



# Puget Sound Human Factors and Ergonomics Society

FALL NEWSLETTER

ISSUE 3

## Message from the President, Janet DeLapp



We are coming down to the close of another very successful event-filled year for PSHFES. I would like to take the opportunity to personally thank everyone who helped make this possible and to let you all know how great you are.

**Miriam Joffe**, Symposium Chair  
*Hard working, smart, and a born leader*

**Celeste McLaughlin**, Program Chair  
*Organized, efficient, and an incredible memory*

**Trevor Bryant**, Treasurer  
*Seriously funny, kind, and level headed*

**Kelly Lynch**, Communication Chair  
*Quiet, good natured, and easy to work with*

**Gary Davis**, Past President  
*Thoughtful, respectful, and knowledgeable about a lot*

**Ram Maikala**, President-Elect  
*Enthusiastic, connected, and intelligent*

But that is just the Council. There are many more who were willing to step up as committee members, speakers and other volunteers. Special thanks to:

**Committee Members:** *Cindy Williamson, Rick Goggins, Ernesto Carcamo, Patti Connolly, Tonya LaFranchi*

**Volunteers:** *Steve Russell, Makinna Brinster, Preeth Alumkal, Janet Peterson, Mike Hutchinson, Carrie Lin, Matt Copeland*

**Speakers:** *John Nance, Bruce Coulter, Julia Payne Cooper, Chris Lowe, Ninica Howard, Jeremy Fanning Janet Hyre, Todd Canterbury, David Arena, Abby Gaston*

**That is 28 people.** Thank you.

## Message from the President-Elect



I am thrilled to have the opportunity to serve PSHFES as President for the upcoming year 2017. I would like to extend my sincere gratitude to our current President, Janet DeLapp, and other executive members for welcoming me to be part of the leadership team in 2015. A few tidbits about my background:

before I moved to the Puget Sound area in October 2014, I worked as a Research Scientist for the Liberty Mutual Research Institute for Safety in Hopkinton, Massachusetts for 13 years. As part of their Center for Physical Ergonomics research team, I had an opportunity to investigate various research questions that pertained to workplace injury prevention issues, and published research findings in various peer reviewed scientific journals. However, thanks to my manager at work, Leslie Pickett of Providence Health and Services, for bringing me to the Puget Sound area, and inviting me to attend the 2014 PSHFES annual symposium that resulted in my witnessing an informative program and interacting with like-minded professionals and industry partners.

**So why did I volunteer to be on PSHFES executive committee?** For me, it is the right thing to do because I believe our chapter's success, growth, and longevity flourish through our commitment to serve. I have been a member of HFES since 1992, and was fortunate to explore a variety of services that are offered by the national and local HFES chapters wherever I have lived. For example, while finishing my doctoral studies in Canada, I came to know about the job opportunity at the Liberty Mutual Research Institute for Safety through the Career Center offered by HFES. Further, I have taken the initiative in volunteering during the annual meetings and have attended a variety of professional and scientific workshops presented by HFES to stay abreast of our field. To this effect, I remember a quote from Paul Stanley (the singer-guitarist of Kiss) "When you're in a position to have gotten so much, the gift at this point is giving back." So I wanted to give back to the Human Factors and Ergonomics profession in whatever capacity possible.

**We need you:** I believe we have many members who have exceptional credentials and are great leaders in their professions. Whatever skills you possess, I request you to bring them to PSHFES and make this chapter more vibrant, stronger and a healthier family. Therefore, I have a simple question for you: Are you interested in being part of the leadership team and help PSHFES grow? If so, let us connect, either through an email or a phone call.

**Rammohan V Maikala, PhD**

## Annual Occupational Ergonomics Symposium

On September 15, PSHFES held its annual Occupational Ergonomics Symposium at Emerald Downs in Auburn, WA. This year's format was based on short, sequential TED-type "PODs" of concentrated information. Each POD had a unique theme with interactive components.



