



# Puget Sound Human Factors and Ergonomics Society

August 2011

Summer Newsletter

[www.pshfes.org](http://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 2011 calendar year by visiting our Web site at [www.pshfes.org](http://www.pshfes.org), click "Membership," and pay online (PayPal) or by check.

## PSHFES President's Message



**Cindy Williamson**  
PSHFES President

PSHFES members and friends!

Hope you've had a great summer and are ready for our Annual PSHFES Occupational Ergonomics Symposium and Workshop this fall at the Museum of Flight on September 14 and 15! Our Council has been working hard to come up with another outstanding line-up of both nationally renowned and prestigious local speakers and workshop leaders who will educate you on the latest topics in human factors and ergonomics. We are excited to have Dr. David Rempel, back to speak to us, as this year's keynote speaker. Dr. Rempel will be presenting his research results of a multi-site study to better understand how upper extremity injuries occur as well as to present practical solutions to lower the risk of injury. Other presentation topics include: aging workforce; implementing participatory ergonomics in the grocery industry; ergonomic products (or not so); ergonomics at Genie Industries; the use of immersive technology at Ford Motor Company; and the continued adventures of the Nicaraguan Coffee Bag research.

Our workshop this year, Integrating Lean with Ergonomics, led by Jeff Smagacz, promises to provide you with practical information and tools to help you make your workplace safer, more productive and user-friendly. And of course, we will again have all of those wonderful vendors at our symposium to show and help you learn about all those great new gadgets and services available to help you in your profession. You can read more about Dr. Rempel, Jeff Smagacz and our six other symposium speakers and presentations later in this newsletter. To register for this year's symposium and workshop, and get the early bird rate, go to our website [www.pshfes.org](http://www.pshfes.org) or contact us for more details at [symposium@pshfes.org](mailto:symposium@pshfes.org).

### 2011 PSHFES OCCUPATIONAL ERGONOMICS SYMPOSIUM & WORKSHOP

*September 14th & 15th*  
*Seattle's Museum of Flight*

## PSHFES President's Message Continued...

Also in this newsletter, read about our fantastic tour of the ergonomics improvements in the King County Library System's outreach vehicles and our dinner meeting with Dr. David Sloan, where our PSHFES members got to learn about the fascinating world of Human Factors Forensics. We still have lots of fun events planned for the rest of the year, so make sure you visit our website to sign-up to join or renew your membership so you don't miss out on any more exciting opportunities to learn about ergonomics and human factors in our local community.

Lastly, if you have some thoughts or ideas to share about how PSHFES can better serve you, either professionally or in the community, please feel free to contact either myself [president@pshfes.org](mailto:president@pshfes.org) or one of the other Council members. We always enjoy hearing from you! Hope to see you at the symposium and workshop this fall!

Cindy Williamson  
2011 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.

# PSHFES 2011 Occupational Ergonomics Symposium

**SYMPOSIUM - SEPTEMBER 14TH, 2011**  
**Seattle Museum Of Flight**  
**8:00AM - 4:30PM**

## KEYNOTE SPEAKER

***New Findings on Risk Factors for Hand & Arm Disorders***

**David Rempel, MD, MPH**



Dr. Rempel is a Professor of Bioengineering at UC Berkeley, Professor of Occupational and Environmental Medicine at UC San Francisco and Director of the Ergonomics Graduate Training Program at UC Berkeley.

Dr. Rempel has been part of a multi-site study looking at upper extremity injuries and risks, and the results of that research will help us to better understand the highest risks involved in various activities as well as some practical solutions. The research of his group focuses on understanding how tendons, muscles, and nerves are injured at work and how workplace tools and tasks can be designed in order to prevent musculoskeletal disorders.

## SYMPOSIUM SPEAKERS

***The Aging Workforce***

**Dr. William Smith, MD, MBA**

Dr. Smith is a senior manager, for Boeing Health Services, and has been with Boeing for 13 years. Prior experience includes a faculty appointment

at the University of Kansas School of Medicine, and healthcare delivery experiences encompassing private and public healthcare systems.

