



## 2014 PSHFES Occupational Ergonomics Symposium Recap

The 2014 Puget Sound Human Factors and Ergonomics Society conference was held on October 16 at the Boeing Museum of Flight. This year's one day format featured six experts in Human Factors and Ergonomics from the Northwest and beyond. The symposium also gave participants the opportunity to visit unique vendors supporting ergonomics solutions to worksite adaptations.

The symposium honored Lynda Enos as the winner of the 2014 Ergonomics Professional of the year. Lynda has made substantial contributions to the industry over the years and was honored for the dedication and professionalism she has brought to Human Factors and Ergonomics in the Northwest.

Mark Bendon, CPE, PhD, from Texas A & M Ergonomics Center, was the keynote speaker. Mark spoke on the future of ergonomics assessments utilizing technology. Mark noted that two-thirds of all workers in the US are office workers. Due to the younger generation of workers entering the workforce with a longer history of technology use, we are now seeing earlier and more frequent injuries of those in their early twenties. He explained this generation as "digital natives" vs. "digital immigrants," those who are the older workers newer to technology. Mark also touched on the paradox of workers having higher, unhealthy BMI's as a result of greater productivity requirements. Techno-solutions of this generation are wearable gadgets that help combat obesity and inactivity and monitor our every waking and non-waking movement.



Dr. Mark Benden Presenting at this year's symposium

Matt Saxon, CSP from REI Employee Health Services and Risk & Business Continuity spoke on using risk management to enhance ergonomics initiatives. He defined types of risk as silos that contain, 1) Hazards, 2) Operational 3) Financial and 4) Strategic Risk. Matt gave several excellent examples of how risk to workforce members was mitigated at Lockheed and Amazon, by focusing on hazards and operational risk factors.

Following Mark was Jevon Powell, PhD and organizational consultant in Seattle, Washington, who spoke on using

## 2014 Business Meeting and Social

Please join the Puget Sound Human Factors and Ergonomics Society for our 2014 Business Meeting and Social!

This event will be held on December 10<sup>th</sup> 2014 from 6:00-9:00pm at Acme Bowl in Tukwila. The business meeting and Italian buffet will run from 6:00-7:00pm and bowling from 7:00-9:00pm. PSHFES will be providing buffet and bowling, no host bar.

This will be a chance to network and socialize with other Ergonomics, Health, and Safety professionals and a chance to learn about PSHFES leadership opportunities. Registration is open to the members only. Register to be a member at <http://www.pshfes.org>.

## Symposium Recap Cont.

change management to enhance ergonomics initiative." Jevon focused on worker resistance to change and emphasized that "top-down, one-way" communication does not work to make change happen. Instead he introduced the Head-Heart-Hands model of communication which focuses on changing resistance to commitment to new behaviors.

The next speaker was Jami Smith from the Boeing Company. Jami is the Well Being Leader at Boeing and spoke on Integrating Wellness Strategies into Ergonomics, Quality and Performance. She started her talk with a discussion of how cancer, heart disease and diabetes are driving up our healthcare costs. Mental, emotional and physical factors all combine to determine our health outcomes. Jami reviewed how deficits in each of these areas can contribute to poor performance in the workplace as well as poor health outcomes. Healthy workplace design can engage the workforce and help to keep us fit. She shared the strategies that Boeing is using such as on-site medical and health screenings, ergo specialists, health coaching and biometric screenings.

University of Washington PhD Professor of Environmental & Occupational Health Sciences, Pete Johnson, shared his advice on understanding laptop and tablet use and how to select the appropriate device. He states that currently laptop use exceeds desktop computers and that the future is looking "fabulous!" Our time on the computer amounts to mostly mouse use which is 2-4 times the amount of keyboard use. He explained that recent research on repetitive stress disorders indicates newer technology with touch-screen and small keyboards (phones, tablets) lead to overuse of the thumb: "thumb-centric."



## 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 now for the 2015 calendar year by visiting our Web site at [www.pshfes.org](http://www.pshfes.org), click "Membership," and pay online or by check.

## 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.

## Symposium Recap Cont.

Jennifer Hess, PhD rounded out the presentations with a talk on "beyond" corporate stretching programs. She discussed how stretching programs became popular in the construction industry. Research however, began to investigate the effectiveness and question why they were being done. Findings indicate that the benefits were uncertain and mostly centered around morale and teambuilding rather than effectiveness of exercise outcomes. The efficacy of stretching in both athletes and workers is unclear and may cause more harm than benefit. Jennifer suggests that a well-rounded program of mobility with emphasis on stability, strength and coordination is a better approach. In summary her suggestion for effective injury Prevention Programs is 1) Education 2) Training 3) Physical Fitness 4) Ergonomics vs. a traditional one-sided stretching program approach.

The culmination of the symposium was a panel discussion by all participants to discuss the future state of ergonomics. It was a lively discussion by all and the take home messages were that tablets were good for "snacking" but not necessarily all day use. When asked to describe the perfect future workplace the following were given as ideals: 1) Adequate time off and flexible work schedules 2) total worker health and fitness programs available 3) managers getting training in ergonomics 4) customizable work environments including age appropriate adjustments, and 5) work-life balance.

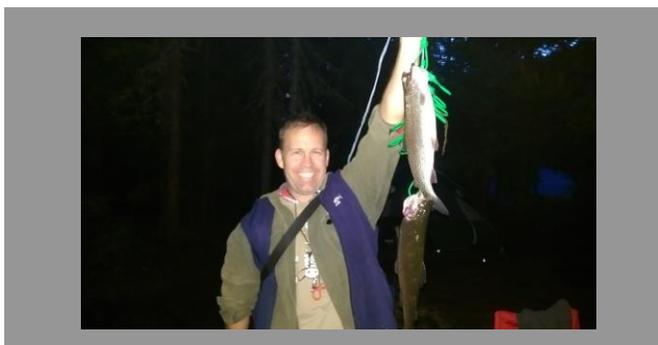
## Welcome New PSHFES Council Member!!

