



On The Move

INTERNATIONAL INSTITUTE FOR SPORT AND HUMAN PERFORMANCE

A news brief

December 2002



Jan Broekhoff Wing of the Bowerman Building, home of the institute

Editor's Message

This is the first issue of a newly constituted newsletter provided to the friends and members of the International Institute for Sport and Human Performance. The newsletter will inform readers about continuing education events and opportunities for students and professionals in the allied health fields. It will also address the institute's ongoing services: its thesis and dissertation collection; the Athletic Training Service Center, a facility that provides treatment and care to the active individual; and other educational events designed to benefit the public.

Institute Background

The institute was established in 1983 in preparation for the 1984 Olympic Scientific Congress held at the University of Oregon. Under the auspices of the College

of Arts and Science, the institute, a nonprofit endeavor, collaborates with the Department of Exercise and Movement Science, and also works together with sections of Peace Health's Sacred Heart Medical Center and with area health and fitness facilities.

The institute is housed in the Jan Broekhoff wing of the Bowerman Building on the UO campus. The building was donated by the Bowerman Family Foundation in 1992 and named after legendary UO track coach Bill Bowerman.

An advisory Board of Directors meets twice a year to advise the institute and help support its objectives. The board consists of faculty members of the University of Oregon and other institutions, health and exercise professionals, and members from the business community.

PT Aide Workshop

Friday, February 21 and Saturday, February 22, 2003

Application deadline Feb. 7

The PT Aide course will provide introduction and early skill building to strengthen an individual's résumé prior to entering the PT aide job market. Specific to the State of Oregon, an individual needs 40 hours "on-the-job" training. This course is offered as an adjunct to, not in lieu, of the Oregon Administrative Rules method requirements. It covers many aspects of the training that would be given on the job.

The course will cover professional and medical ethics, the concept of patient confidentiality, basic body mechanics, universal precautions, and safety issues (gait belts, BP monitoring, general treatment protocols: hot/cold pack set up; ice massage; cervical/pelvic traction; ultrasound; paraffin bath; whirlpools; and other selected protocols).

The class is limited to 30 participants. Registration is open to students and the professional community on a space-available basis. Workshop fee is \$250. Students \$195, with valid student ID.

Applications must be received by Friday, February 7, 2003.



INSIDE

Editor's Message	1
PT Aide Workshop	1
ACSM Certifications	2
ATSC.....	3
Book Review	4
KinPubs and KinAbs	5
Upcoming Events	
Basic concepts in training	5
Senior fitness workshop	6
HEAL conference.....	6
Institute needs help	7
Service to the Community	8

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Certifications



ACSM Certifications

The Institute is an approved site for several American College of Sports Medicine workshops and certifications for health/fitness and clinical track professionals.

Health & Fitness Track

This track is designed for leaders of preventive health programs which are aimed at apparently healthy individuals in corporate, commercial, and community settings or people with controlled diseases.

Health/Fitness Instructor Certification Dates

Early Bird Deadline: Feb 21, '03
Application Deadline: Mar 7, '03
Certification: Apr 18-19, '03
To apply, download a form from
<<http://www.wwilkins.com/acsmcrc/hfinstr.html>>

Certification Requirements

A 2-year, 4-year, or master's degree in a health-related field from a regionally accredited college/university (verification by transcript or copy of the degree); OR current enrollment, as a junior or higher in a degree-granting health-related field from a regionally accredited college or university; OR a minimum of 900 hours of practical experience in a fitness setting. Possess current CPR certification.

Examples of health-related fields

Physical Education, Exercise Science, Kinesiology, Kinesiotherapy, Athletic Training, Physiology, Sports Management, Biology, Exercise Physiology, Human Performance, and Recreation Management/Science.

