



Puget Sound Human Factors and Ergonomics Society

August 2010

Summer Newsletter

www.pshfes.org

Renew Your Membership or Join Today!

Our chapter is a non-profit organization associated with the Human Factors and Ergonomics Society and serves the interests of the local community of the Pacific Northwest. Our funding is generated via the chapter's membership dues and activities.

For only \$18 (\$9 for students), you can enjoy opportunities for professional development, network with fellow professionals, and tour local facilities when you join PSHFES.

Additionally, receive newsletter and mail updates about what's going on in the area, volunteer opportunities, access to and a listing in the membership database, and an invitation to the yearly business meeting.

Join for the 2010 calendar year by visiting our Web site at www.pshfes.org, click "Membership," and pay online (Pay Pal) or by check.

President's Message

Dear PSHFES members,

We have a terrific line-up for our Symposium and Workshops this year on September 15th and 16th, starting with our Keynote Speaker, Dr. Andy Imada. Not only is he the current president of the International Ergonomic Association, but he is also an excellent and entertaining speaker. Following our successful format in the recent past, the rest of the Symposium day is filled with an eclectic group of speakers and topics that will appeal to attendees from a variety of backgrounds and interests. We also have many exhibitors that will be there so you can try out the latest in ergonomic equipment and services.



Janet Peterson
PSHFES President

We are trying something a bit different for our Workshop day on September 16th – two, half-day workshops on slightly different topics, and you can choose to attend one or both of them. Dr. Stephen Bao is speaking on Upper Extremity Tools in the morning, and Susan Murphey is speaking on Healthcare Ergonomics in the afternoon. Elsewhere in this newsletter you can read more about Susan's topic; Dr. Bao is internationally-known for his work on upper extremity tool risk factors and design, so both workshops promise to be practical as well as interesting. Go to our website to sign up for the Symposium and the Workshops: www.pshfes.org.

And speaking of our website, we are excited to be near the "go live" stage for our newly-designed website! You will see more photos, easier navigation and more information.

I look forward to seeing you at the Museum of Flight,
Janet Peterson, PT, DPT

2010 PSHFES OCCUPATIONAL ERGONOMICS SYMPOSIUM & WORKSHOP

September 15th & 16th
Seattle's Museum of Flight

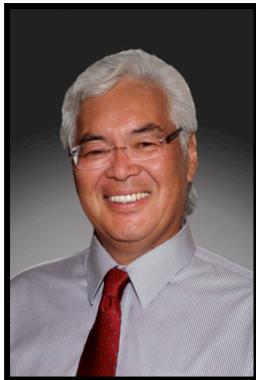
PSHFES 2010 Occupational Ergonomics Symposium

SYMPOSIUM - SEPTEMBER 15TH, 2010
Seattle Museum Of Flight
8:00AM - 4:30PM

KEY NOTE SPEAKER

Participatory Ergonomics

Dr. Andy Imada, PhD, CPE President of the International Ergonomic Association (IEA)



Dr. Imada's work focuses on helping people and organizations change to improve productivity, safety, quality, and work systems. He has published extensively and edited a book entitled "Participatory Ergonomics". Dr. Imada has consulted with companies including AT&T, Chevron, Steelcase, Sheraton Hotels and the LA Dodgers. He is currently the Principal at AS Imada & Associates, an ergonomic consulting company out of Carmichael, CA. His PhD is from Ohio State in Industrial Psychology.

SYMPOSIUM SPEAKERS

"Photogernomics": Enhancing Ergonomics with Photography

Steve Russell

Steve has practiced ergonomics for 25+ year and recently became a professional photographer. Even with today's technology, taking/storing sending/using photos can be confusing. Learn tips that will enhance photo documentation, increase your persuasive abilities, and improve efficiency.

Designing Airplanes for People What's Really Needed?

Alan Jacobsen

Alan has been involved in design and evaluation for 25+ years including leadership for the 787 Human Factors and Ergonomics Team. This session focuses on integrating human factors and ergonomics into the design of today's airplanes.

Is Your Stretch & Flex Program Cutting Edge?

Deborah Read

Deborah is the owner of ErgoFit Consulting and has a diverse background as an Occupational Therapist and certified fitness trainer. She will explore what the research shows should and should not be a part of "Stretch & Flex" Programs.

Technically Cool Computing

Kim Popovic & Janet Peterson

Several years of trial and error have resulted in a curriculum for teaching kids about ergonomics. This session will review the content and discuss lessons learned as a result of this effort.

McKinstry Sheet Metal Case Study

John Von Lossow

Learn how a commercial, union shop overcame challenges resulting in a dramatic turnaround in behavior and safety in addition to increased productivity.

Sharing Ergonomics Solutions & Success Stories

Judy Damoff & UW Students

This session focuses on before and after photos and a case study to stimulate thought and discussion on creative and effective ergonomics solutions.

SYMPOSIUM PRICE: \$85

REGISTRATION NOW ONLINE!!!

Please visit www.pshfes.org

PSHFES 2010 Occupational Ergonomics Workshop

WORKSHOP - SEPTEMBER 16TH, 2010

Seattle Museum Of Flight

8:00AM - 5:00PM

TWO HALF DAY WORKSHOP SESSIONS!!!

Upper Extremity Risk Reduction and Hand Tools

Dr. Stephen Bao

8:00AM - 12:00PM



Dr. Bao, a researcher with the SHARP program at L&I, has done extensive work on tool design and risk exposure. Learn how to choose and modify tools to reduce risk of injury.

