

# Puget Sound Human Factors and Ergonomics Society

ISSUE 1, 2021 FIRST QUARTER

#### A Message from the President

Happy New Year, PSHFES community! My name is Niki (or Ninica, for my mother's benefit) Howard and I'm the new president of PSHFES. As a brief introduction, I have been an ergonomist and researcher with the SHARP Program, in the Department of Labor and Industries, for the past 23 years. My degree is in Work Environment from the University of Massachusetts Lowell. I have served on the executive council for the past three years as the symposium chair.

So this is my first president message. Where to start? At this time last year, we had no idea just how much our lives would change in a short period of time, or just how much our jobs would change. We are dealing with so much right now, the pandemic and its mounting infections and deaths, racial injustice, massive job losses. All these have and will probably continue to affect how we do our jobs for some time. So our challenge, as it has always been, as occupational health and safety professionals, is to use our expertise and knowledge to address the new and emerging issues that have arisen, all the while continuing to do the great work we were already doing. So simple, right?

But here is what I know. I know that we are a brilliant and resourceful group and that we are up for the challenge. Together, we share, we commiserate, we problem solve and support each other. There is no better or strong community.

I am truly honored to be the new president of this society. I'm looking forward to serving in this role and supporting the PSHFES community as we strive to help ensure safe and healthful working environments.



Niki Howard, MS

#### A Message from the Outgoing President

It has been a challenging year for everyone, including PSHFES. As we all find ourselves in these unique and challenging times, many of us have had to make significant changes, including PSHFES. Due to Covid 19, PSHFES hosted its first-ever virtual symposium, which was well attended (see the symposium chair's report on page 2). Special thanks to Ninica (Niki) Howard and Carrie Lin for working so hard to ensure the symposium went off without a hitch.

Special gratitude to the five sponsors (page 5), who participated in the symposium despite the challenges of showcasing their products on a virtual platform. Thanks to Gus Arroyo and Kimo Hudson for taking care of each sponsor's needs. Also, thanks to the entire PSHFES executive committee for working tirelessly throughout the year to uphold PSHFES's mission and vision.

It has been an excellent opportunity for me to serve all of you for the last two years. However, it is time for me to pass the torch to our President-Elect, Niki Howard, who will be taking the reigns as President in 2021. Niki is especially capable of leading the continued great work of PSHFES, being the symposium chair for two years running. I look forward to seeing the continued growth and outreach of PSHFES in Niki's capable hands. With the New Year, we will see some new members as part of the council.

I would like to take this opportunity to thank the outgoing council members, Trevor Bryant, Lynnda Dee English, Gus Arroyo, and Ram Maikala for volunteering their time and expertise.



#### **Summary - 2020 Virtual Symposium**

This year was a new experience for all involved in the PSHFES Annual Symposium as we went virtual. Despite the learning curve involved with going virtual, the symposium was a great success.

Eighty-eight (88) people attended the symposium. And though I'm sure everyone missed the face-to-face interactions and the opportunity to network, the virtual symposium did provide the opportunity for those outside our region to participate. Besides Washington State, registrants came from California, Texas, Oregon, Massachusetts, Minnesota, and North Carolina.

Our line-up of speakers was exceptional, presenting from different parts of the country. Our six speakers for this year's symposium offered presentations that were diverse and topical for this time. Dr. Susan Hallbeck, President of the national Human Factors and Ergonomics Society, opened up the symposium.

Gary Davis, from the Boeing Company, presented a follow-up to his presentation at the 2018 symposium describing strategies for automation-proofing your job. Dr. Richard Holden, from Indiana University School of Medicine, described sociotechnical work systems and introduced an update to the SEIPS systems model. Dr. Geeta Lal, an endocrine surgeon from the University of Iowa, provided a unique ergonomic perspective of work-related musculoskeletal disorders among surgeons.

Dr. Sean Gallagher of Auburn University described the contribution of fatigue in the development of musculoskeletal disorders. If you're thinking about buying VR goggles during this holiday season, Dr. Dan Odell, a researcher from Google, provided an overview of the main challenges in designing virtual reality hardware.

Our last speaker of the day was Dr. Alan Hedge, professor emeritus from Cornell University. Dr. Hedge offered practical guidance for organizing the home office ergonomically.

As is our tradition, the Ergonomics Professional of the Year was presented during the symposium. The 2020 recipient is Deborah Reed of ErgoFit Consulting.

#### **Ergonomics Professional of the Year 2020**

#### Deborah Read, MOTR/L



Deborah Read of ErgoFit®
Consulting, Inc. was
honored with the 17th
Annual PSHFES Ergonomics
Professional of the Year
Award. In addition to being
the current Administrator/
Facilitator of the Pacific
Northwest Ergo
Roundtable, Deborah has
previously served as
President of the PSHFES.

Congratulations Deborah and thank you for all your contributions to the PSHFES community!

Going virtual proved a challenge of providing symposium participants the opportunity to interact with vendors. For this year's symposium, three companies gave short presentations about their services and products. These companies were Apex Companies, LLC; LifeBooster, Inc.; and Impacto Protective Products, Inc. These companies, along with the Boeing Company, were platinum sponsors of our symposium. Grand Stands was a gold level sponsor, and Kinesis Corporation was a silverlevel sponsor. PSHFES would like to extend our gratitude to these companies for their support of our society. Several of these companies have been supporting our society for many years, and their generosity is truly appreciated.