***Implementing Participatory Ergonomics in the Grocery Industry***

**Samantha Modderman, PT, DPT**

Samantha Modderman is a third year graduate student in the physical therapy program at Eastern Washington University located in Spokane, WA. She has worked as a research assistant on several ergonomics projects in the grocery industry for the past two years.

***Who are you and what gives you the right to call your product ergonomic?***

**Ian Chong, CPE, Extreme Ergonomics**

Ian Chong is the founder of Extreme Ergonomics, a Seattle based multi-disciplinary firm that designs unique tools, equipment and workstations to address occupational injuries in all environments, industrial and office.

***Ergonomics Program at Terex AWP***

**George Chuckrow, CPE, CSP**

George Chuckrow is the Health, Safety, Environmental Manager for Terex Aerial Work Platforms of North American Operations.

***Ergonomics Program and the use of Immersive Technology at Ford Motor Company***

**Allison Stephens, MSc, CPE**

Ms. Stephens is the global technical leader in Assembly Ergonomics for the Ford Motor Company.

***Nicaraguan Coffee Bag Research Project***

**Kate Stewart, CPE; Stephen Bao, CPE, CCPE; and Steven Russell**

Speakers for this project are employees for Labor & Industries and have been using their talents to influence a community in Nicaragua.

**SYMPOSIUM PRICE: \$85**

**Price includes lunch (before Labor Day, after this date: \$100)**

**REGISTRATION NOW ONLINE!!!**

**Please visit [www.pshfes.org](http://www.pshfes.org)**

# PSHFES 2011 Occupational Ergonomics Workshop

WORKSHOP - SEPTEMBER 15TH, 2011  
Seattle Museum Of Flight  
8:00AM - 5:00PM

*Integrating Lean with Ergonomics*  
Jeff Smagacz, CPE



Jeffrey is a graduate of the University of Michigan with a B.S. in Industrial Engineering. He is a member of Human Factors and Ergonomics Society (HFES), the Institute of Industrial Engineers (IIE), a Six Sigma Green Belt, a Lean Practitioner and has also achieved recognition as a Board Certified Professional Ergonomist (CPE). Jeffrey has completed over 2,500 ergonomic assessments in a variety of environments, including manufacturing, healthcare, service, retail, construction and office environments.

For more information visit: <http://www.riskgroup-llc.com/index.php>

## **WORKSHOP DESCRIPTION:**

The morning session of this all day work shop, will include a presentation and discussion on Lean basics and using Lean principles to reduce ergonomic risk factors and implement ergonomic solutions within the work area.

The afternoon session will include case studies from varying companies applying Lean principles. Participants will have opportunity to apply Lean principles to an ergonomics challenge working in groups with other attendees.

## **WORKSHOP PRICE: \$185**

**Price includes lunch (before Labor Day; after this date: \$200)**

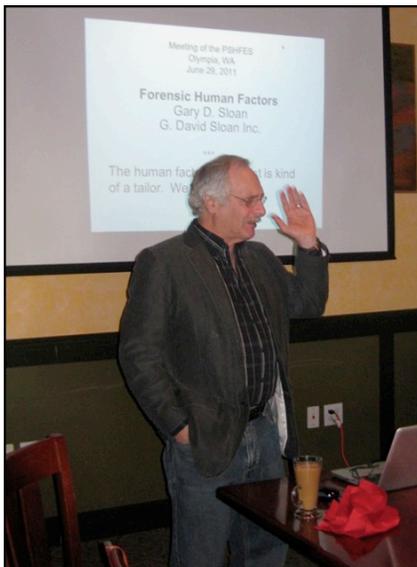
## **REGISTRATION NOW ONLINE!!!**

Please visit [www.pshfes.org](http://www.pshfes.org)

# David Sloan Dinner Meeting

PSHFES members were able to sit down with Forensic Human Factors expert David Sloan, Ph.D. in June. The evening was filled with good food and engaging conversation. Dr. Sloan primarily discussed several case studies where human factors forensics played an important role in the courts' decisions.