Recommended Competencies

- Demonstrate competence in the knowledge, skills, and abilities (KSAs) required of the ACSM Health/Fitness Instructor, and Group Exercise Leader as listed in the Sixth Edition of the *ACSM's Guidelines for Exercise Testing and Prescription*.
- Work-related experience within the health and fitness field.
- Adequate knowledge of and skill in risk factor and health status identification, fitness appraisal, and exercise prescription.
- Demonstrated ability to incorporate suitable and innovative activities that will improve an individual's functional capacity.
- Demonstrate an ability to effectively educate and/or counsel individuals regarding lifestyle modification.
- Knowledge of kinesiology, including exercise science, functional anatomy, exercise physiology, nutrition, program administration, psychology, and injury prevention.

This certification is ideal for personal trainers, strength trainers, fitness consultants and health/fitness professionals.



Certifications continued

Clinical Track

This track applies to those who work with high-risk or diseased individuals—or individuals who are apparently healthy.

Exercise Specialist Workshop & Certification Dates

Early Bird Application Deadline:
Apr 22, '03

Application Deadline: **May 6, '03**

Workshop: **June 17 - July 2, '03**

Certification: **June 20-21, '03**

- Current certification in Basic Life Support (BLS)

Recommended Competencies

- Demonstrate competence in the KSAs required of the ACSM Exercise Specialist®, Health/Fitness Director, Health/Fitness Instructor and Group Exercise Leader as listed in the Sixth Edition of the ACSM's Guidelines for Exercise Testing and Prescription
- Ability to demonstrate extensive knowledge of functional

Workshop Information

The optional ACSM workshops offered for Exercise Specialists require a certain degree of job knowledge and training in cardiopulmonary rehabilitation, exercise testing, exercise prescription, and program development for workshop participation. The program content of the Exercise Specialist workshop is based on a basic knowledge of exercise physiology, pathophysiology, pharmacology, electrocardiography, exercise program leadership, and counseling. These workshops serve to review and supplement the background experience of the well-prepared participant. It is not intended to independently prepare a candidate for ACSM Exercise Specialist® certification.

Applications:

All applications and fees must be sent to ACSM:
ACSM Certification Department,
P.O. Box 1440, Indianapolis, IN
46206-1440.



Participants in a previous ACSM Health/Fitness Instructor Workshop review blood pressure taking procedures during a sub-maximal exercise bike test. Certification Director Sarah Grall, second from left, is overseeing the task.

Certification Requirements

- Baccalaureate degree in an allied health field or the equivalent (e.g., 2-yr degree plus a minimum of 2 yrs experience in cardiac rehabilitation/clinical exercise testing environment)
- Minimum of 600 hours of practical experience in a clinical exercise program (e.g., cardiac/pulmonary) including exercise testing

anatomy, exercise physiology, pathophysiology, electrocardiography, human behavior/psychology, gerontology, graded exercise testing for healthy and diseased populations, exercise prescription for healthy and diseased populations, exercise supervision/leadership, patient counseling, and emergency procedures related to exercise testing and training situations.

Call 1-800-486-5643 to receive the ACSM Certification Resource Catalog, or download an application from <http://www.lww.com/acsmcrc/>.



Book Review

Turn Off the Hunger Switch

Paul Rivas, M.D.

Prentice Hall Press: Paramus, NJ,
2002, 216 pp

Just when you thought you knew all about diets based on body type, another book appears on the market to further muddy the waters of weight loss and weight management. *Turn Off the Hunger Switch*, written by bariatrician Paul Rivas, M.D., asserts that you can reset your brain to change your weight.

Rivas bases his program on the idea that people are deficient in, or sensitive to, various chemicals in the body and that adjusting the diet to compensate for these aberrations will “turn off” the switch that causes people to feel hungry and, therefore, eat. Using a 23-item questionnaire, he classifies people as lacking in norepinephrine, serotonin, or dopamine, or as sensitive to carbohydrates. N-profile people, for example, need to raise their norepinephrine levels, which Rivas suggests they do through an ephedra/caffeine combination, the amino acid L-tyrosine, or prescription medications such as phentermine. Rivas favors combinations of prescription drugs for some types, such as phentermine and Effexor, with or without the amino acid tryptophan, for S-profile (serotonin deficient) people.