### Zachery Collins

#### PSHFES Events Co-Chair

Zachery Collins, Senior Ergonomics Consultant for Bureau Veritas, trained as an occupational therapist earning a degree from Idaho State University in 2002. He began his career treating injured workers in a chronic pain clinic and it did not take long to recognize that preventing an injury was much more satisfying than treating an injury for him. He has since practiced ergonomics in office settings, heavy industry, warehousing & distribution and medical & safe patient handling for multiple firms including Nordstrom, UPS, Daimler/Freightliner Trucks, Providence Health & Services, and most recently with Bureau Veritas at Boeing. In 2010 Zac became a Certified Professional Ergonomist by the Board of Certified Professional Ergonomists.

Zac moved to the Puget Sound area from Portland, Oregon in March of this year with his wife and two elementary aged kids, and a few pets too. Zac's many hobbies include playing guitar with his daughter, coaching his son's wrestling team, hiking, fishing and watching his Alma Mater's basketball team- undefeated, 10<sup>th</sup> ranked nationally Gonzaga University. Zac is excited to be in this new environment where there are so many opportunities both professionally and personally and looks forward to serving PSHFES and getting to know the ergonomics community here.





PSHFES Members at Valin Corp.



Ernesto Carcamo, L&I and Chris Korb, Schmalz

## Valin/Schmalz Tour and Barbeque

On September 17<sup>th</sup>, about 20 PSHFES members were treated to a great barbeque lunch and tour of the Valin Corp. facility in Kent, Wa. Valin is a leading distributor of automation, filtration, fluid handling, fluid power, heating and process control products & systems for a wide range of high purity and industrial applications. Valin represents brand leading manufacturers, offering comprehensive solutions to the process markets including technology, life sciences, energy, and transportation. After the lunch and Valin tour, Chris Korb, Regional Sales Manager at Schmalz, Inc demonstrated and allowed several lucky PSHFES members the opportunity to operate a couple of different models of their vacuum lifters. PSHFES extends a big thank you to both Valin and Schmalz for their hospitality. To view the Schmalz vacuum lifters, see the website: <http://us.schmalz.com/>

## Ergonomics and the Aging Workforce Dinner Meeting

On October 13, 2014, sixteen PSHFES members had the pleasure of joining Ronald W. Porter, Director of the Back School headquartered in Atlanta, GA as he spoke on the topic of "Ergonomics and the Aging Workforce".

It was brought to the attention of those attending that in the last 40 years there has been a large jump in the aging workforce; in 1985 just 18% of those 60 years old and above were employed, whereas in 2013, 70% of those 60+ years old planned to work into their 'retirement years'. These numbers are anticipated to continue rising until the year 2035 when baby boomers are no longer working. Older workers have higher incidence rates of slips, trips and falls which may be due to a variety of variables, such as obesity, hearing loss, eyesight equity, reflexes, stamina, endurance, balance and sleep patterns. Employers should consider assessing *all* workers to determine if the physical demands of the job match with the physical abilities of the person; consider 'Workplace Athletes'. If a person's abilities are not appropriately matched with job demands, fatigue and job dissatisfaction will likely become an issue, that can lead to discomfort, increased error rates, decreased productivity and increased risk for injury. This may turn into a persistent injury, and if not addressed by changing the design of the job and educating the worker on their own responsibilities, the injury will likely worsen. A 2013 Gallup Poll found that 70% of U.S. worker are unsatisfied with their job; which means a \$550 billion loss in productivity.

Vision and hearing loss are two issues that older workers may not recognize as issues, and hence may not receive appropriate medical assistance to address. For instance, if a warehouse worker is hard of hearing and does not have the appropriate hearing aids or accommodations, he/she may not hear important safety warnings. Or consider an office worker who has difficulty reading papers or the computer monitor and strains his/her eyes and neck instead of seeking appropriate eye wear or accommodations for ease of reading.

Sleep is another very important variable to consider. Older people may have more difficulty falling asleep or staying asleep through the night which can lead to an increase in fatigue. Older people take longer to recover, so they likely need more hours of sleep to get the appropriate recovery time. In addition, the more hours that are worked, the more the risk for injury increases.

Bottom line, all workers, no matter the age, should be provided with appropriate education and modification in the workplace to identify hazards and misfit job demands. Aging workers are at a higher risk of injury, but may not be aware of it.

--Tonya Pitman, MSOT/OTR/L, ErgoFit Consulting, Inc.



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## PSHFES Opportunities!!!

**Are you looking for an opportunity to get involved in the local ergonomics community?**

**Here is your chance!!!**

PSHFES is seeking candidates for the position of President Elect/Secretary. Here is your opportunity to be involved in the most robust and active HFES Local Chapter in the nation. For more information, contact Janet DeLapp at [president@pshfes.org](mailto:president@pshfes.org)

**Have you been looking for a way to give back to this organization and be more involved?**

If you are interested in becoming part of the PSHFES Council, help is needed with the upcoming symposium. We especially need someone who is willing to take on the vendor portion of this event. If you are willing to help, please contact Miriam Joffe, [symposium@pshfes.com](mailto:symposium@pshfes.com).

**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 [newsletter-editor@pshfes.org](mailto:newsletter-editor@pshfes.org).

Thank you for all your continued support and contributions!