A major topic of discussion was the evaluation of illuminance vs. luminance levels and the measurement tools involved. We don't actually see illuminance, which is the density of light incident on a surface. We see the light reflected from a surface, which is luminance. Using the proper measurement tool and using it correctly is essential in forensic work. Dr. Sloan also presented the expanded accident sequence model which aids in identifying the cognitive and perceptual factors that most likely contribute to the occurrence of the accident. Whether an unsafe condition will be identified in time to avoid harm depends on variables like luminance, contrast, hazard location in the visual field and expectancy.



*Above, Dr. Sloan begins his presentation to the PSHFES group.*



*From left to right, PSHFES members Bill Mann, Ginny Robinson, Janet DeLapp, Dr. Gary Sloan, and guest John DeLapp all engage in conversation at Mercato Ristorante in Olympia.*

Dr. Sloan's take home message was that at any moment our ability to attend to our surroundings is limited. To compensate, we sample our surroundings for information in short glances. We depend on judgment, prediction and expectancy to fill in the gaps. Expectancy concerns our readiness to respond to situations in predictable ways. When a situation is at odds with our expectancies, surprise, confusion, errors and accidents are more likely to result. Dr. Sloan demonstrated refreshing insight and depth in the field of forensics and PSHFES looks forward to having him speak to us again in the future.

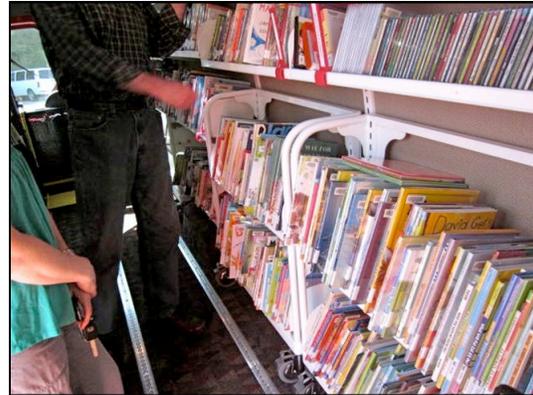
*Kelly Lynch, MS, CSCS, AEP  
2011 PSHFES Events Co-Chair*

# PSHFES KCLS Tour

PSHFES members were introduced to the King County Library System's vehicle-based outreach services. KCLS is one of the largest and most productive library system in the country and they have made some innovative changes to their vehicles new and old.



*The Digital Discovery Zone, a mobile computer lab, is recharging prior to being dispatched.*



*An innovative solution that was incorporated by KCLS was the addition of custom snap-in shelving into the Library2Go vehicles. A custom tool was also developed in-house to lock and release the shelving.*



*Above, PSHFES members look on as KCLS Safety and Security Program Coordinator Danielle Perry demonstrates the typical size of box used in the Words on Wheels program.*

KCLS Safety and Security Program Coordinator Danielle Perry led PSHFES members through the administrative facility in Issaquah which houses a number of programs including the Traveling Library Center, Words on Wheels, ABC Express, TechLab, Digital Discovery Zone, and Library2go. The programs' main goal is to bring library services to those who cannot make it to their local branch. PSHFES members stepped inside several of the vehicles used for the outreach programs and discussed recent changes that were implemented and new issues that have been discovered within the continuous improvement process.

Attendees were impressed with not only the reach and size of the programs available, but also with the collaborative approach used by KCLS in the implementation of solutions. KCLS has developed a proactive approach in employee health with ownership throughout the departments. It was a beautiful day to be outside touring the vehicles and a number of members were inspired to head to their local library branch following the tour.

*Kelly Lynch, MS, CSCS, AEP  
2011 PSHFES Events Co-Chair*



## Ergonomics Animation

- ◆ **Office/Home Ergonomics**  
[http://www.youtube.com/watch?v=jbV5dGvJWyo&feature=player\\_embedded](http://www.youtube.com/watch?v=jbV5dGvJWyo&feature=player_embedded)
- ◆ **Laptop Use**  
<http://www.youtube.com/watch?v=nb9pqgHbPy4&feature=related>
- ◆ **Cell Phone Use**  
[http://www.youtube.com/watch?v=\\_DEmtz7TU6o&feature=relmfu](http://www.youtube.com/watch?v=_DEmtz7TU6o&feature=relmfu)

## 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](mailto:secretary@pshfes.org).

Thank you for all your continued support and contributions!

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