Lack of success with treatments for the three neurochemical deficiency types identifies a person as carbohydrate sensitive. In these individuals, consuming even small amounts of carbohydrate prevents weight loss. Treating carbohydrate sensitivity involves eating a low-carbohydrate diet until the desired weight is lost and then eating a maintenance diet that is slightly higher in carbohy-

drates. Rivas recommends that carbohydrate-sensitive individuals take medications typically used to treat the other profiles, which he believes may help them stick to a low-carbohydrate diet. He does not indicate that he has undertaken any controlled research to substantiate his views.

Once an individual has reached the target body weight, he or she must take medications for the rest of his or her life, albeit some people may be able to halve their doses or take medications every other day. To ease the concerns of people reluctant to take or prescribe ephedra, the author includes a chapter by attorney James R. Prochnow, who has represented defendants in lawsuits filed by the Food and Drug Administration over ephedra. An appendix outlines the drug and supplement programs Rivas recommends.

Rivas’ approach will likely find little acceptance among team physicians and exercise physiologists, due to its heavy reliance on prescription medications with stimulant effects. The use of stimulants has been linked to numerous reports of illness and death in athletes taking supplements containing ephedra and caffeine. Rivas does not advocate the use of stimulants among athletes, but he also fails to caution readers against strenuous or extended activity while taking these drugs. Even if carbohydrate sensitivity is identified as a physiological phenomenon in the future, the human body’s need for carbohydrates during endurance activity will necessitate some adjustments in Rivas’ plan. In short, *Turning Off the Hunger Switch* is another name for turning on prescription stimulants, and adoption of its ideas should be avoided pending scientific substantiation.

—Carolyn Petersen, MS
Managing Editor, MayoClinic.com,
Rochester, MN

ATSC

Institute offers acute care to people who exercise

If you are a regular exerciser you may occasionally experience aches and pains that keep you from being at your best performance. If seeing your doctor appears too drastic for the nature of your problem, you may want to check out the institute’s Athletic Training Service Center. The center provides sport injury treatment to individuals who sustain injuries related to exercise activity or who may be inhibited in their athletic performance due to an injury.



Athletic trainer, Kristy Rahimi-Alangi, testing a client’s hamstring strength

ATSC serves elite athletes, competitive athletes, and recreational exercisers. The center provides sport injury assessment and screening; client education on injury treatment, prevention, and reconditioning; and acute injury treatment. All student staff are certified by the National Athletic Trainer Association.

Appointments are available daily from 11 a.m. to 1 p.m.; please call 346-4114. Monthly membership: \$70 (up to 2 visits a week). A single visit is \$20 per visit. This service is not covered by health insurance.

ATSC is located on the UO campus, Bowerman Building, 1580 E. 15th.



KinPubs & KinAbs

Kinesiology Publications

Kinesiology Publications (KinPubs®) is the new name for the institute's nonprofit component, Microform Publications of Human Movement Studies, a collection of master's theses and doctoral dissertations. This

"Kinesiology is the science dealing with the interrelationship of the physiological processes and anatomy of the human body with respect to movement."

Webster's (1989)

service has been archiving and disseminating graduate research studies on microfiches since 1949. While the former name made reference to the reproduction process used to preserve the theses, the new name represents the area of study and research that is included.

Microforms—a durable film product—will remain Kinesiology Publications' primary archival medium; however, the service will be expanded to include electronic file submission to better accommodate the individual customer.

It has always been difficult to give a simple name to the area Kinesiology Publications serves. It is a multifaceted field in which movement or physical activity is the intellectual focus. This field includes health as it relates to physical activity,

physical fitness, activities of daily living, work, sport and athletics, recreation, dance, and play. The populations it studies include children, adults, and the elderly; individuals with disabilities, injury or disease; and athletes. The research, which focuses on the causes and effects of physical activity, employs knowledge and methods of inquiry from arts and sciences as well as humanities; physiology, biochemistry, biomechanics, motor control and development, psychology, sociology, sports medicine, measurement and kinanthropometry, and also pedagogy, history, and philosophy. More recently, sports marketing, a component of some business schools, has entered the scene. All these areas are included in Kinesiology Publications.