*Symposium Chair, Miriam Joffe*

The program started with a keynote by John Nance, JD (ABC Analyst, Professional Speaker and Author) on "Re-Humanizing Human Institutions". Mr. Nance did a fantastic job in his talk explaining the decades-long culture within the medical community where the doctors or surgeons are infallible and unquestionable. Starting from the earliest parts of training, young doctors have been taught to be perfect, to always know what to do and how to handle every possible situation. As we have seen time and time again, we can only be perfect for small amounts of time and there is no way to judge when or for how long that time will be. In medicine and so many other arenas we see the mantra of "we've always done it this way" driving the way a task or job is done. Human failure is inevitable and can be extremely costly. So how do we leverage our incapability for perfection? Teamwork.

Mr. Nance told of two personal stories that were it not for that one voice, devastation would have been the result of both those flights. Luckily that one voice was heard and listened to and disaster was averted. How often does the one or even many voices go disregarded because of a system that instills and expects its leaders to be perfect, to be all knowing and in control?

Errors can occur without warning or expectation but reducing those errors can be accomplished by instilling teamwork and making a team where every member is invested and is heard.



*Keynote by John Nance*

The moderator for POD 1 was Bruce Coulter from Washington State Dept. of Labor & Industries, who introduced the topic "Change in the Office Setting" by asking the audience: How does office work look today?



*Bruce Coulter, Moderator (POD 1)*

Traditionally, work was a place you went to execute a task that you were paid to do - but what about today? When you see a person at the beach with a laptop open under their umbrella, is he/she attending a meeting or surfing the web? Is he/she corresponding with clients or sending a message to his/her mom?

Nowadays both situations can look exactly the same. But the “office” is quickly changing, becoming more mobile, more fluid. Change is upon us and we must find ways to keep the pace.

Bruce introduced two speakers, Julia Payne Cooper and Christopher Lowe who presented “Balance in the Face of Pressure: How the Physical Environment and Design Help Workers to Cope and Excel in an Ever-Changing World”.



*Julia Payne Cooper, HOK*



*Christopher Lowe, Intellifactors*

These speakers talked about how the demographics of workers is changing, millennials are entering the workplace replacing the aging workforce. Employee engagement is also changing. As many as 70% of employees are disengaged at work and 18% are actively trying to “sink the boat”. Last year there was a loss of \$450-\$550B in the U.S. connected to employee disengagement with the work they were doing. But this can be fixed. Employers need to consider the individual employee because there is no “one size fits all”. Employers need to address the flexibility of work and workers alike by considering activity-based work and an alternative workplace as well as incorporating wellness, health, and ergonomics. Quiet workspaces, group collaboration spaces and sitting-to-standing options can help to improve productivity. Research and new and

innovative techniques and products are showing us a way to increase employee engagement.

As part of “Change”, Bruce also introduced Ninica Howard who spoke on “What would George Jetson’s Job be like Today? Ninica elucidated the evolution of “work” and the impact on workplace Injuries. With a shift from a manufacturing to a services economy, the jobs of today and the future have changed and the hours, pay and benefits may be not be as stable as before. How, where and the level of control at which George Jetson, a man of the future, performs his job can now vary. Ninica discussed the differences of standard versus precarious employment within the realm of work conditions and the impact on employee health and wellness.



*Ninica Howard, SHARP*

The moderator for POD 2 was Gary Davis from the Boeing Company who introduced “Case Studies”. Part of this session, Jeremy Fanning’s task focused on “Sustaining Ergonomics at Cascades Sonoco”.



*Jeremy Fanning, Cascades Sonoco*

Jeremy discussed the role ergonomics and safety in changing the culture around the operations at his facility. Cascades Sonoco is a Paper industry that makes roll packaging and food packaging. Jeremy, with the help of Washington L&I Ergonomists, has developed an Ergonomics Program that has

completed the workers' culture of safety by introducing things such as a dynamic stretching program, insoles and safety mats, and roll movers. As a result, Cascades Sonoco has gone 4 years without accidents and 6 years with no time loss accidents. This has been accomplished by achieving an employee buy-in to the company wide-safety program. Changing to a culture of safety is an ongoing process and Cascades Sonoco is ahead of the game.



