newsletter *Kinesiology Today*. In addition, the committee will also provide advice and assistance to the editorial board of

Kinesiology Reviews, a new journal that is published jointly by the National Academy of Kinesiology and the American Kinesiology Association.

In addition to these five standing committees, the AKA board has decided to develop a new **awards committee** that will be charged with providing oversight for the AKA National Scholar Awards. The AKA scholar awards honor a select number of students from member departments, recommended by department faculty, whose academic and leadership records are distinctive. The awards are intended to recognize and promote academic excellence, to further the professional competence and dedication of academically accomplished students, and to promote kinesiology and its related fields.

As you can see, AKA committees are engaged in moving academic kinesiology forward in a wide variety of ways. We are always interested in recruiting additional colleagues to assist us with these efforts. Faculty members from AKA member departments interested in serving on AKA committees are strongly encouraged to contact Amelia Lee, AKA executive director, at amlee@lsu.edu.

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Charting the Course: The Road Ahead for ...

AKA Partnerships and Collaborations: Working With Others to Advance the Field of Kinesiology

In addition to the work of the AKA committees described previously, the AKA also participates in collaborative ventures and partnerships with national and international organizations that share a common goal in advancing the field of kinesiology. The AKA recently entered into a partnership with the American College of Sports Medicine (AC SM) and the National Academy of Kinesiology (NAK) to develop a national initiative titled Physical Activity Promoting Colleges and Universities. Our goal is to promote physical activity and healthy lifestyles for faculty, staff, students, and community members on college and university campuses around the country. The AKA has also partnered with several other groups to participate in a national conference in 2013 about the future of kinesiology. This conference will be organized by the National Association for Kinesiology in Higher Education (NAKHE) and includes a variety of national and international partners.

Finally, in our 2012 board meeting, the AKA committed to a major effort to disseminate additional information about the undergraduate core curriculum. In 2009 an

AKA workshop identified the following four curricular elements that all undergraduate degrees in kinesiology should include:

- 1. Physical activity in health, wellness, and quality of life
- 2. Scientific foundations of physical activity
- 3. Cultural, historical, and philosophical dimensions of physical activity
- 4. The practice of physical activity

The AKA does not believe that these elements need to be operationalized identically across all academic departments. Rather, we believe it is preferable that local departments be encouraged to articulate for themselves how to include the core elements in their own curriculum. Over the next 12 months, the AKA will be collecting and disseminating examples of how various departments around the country have defined the core elements of our discipline.

As you can see, the AKA is on the move. With the assistance and encouragement of our executive director, Amelia Lee, and the hard work of our board of directors and committee members, the AKA is helping departments around the country make a difference. There has never been a more exciting time to be involved in the field of

kinesiology. As president of the association, I invite all of you to consider getting involved with AKA on behalf of your departments and universities. Please let me know of your interest by e-mailing me at wojtek@illinois.edu.

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Sport Problems Gussy Up a Dismal Science

But baseball isn't the only sport that statisticians have turned to in their search for relevance. Paul Kvam and Joel Sokol, on the faculty at the School of Industrial and Systems Engineering at Georgia Tech, point out that Current Index to Statistics (CIS) cites 230 sport-related articles that appeared in statistics journals from 1960 to 2002.

Not all mathematics faculty members have welcomed these ventures into the sport world. In some cases, steering courses through the curriculum approval process has been a chore. David C. Carothers. chairman of the math and statistics departments at James Madison University, recently told the New York Times that some faculty had reservations about the use of baseball in a new introductory course. But, he says, "They hadn't thought about it very much, and hadn't been exposed to the wide range of hard-core things they could do." Gabriel Costa told the Times, "There's sports law and sports medicine; why not sports mathematics? Fifty years ago, people weren't getting PhDs in kinesiology, either. Everything has its time and place. If this became a legitimate academic area, I'd be a happy man."

[Editor's note: Actually, the first physical education doctorate was granted at NYU in 1924, 87 years ago.]

—SJH

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The Perils of Front-Porch Athletics

on in its academic halls. For them the porch is the house.