The PSHFES executive committee had a huge undertaking of putting together a virtual event. From identifying speakers to choosing the virtual meeting platform to use, we faced the challenges through great collaboration and a lot of humor. A huge thanks go to the symposium organizing committee for the time and effort they devoted to this event. The committee included Niki Howard, the symposium chair; Carrie Lin, the registration and communication chair; and Gus Arroyo and Kimo Hudson, the sponsors' co-chairs.

Finally, we would like to thank everyone who attended this year's symposium. It certainly a shift from the normal (but what wasn't in 2020). The annual symposium, virtual or otherwise, was a great success because of your participation. From our feedback survey, almost a third of the respondents indicated that a reason for attending the symposium was to support PSHFES. And for that, we thank you! Without your support, our society wouldn't be the standout that it is.

Planning for the 2021 symposium has already begun. This will be a virtual symposium. But with the lessons we've learned and the feedback we received from participants, this year's symposium will be another great one. We hope to "see" everyone at the 2021 Annual PSHFES Symposium!

Contributed By: Niki Howard, Symposium Chair



Our Outgoing President, Randy Pickett respecting the COVID-Protocol and presenting the 2020 **Ergonomist Award to Deborah** Read

## 2020 Symposium Speakers













Gary **Davis**  Richard Holden

Geeta Indiana University University of Iowa

Sean Gallagher **Auburn University** 

Dan Odell Google Inc.

Hedge Cornell University

#### **SPOTLIGHT**

#### **2020 HFES Distinguished Fellows**

We are proud to let you know that two of our members (past and present) were bestowed with the highest honor of Fellow by the Human Factors and Ergonomics Society (HFES). As per our national society website, election to Fellow is an honor conferred by distinguished colleagues to recognize outstanding achievement, consistently superior professional performance, exceptional contributions, personal service to the Society, and other meritorious accomplishments.

Dan Odell, PhD, CPE, is no stranger to the Puget Sound region. During his time with Microsoft, Dan was one of the chapter's past Presidents (2009). He is currently the Human Factors Lead for Google's Daydream Virtual and Augmented Reality team.

At Google, Dan blends ergonomics, UX, mechanical engineering, and Human-Computer Interaction (HCI) to create meaningful new experiences that are desirable, effective, and make people smile. The Daydream View is an example of his work, called "the most comfortable VR headset ever created" by Digital Trends. Dan is internationally known for the creation of the "ergonomist approved" line of products at Microsoft. Dan earned his Ph.D. in Mechanical Engineering from UC Berkeley.

**Stephen Bao, PhD, CPE,** is a highly sought after conference speaker at local, national and international events. Currently, Stephen is a senior ergonomist at the SHARP Program of Washington State's Department of Labor and Industries. He is also an affiliated professor in the Department of Environmental and Occupational Health at the University of Washington.

Stephen is internationally known for his research on examining the relationships between workplace factors and musculoskeletal disorders, development of job assessment tools, and the evaluation of workplace ergonomics interventions. Stephen graduated with a Doctoral degree from Luleå University of Technology, Sweden.

Stephen has the unique distinction of being the only member who has been the PSHFES Ergonomist of the Year (2009) and an HFES Fellow.

Below images are from the HFES Annual Conference, where awards were presented 'virtually' to Dan and Stephen.

Contributed By: Ram Maikala, Newsletter Editor (2015-2020)

#### Dan Odell, PhD, CPE

- Primary Professional Specialty: Ergonomic product research and design
- · Significant contributions to HFE
  - Ergonomic keyboards and mice (Microsoft)
  - · Emerging output and input tech for virtual reality
  - · Form factors and effects on posture and muscle load
- · Personal Service to HFES
  - · Regional chapter offices
  - · Advisor, HFES student chapters
  - Officer, HFES Technical Groups and member of several HFES Committees



#### Stephen Bao, PhD, CPE

- Washington State Department of Labor & Industries
- Primary Professional Specialty: Research & Development
- · Significant contributions to HFE

  - Led in establishing ergonomics in China
     Led research in work-related musculoskeletal disorders
  - Design of hand-held power tools to minimize HAV
     Integration of lean manufacturing and ergonomics
- Personal Service to HFES

National and state ergonomics policy leadership Senior Editor: Ergonomics in Design ErgoX Advisory Board and other HFES committees ANNUAL MEETING

HFES 64TH INTERNATIONAL ANNUAL MEETING

### THANK YOU, 2020 ANNUAL SYMPOSIUM SPONSORS











**GOLD** 



**SILVER** 



## The PSHFES Executive Council (2021)

President Niki Howard, SHARP, Dept. of L and I

Immediate-Past President Randy Pickett, Safran Cabin

Treasurer Carrie Lin, The Boeing Company

Communications Chair Kelly Lynch, The Boeing Company

Newsletter Editor Jim Lin, SHARP, Dept. of L and I

**Program Events Chair** Vacant

Outreach Chair Miriam Joffe, The Boeing Company

**Director** Gary Davis, The Boeing Company

#### **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.







Visit: <a href="https://www.hcs2021.org/">https://www.hcs2021.org/</a> for more details