*Janet Hyre, WA State Dept. of Ecology*

Second speaker within POD 2 was Janet Hyre who presented "Benefits of Ergonomics in Large & Complex Organizations". Janet is a Safety Officer at the Washington State Department of Ecology. Ergonomics is very important part of working in a large and widely diverse organization such as the Department of Ecology. Working in such a large and complex organization can reap a great payoff when safety and ergonomics issues are solved throughout the organization. Identifying the problems that need to be fixed, and the ones that really matter, helps to facilitate solutions that are impactful. Getting workers to talk about safety, and past and possible injuries and incidents, helps others to realize that those incidences and injuries are possible which helps to better define a culture of safety. By doing this, fewer sprains and strains have occurred throughout the Department of Ecology despite the many different work settings. Ergonomics improvements have been implemented in office settings, laboratories, and for those working in environmental restoration.

Todd Canterbury of the Boeing Company was the moderator for POD 3 (Advanced Manufacturing). Part of this session, Todd introduced Gesturing Technology. As per Todd, 'gesturing' may be defined as a movement or movements of the body or hands that express an idea or meaning. Gesturing is often employed in situations where messages need to be

delivered quickly and concisely, but distance or noise prevents simple speech from being able to adequately deliver the message. Technological innovation has picked up with the introduction of the gesture mouse in 2009. Gesturing technology is advancing more as time goes by but has not been seamless in execution due to cultural differences. Even still, smart phones and other personal technologies have started using gesturing in operation, reducing finger and hand activity required to use the product. Though gesture technology may still have obstacles to cross, it is an innovation that has a multitude of possible applications.



*Todd Canterbury (Moderator)  
introducing David Arena of GoEngineer*

Part of Advanced Manufacturing session, David Arena talked "3D Printing and Ergonomics". 3D printing is a process for making parts or systems by building the entire component, layer by layer. Traditionally, components are constructed through elimination or a process of cutting or milling where a large quantity of the raw material is shaped or cut down to the desired size and design. This process may be timely and laborious. 3D printing uses an additive process where plastics and metals, even concrete are used to build the end product layer by layer from a computer model, producing intricate products quickly and accurately for a variety of settings from medical to industrial applications.

In the final presentation, Abigail Gaston of the Boeing Company talked about "Experience Exoskeletons". Exoskeletons are found throughout nature and those animals have incredible strength and endurance. But what about humans? Exoskeleton technology has been around since 1890 with springs designed to help with walking, running, and jumping. Though this technology was mostly theoretical, it sparked future generations to realize a more realistic design.



*Abigail Gaston, The Boeing Company*

In 1960 the U.S. military built prototypes that could make lifting 250 pounds feel like lifting 10 pounds. Later in the 60's the idea became more familiar through cultural iconic entertainment like Ironman and Starship Troopers and the Mobile Infantry Power Suits. Exoskeletons could have many uses from military to industrial, being used for manual materials handling, increasing human mobility and endurance, and in industrial and trauma/catastrophe response.

**Contributed by:** Matt Copeland

Importance of volunteering and serving on the executive committee of PSHFES was stressed by both Miriam Joffe and Ram Maikala. During their presentation on "PSHFES of the Future", Miriam also asked other executive members to speak about their motivation, service, and time commitment that led to their becoming part of the leadership team.

Part of the symposium, our Outreach volunteers, Tonya LaFranchi, Patti Connolly, and Ram Maikala updated their effort in assisting Skills, Inc., Auburn, WA in evaluating the company's ergonomics and safety issues. Their work is still in progress, and will be updated in the New Year.