Second, the metaphor implies that intercollegiate sports, like the porch of a house, previsions what is in the interior. But in the case of athletics the porch is of a vastly different architectural style than the main building; all too often it is a place where students learn to be followers, not leaders. a place where trip-wire emotional reflexes are valued over reflective thinking. Over 20 years ago, a seminal study on organizational loyalty by eminent sociologists Patricia and Peter Adler showed how a big-time basketball program engendered levels of loyalty in players. To their way of thinking, it was a loyalty seen only in the military or religious cults and developed by demanding players' unquestioned acceptance of orders and fostering a cult-like dependence on

coaches for food, lodging, and academic assistance. I cannot think of an ethic further removed from that which is honored in a university's interior.

Third, as we see each season, bad things can occur on your front porch, and when they do, the neighbors notice. Universities open themselves up to what can be harsh public investigations, usually by the same core of media that they wined and dined and invited into their press boxes on Saturday afternoons. Universities that cede their images to their athletic programs do so at their own peril. Maybe it's time they think about moving them to the back porch.

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To Your Health: The Sport of Golf

energy expenditure, we would expect the health benefits [of walking a 9-hole round of golf] to be almost identical: a drop in blood pressure, a drop in blood sugar, probable decreased risk of cardiovascular disease, and probable decreased cholesterol levels. That's what the literature shows with other exercise, so this should do the same."

The data show golf cart riders, on the other hand, expend about half the caloric energy of walkers on the same 9-hole round (357.63 ± 22.12 kcal for cart riders and 710.46 ± 44.11 kcal for walkers). But that could be good news, too. It means cart riders who golf an 18-hole round may receive the same benefits as 9-hole walkers, says Lyerly.

"That was one appealing aspect of the cart riding. If an individual cannot physically walk because of obesity or sedentary lifestyle or both—or their physical function may be so low that they really can't walk—they may be able to get into a cart and play. If they do that enough, maybe they could transition to walking. And in any case, as we saw with riding, they do burn a significant amount of calories. It is good to promote that some exercise is better than none," he says.

The results of the pilot study are promising but not definitive: "We are still determining

the duration and frequency of play required in order to yield health benefits," he says. "Right now we are looking at energy expenditure compared to the physical activity guidelines. Then we would look at whether it really does prevent disease. We would go a step further than calories and look at blood pressure and cholesterol. There may be something more to it—for example, 9 holes a week may not be enough. You may need that three times a week. It might not be the total time that counts."

Lyerly would also like to directly assess the benefits of playing 18-hole rounds once a week compared to more than once a week. "The goal is to see what's working and what's not. We do have a lot of people here, especially in the summertime, who feel like playing only 9 holes. If they are hot and tired, and we say you need to play 18 for health benefits, are they really receiving a benefit? Where is that rationale of saying, 'Well, it's good, but it's not doing that much for them.' We just don't know that right now."

Lyerly says future studies would look at the effects of playing golf on individuals who may have already suffered the physical consequences of an inactive lifestyle. No subjects included in the current pilot study had been diagnosed with any chronic disease. "We would like to start doing more with people who have chronic diseases. For example, with diabetes, we would look at how [playing golf] affects their disease. Or somebody who has a high risk for heart disease—does it lower blood pressure? Or does it have any effect on cholesterol levels?"

Future studies would also look at balance problems in the elderly with walking compared to riding, and more specifically at the question of whether golf could improve balance for people who do not already play. There could be potential for using the Wii golf game with a balance board, especially in nursing homes, in rehabilitation or physical therapy programs.

[Data obtained in this pilot study were presented at the Southeastern Chapter of the American College of Sports Medicine and at the 2011 ACSM national meeting. The pilot study was funded by a Coastal Carolina University Research Enhancement Grant.]

Conferences

Call for Papers and Participation

8th Annual International Conference on Kinesiology and Exercise Sciences June 25 to 28, 2012 Athens, Greece

This conference is organized by the Sports Research Unit of the Athens Institute for Education and Research (ATINER) in collaboration with the Panhellenic Association for Sports Economists and Managers (PASEM). For the program of the previous conferences, book publications based on the conference papers, and other information, visit the conference website at www.atiner.gr/fitness.htm.

2012 AAHPERD National Convention and Exposition

March 13 to 17 Boston, Massachusetts

Information at www.aahperd.org/whatwedo/convention.

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P.O. Box 5076 Champaign, IL USA 61825-5076 www.HumanKinetics.com