Kinesiology Abstracts

Kinesiology Abstracts (KinAbs) is the new name for Microform Publications' Bulletin, formerly named *Health, Physical Education and Recreation, Exercise and Sport Sciences*.

KinAbs publishes semiannually approximately 120 theses and dissertations from the various areas listed above. Interested readers may peruse KinPubs' website at www.uoregon.edu/~micropub/ where the entire collection can be searched using simple keywords.

The website also provides information about how to submit theses, how to order a thesis copy, or how to subscribe.

Upcoming Events

Basic Concepts in Training

Workshop: Sat, April 5, 8–5 p.m.

Sun, April 6, 8:30 a.m.–12 noon.

Registration deadline: Fri, Mar 21

In April of 2003, courtesy faculty member Richard (Dick) Brown, Ph.D., will offer a course entitled "Basic Concepts in Training." The eleven hour course will give participants an understanding of the concepts that form the basis of training. Specifically, participants will see how the laws of nature, physiological processes, and Selye's General Adaptation Syndrome theory interrelate and can be used to ensure effective adaptation to physical challenge. The information is beneficial for those training themselves or training others.

The course is appropriate for exercise science students, health and Fitness instructors, physical therapists, athletic trainers, personal trainers, coaches, and athletes. It will include lectures, slide presentations, simple experiments and demonstrations, discussion, and self-evaluated quizzes.

Sessions:

- The concept of energy—Unavoidable laws of nature
- The concept of cells—One for all and all for one
- The concept of homeostasis—Keeping cells happy
- The concept of metabolism—Fuel for homeostasis
- The concept of nutrients—Raw material for metabolism
- The concept of delivery—Nutrient prep
- The concept of communication—The body-wide web
- The concept of evolution—Is it better to suffer the slings and arrows of outrageous fortune or ...?



Upcoming Events

The concept of adaptation—The only constant is change
The concept of Hans Selye—
Challenge must be balanced with recovery

Richard L. Brown, Ph.D., exercise physiologist, Olympic coach, and training innovator.

Presently Dr. Brown is the president of the Eugene Health & Performance Foundation whose goal is to increase the number of Olympic medals won by US women distance runners and to make the knowledge developed in this process available to other coaches and to the public. Since 1996 he frequently has been adjunct professor in the Department of Exercise and Movement Science, teaching in the area of training and performance.

He is the founder of LEAP (1987) and creator of The Individual Trainer, a computer program that brings the science of exercise physiology and the art of coaching together and helps people interested in making fitness a part of their lives maintain a personalized fitness program of high quality. Previously, he served as consultant to Nike, Inc., and was director of Athletics West in Eugene, a track and field organization that helped raise the level of support for, and performance of, track and field athletes in the US. During his tenure with Athletics West, 1980-1984, the organization took ten national championships and in the 1983 World Championships and 1984 Olympics, athletes from Athletics West comprised over 23 percent of the US team.

Brown coached several high school state championship teams and 25 high performance athletes from various disciplines, among those athletes were world champion and world record holder, Mary Decker Slaney; two time Olympian in cross-country skiing, Leslie Krichko; and silver medal paralympics

swimmer, Arden Adams. He coached the 1983 World Champion US Cross Country team.

Brown received his Ph.D. in exercise and movement science from the University of Oregon, holds a master's degree in physical education from the University of Maryland, and a bachelor's degree in Military Science from the United States Naval Academy in Annapolis, MD. He is well published and, in 2002, co-authored with J. Henderson the book, *Running Programs* (Human Kinetics).

Senior Fitness Workshop

Thu–Sat, May 8–10, 2003

Registration deadline: Thu, Apr 24

This workshop is designed for health and fitness professionals who work or want to work with seniors. It provides knowledge about the changes occurring in the aging process and how those changes will affect leading a physically active life. It will also address training for performance.



Carolyn Kortge, author of The Spirited Walker, leads a walking class and explains the benefits and the pleasures of walking.

The workshop will consist of lectures, labs, and practical sessions.