*Tonya LaFranchi, ErgoFit, Inc.*



*Patti Connolly, Puget Sound Energy*

### Ergonomist of the Year



*Gary Davis, The Boeing Company*

Gary Davis was honored with the 13th Annual PSHFES Ergonomics Professional of the Year Award for his contributions to PSHFES and industry, including PSHFES President, Treasurer, and Mentor for new council members, for more than a decade. Congratulations Gary and thank you for all your contributions to the HFES community.

Overall, the symposium was well attended by a large group of members. During periodic breaks, attendees interacted with exhibitors and sponsors as well as with speakers, networking and using their time productively. However, the biggest surprise of the evening was the yummy cupcakes from Corina Bakery in Tacoma, WA. In summary, the symposium covered broad, diverse and informative topics.

**Contributed by:** Ram Maikala

## Symposium Sponsors/Exhibitors



Also see **Sponsors Thank You** on **Page 10**

## 2016 Events Summary

### C.C. Filson Co.

On a sunny Thursday (April 14), during the first heat wave of spring, 15 PSHFES Members gathered quietly at the entrance of Filson's flagship retail store in SoDo. There was chatting about parking, the rarity of the sun, and plans for weekends amongst colleagues who have not seen each other since the last gathering. Standing around a log doubling as a product display, the view up and to the right was inviting. There was a grand staircase, lofty windows, and gorgeous wood grain everywhere anyone looked. Our guides Brian and Nick introduced themselves and shared a bit about the legendary products (Made In The USA), history, and arc of the C.C. Filson, Co.



*PSHFES Members and Tour Guides in the retail space*

The factory production space was the first floor and a small footprint - perhaps 5000sqft- under what we found out later to be the retail space. But it was tidy and well appointed. Members got to see multiple production lines in operation toward the typical daily total of about 300-400 pieces of luggage or bags. The sewing machines in use were impressive. They could punch that needle through  $\frac{1}{4}$ " of tanned leather with staccatoed authority. In the product development area individual pieces were being crafted for the first time to test as potential products. Khoa, the production manager, graciously fielded some not so easy questions as well as a few suggestions from the gaggle of ergonomists. Brian and Nick relayed how Filson endeavors to bring work back from overseas to either this facility, another here in Seattle or a third in Twin Falls Idaho. Our walking loop around the luggage production floor found us back at the log doubling as a display.



*Ergonomic Bottle Opener*

The grand staircase leading up to the retail space wraps around a centerpiece totem carving. At the top of the stairs the good folks in the repair shop were taking bags under warranty and returning them to service. Some of the repairs were turned into custom one-of-a-kind bags. As the mob of ergonomists filtered into then out of the retail space, a comment was heard about the robustness and quality being put out by the employees just under our very feet.

**Contributed by:** Zachary Collins

### Chair Fit or Misfit

Our May event held at the Copa Contract Studio in Seattle was an overwhelming success! With a near full house of people from many different backgrounds all contributing to a wonderful dialogue. Paul Gajewski from Copa Contract truly set the bar high for what will be talked about in the months to come as an event that should not have been missed.



*Trevor Bryant introducing Paul Gajewski*

Paul set the evening off right with setting his George Town studio up for a wonderful viewing platform to see the latest trends in office seating. There was well over 120 different types and styles of chairs for guests to try during the course of the evening.



*Members enjoying great food and wine*

We started the evening off with a wonderful social hour where we feasted upon gourmet shish-kabobs adorned with artichokes, salami, tomatoes, cheese and cucumbers along with delectable dipping sauces. Who could forget desert which was wonderful bite sized cakes and individual strawberry topped tarts (yum!). All of this was paired with chilled white or red wine. Once we all had a chance to visit with old friends and make new ones we sat down for a wonderful talk by our featured speaker of the evening.