WORKSHOP PRICE: \$95

REGISTRATION NOW ONLINE!!!

Please visit www.pshfes.org

Healthcare Ergonomics: A Beast of Burdens

Susan Murphey

1:00PM - 5:00PM

This session will include:

- ◆ Cost justification model for ergonomics programs and equipment
- ◆ Safe patient handling in non traditional areas
- ◆ COWS & WOWS - Computers on Wheels (COWs) or Workstation on Wheels (WOWs)

SYMPOSIUM PRICE: \$95

REGISTRATION NOW ONLINE!!!

Please visit www.pshfes.org



COME JOIN US FOR ONE OR BOTH SESSIONS!!!

Healthcare Ergonomics: A Unique Beast of Burdens

One of our two, half-day workshops on Thursday, September 16th, is “Healthcare Ergonomics” taught by Susan Murphey. This is a very short introduction to the issues; learn more by attending the workshop. Sign up on our website: www.pshfes.org



Healthcare Ergonomics—A Unique Beast of Burdens

Susan L. Murphey BS, CECD

The ergonomic concerns in healthcare go beyond musculoskeletal injuries, as they must also address concerns related to patient safety, patient confidentiality and the avoidance of medical errors. While there are many similarities to practicing ergonomics in the field of healthcare, there are unique differences as well. As with other industries, the goal is to reduce the risk for injury by avoiding risk factors such as excess force, repetition and awkward postures, but how you go about achieving that goal in other industries may not be practical in healthcare.

Healthcare ergonomics is also uniquely different than other industries because, essentially, the product that is managed throughout the work cycle is a human being. Materials handling takes on a whole new meaning when the “material” is a living person. While accidentally dropping a load on the manufacturing floor may not result in a disastrous outcome, dropping a patient during a transfer can result in significant injury to the patient. As a result, healthcare workers tend to overexert themselves rather than let a patient fall. Patients who are confused or cognitively impaired can be unpredictable and may suddenly become combative, resist being transferred, or go limp during a transfer, throwing the worker off balance and requiring them to make sudden movements to accommodate the load. These unexpected movements can cause high muscular forces within the supporting muscles of the spine.

The concept of task rotation isn't generally practical in healthcare either. You wouldn't want a surgeon trading places with a radiologist, or visa versa! Healthcare is comprised of small groups of uniquely trained individuals working together to achieve a task. In many cases, alternating the task or changing the process is not an option. In addition, the Health Insurance Portability and Accountability Act (HIPAA) requires healthcare facilities to protect the privacy of identifiable health information of their patients. Upholding this confidentiality must be considered when implementing abatement to risks for injury, as violations can result in termination of employees as well as expensive fines and penalties to the institution.

Understanding the nuances of the diverse roles in healthcare helps to be able to provide practical solutions to their ergonomic concerns. Those with healthcare backgrounds may be best suited to provide guidance for solving barriers to safety in healthcare, however, it is through sharing with ergonomists in other industries that we all expand our applicable knowledge. PSHFES has a long history of providing ergonomic education and networking opportunities. It is through this network of knowledge from varying industries that we all learn and grow.

Susan Murphey is Community Projects Chair and a Past President of PSHFES. Her company, Essential Ergonomics, provides healthcare ergonomics consulting. Susan will be presenting a half day workshop on healthcare ergonomics as part of the PSHFES Symposium on September 16th. For more information: <http://www.pshfes.org/symposium.htm>

Mathiassen's Dinner Meeting

PSHFES members learned about how ergonomics and politics intersect in Sweden during Dr. Svend Erik Mathiassen's presentation at a dinner meeting in May.



From left to right, PSHFES members Robert Kodama, Ellen and Bob Meyer, and Nate Duris socialize before the presentation.

Dr. Mathiassen, a leading researcher on exposure assessment of work, was visiting the University of Washington to meet with PSHFES member Dr. Pete Johnson. Pete is now spending five months in Sweden, working with Dr. Mathiassen and his colleagues on ergonomic research.



Above from left to right, PSHFES members Melissa Findlay, PSHFES Secretary Wilmarie Villanueva, Deborah Read and Bruce Coulter enjoy collegial interaction at the meeting.

Swedish law states that "variation in work" is important, but quantifying and being able to measure variation is difficult. Much of Dr. Mathiassen's

research has focused on defining variation in work, and then measuring how that affects workers' risk for musculoskeletal injuries.



Above, Dr. Mathiassen responds to a question from the audience.

One very interesting finding in his research is that some individuals repeat the same action (such as raising your arms to 90 degrees and holding them for 15 seconds) using the same muscles each time, while others use different muscles as repetitions proceed. This may affect an individual's risk for MSDs.



Speaker Dr. Svend Erik Mathiassen, on the right, shares a meal with Dr. Pete Johnson, middle, and Steve Russell, OT, left, before his talk.

Good food, a nice chance to socialize with colleagues, and a stimulating presentation made for a great evening.

-Janet Peterson, PT, DPT, PSHFES President

PSHFES Mission Statement

- ◆ Provide opportunities for professional development, networking, workshops, and education for local Human Factors and Ergonomics professionals, students, and enthusiasts.
- ◆ Raise public awareness of the value and benefits of Human Factors and Ergonomics.
- ◆ Provide volunteer opportunities for HFE professionals to contribute to the Puget Sound area community.

Have an idea for an article?

We want to encourage all members to contribute ideas for articles and any items of interest for the next PSHFES Newsletter. For information or to submit content, please e-mail Wilmarie Villanueva at secretary@pshfes.org.

Thank you for all your continued support and contributions!



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