Topics will include:

- Physiology of aging and how exercise affects the aging process
- Cardiovascular changes in aging
- Musculoskeletal health and fitness in seniors
- Nutrition for active seniors
- Exercise safety and special health concerns
- Submaximal testing (lab)
- Walking/Jogging
- Cardio workout
- Strength and balance
- Water aerobics
- Chair exercises

For more information, go to www.uoregon.edu/~events and look for Senior Fitness Workshop. You may also request to be added to our workshop mailing list to receive a brochure. Please send an E-mail to <rlt@uoregon.edu> or call (541) 346-4114.

HEAL Conference

The HEAL Conference is an annual event serving an older adult population. Its purpose is to motivate older adults to participate in physical activities and to educate them about the value of choosing a healthier lifestyle. Peace Health's Senior Health Services is a partner in facilitating this event. This year's conference will be held in March. Stay tuned for details by checking our website at <www.uoregon.edu/~iishp/events.html>



Institute needs help from its friends

Institute is self-funded service

Although a component of the University of Oregon's Department of Exercise and Movement Science, the institute is funding its staff and programs without any state or university funds. Revenue is largely generated from its library and archival service, Kinesiology Publications, and to a lesser extent from participation fees earned from educational and certification programs. Other programs of the institute, such as the Athletic Training Service Center, are

designed to cover their own costs but do not generate income.

The more educational and service programs the institute establishes, the greater the need for outside assistance. Workshop fees have to be kept to a minimum, considering students' budgets. While the institute serves many professionals in the field who are able to pay fees commensurate to the costs of the program, students often cannot. In order to be able to include students, we reduce student fees,

which then have to be subsidized with income from other sources.

Given the need to update Kinesiology Publications and the costs involved, we are concerned about maintaining our educational components, particularly those which serve students.

If you are planning to make a gift to higher education, please consider the institute as the recipient of your generosity. We will be prudent stewards of your donation.

Invest in Oregon's Future

Please consider a gift to the International Institute for Sport and Human Performance. Your contribution will help us expand our educational and service programs.

Please make your check out to UO Foundation and mail to: IISHP, Bowerman Building
1243 University of Oregon
Eugene, OR 97403-1243

Pledge Form

My/our contribution of \$ _____ is enclosed

My/our pledge of \$ _____ to be billed for total amount in _____

or paid starting in _____ in the amount of \$ _____ each month.
(month)

Visa or MasterCard for \$ _____ Name on Card _____

Account # _____ Expires _____ Signature _____

Name(s) _____ Phone _____
As you would like it to appear on the donors' list

Address _____

City _____ State _____ Zip _____

I/we would prefer to remain anonymous I/we would like institute planned giving information

I/we have enclosed my company's matching gift program information

Service to the Community

Exploring Careers in Health Care

Enticing 90 middle-school students to give up their “no-school day” isn’t easy, but Career MED did just that. On October 11 the opportunity to experience the world of health care drew local students to the university and to Sacred Heart Medical Center. Students began a day of sampling careers such as nursing, physical therapy, and athletic training. After spending the morning at the hospital, they were escorted to the university to attend one of three lab sessions.

Graduate students offered their time to introduce the middle-schoolers to current research and study environments that they would some day encounter at the college level. They were able to choose between sessions at the institute’s Athletic Training Service Center, the anatomy lab, and the biomechanics lab. Hands-on activities such as examining cadavers, operating balance-testing equipment, and learning testing techniques from an athletic trainer, allowed them to investigate the process of creating a health-oriented career.

The students who participated in Career MED gained a new perspective on coursework in

school. They realized that learning can be applicable to real life problems and that it can equip them with the ability to someday help someone else. Comments on the lab experience ranged from “I liked learning about rehab, I plan to be a nurse” and “I liked learning about the experiments with balance and how they are used” to “I liked getting to see and study all of the (body) parts.”

Career MED is sponsored by Sacred Heart Medical Center and the UO College of Education’s Youth Enrichment and TAG programs. It serves as a catalyst for further exploration into health occupations. The International Institute for Sport and Human Performance is pleased to help facilitate this valuable event for the community.



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