*Alison Heller-Ono, Worksite International, Inc.*

Paul had graciously arranged for Alison Heller-Ono who is a renowned speaker on ergonomic topics to

provide a presentation called Chair Fit or Misfit. Alison's background includes a degree as a Physical Therapist with many different credentials including: Certified Industrial Ergonomist, Certified Professional Ergonomist, Certified Disability Analyst, Certified Professional Disability Manager, and a Certified Management Consultant. Alison has lectured at several national and international venues which has made her company, Worksite International Inc., a go to resource for ergonomic consultation.

Throughout the Chair Fit or Misfit presentation Alison encouraged audience participation and discussion. With so many leaders in their industry present we all had the opportunity to learn from the best! About half way through the presentation our own Janet Peterson took the stage with Alison as they worked through an actual chair fitting. Janet herself is an accomplished ergonomic expert and was a wonderful complement to our featured speaker.

Although there were too many to share in a short review there were two "take aways" that stood out for me personally. The first "take away" was the idea of establishing a realistic life span of a chair. Much like any other equipment at work a chair has a finite period of time it can provide the necessary support to prevent injury. So many times we fail to recognize when a chair is "done" and thus increase the likelihood of an injury to occur. The second take away was the benefit of purchasing a quality chair (like the many that were on display at Paul's studio) which has a warranty behind it. Many times an employer may be hesitant to purchase a more expensive chair due to budgetary issues. As Alison explained during her talk, these more expensive chairs often have good warranties that aren't used. The warranties can be used to prolong the life and thus reduce the overall cost of the purchase. In the end both parties win, the worker has a better chair and the employer has a quality piece of equipment, that when amortized, is less costly than a cheap chair.

As our evening came to a close we all left well-nourished and with exciting new ideas to bring to our next chair fitting. In the world of ergonomics it is vitally important to have great resources. Paul Gajewski and Alison Heller-Ono are great tools to have in your resource box.

**Contributed by:** Trevor Bryant

#### GET INVOLVED

FOR MORE INFORMATION CONTACT: JANET DELAPP  
PRESIDENT@PSHFES.ORG

## 2016-2017 CALENDAR FOR LOCAL, NATIONAL AND INTERNATIONAL EVENTS

<b>November 28-December 1</b>	4th SEANES Ergonomics Conference, Bandung, Indonesia
<b>December 5 - 7</b>	10th International conference on Nursing and Healthcare, Irving, TX
<b>December 8-11</b>	International Conference on Humanizing Work and Work Environment, Jalandhar, Punjab, India
<b>January 5-6</b>	Annual Symposium on Environmental Occupational and Public Health, Semiahmoo Resort, Blaine, WA
<b>March 5-8</b>	International Symposium on Human Factors and Ergonomics in Health Care, New Orleans, LA
<b>March 9-10</b>	19th International Conference on Occupational Health and Safety, Miami, FL
<b>March 27-30</b>	Applied Ergonomics Conference, Orlando, FL
<b>June 1-2</b>	XXVIII Annual International Occupational Ergonomics and Safety Conference, Seattle, WA
<b>June 19-22</b>	ASSE Professional Development Conference & Exposition, Denver, CO
<b>September 3-6</b>	XXI World Congress on Safety & Health at Work, Singapore
<b>October 9–13</b>	61st Annual Human Factors and Ergonomics Society Conference, Austin, TX

### Please join us for our 2016 Business Meeting and Social

**Date and Time: December 7 (6:00-9:00 pm)**

**Venue: Acme Bowl, 100 Andover Park West, Tukwila, WA 98188**

**Business Meeting and Italian Buffet from 6:00-7:00 pm**

**&**

**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 currently open to members only!**

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

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## The PSHFES Council

<b>President</b>	Janet DeLapp
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<b>Past President</b>	Gary Davis
<b>Treasurer</b>	Trevor Bryant
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<b>Symposium Chair</b>	Miriam Joffe
<b>Outreach Chair</b>	Rammohan Maikala
<b>Committee Members</b>	Janet Peterson Cindy Williamson Rick Goggins Ernesto Carcamo Trevor Bryant

## PSHFES MISSION STATEMENT

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

