Washington State University's
Sleep and Performance Research Center
presents:

FATIGUE RISK MANAGEMENT INDUSTRY DAY

SEPTEMBER 8–9, 2019 | WSU SPOKANE
SPOKANE, WA, USA

sponsored by:

PULSAR INFORMATICS

Elson S. Floyd College of Medicine
WASHINGTON STATE UNIVERSITY

IS FATIGUE IMPACTING YOUR WORKPLACE?

Hans Van Dongen, PhD

Director, Sleep and Performance Research Center
Professor, Elson S. Floyd College of Medicine
Washington State University Spokane

Kimberly Honn, PhD

Core Faculty, Sleep and Performance Research Center
Assistant Research Professor, Elson S. Floyd College of Medicine
Washington State University Spokane

Welcome to the Fatigue Risk Management Industry Day at Washington State University. Fatigue is inevitable in a world reliant on 24/7 operations. Fatigue cannot be completely eliminated in the modern workforce, but the risk associated with fatigue can be managed. You will hear from international scientists and industry experts on the latest developments in the science of fatigue and how to mitigate its impact on your workplace. Thank you for joining us!

Hans Van Dongen & Kimberly Honn
Sleep and Performance Research Center
Washington State University
www.wsu.edu/sprc

KEYNOTE SPEAKER

Professor Drew Dawson, BA(Hons)Psych, PhD

Director, Appleton Institute
CQUniversity – Adelaide Campus

MANAGING FATIGUE, NOT JUST HOURS . . .

Professor Drew Dawson is nationally and internationally recognized for his contributions to the scientific community and to industry in the areas of sleep and fatigue research, organizational psychology and human behavior, industrial relations negotiations, and the human implications of hours of work.

Professor Dawson has worked extensively with the aviation, manufacturing, retail, entertainment, transportation, and mining sectors in Australia, and is a world-renowned expert on fatigue in the workplace. He has instigated fatigue management programs, developed shift work and fatigue policy, undertaken pre-employment assessments, and facilitated shift work education sessions. Professor Dawson also regularly presents at national and international conferences and has provided expert witness testimony in many fatigue-related court cases.

As director of the internationally recognized Appleton Institute, he oversees basic and applied research into the effects of shift work and sleep loss on the health and well-being of employees. Basic research programs are focused on the interactions of the sleep and circadian systems, the effects of sleep loss, and the ways people protect themselves against fatigue-related errors.

SCHEDULE

SUNDAY, SEPTEMBER 8, 2019	
NURSING BUILDING COURTYARD	
4:30 – 6:00 p.m.	**Welcome Reception**

MONDAY, SEPTEMBER 9, 2019	
CENTER FOR CLINICAL RESEARCH AND SIMULATION	
8:00 – 9:00 a.m.	**Breakfast**
9:00 – 10:00 a.m.	**Keynote** Drew Dawson Managing Fatigue, Not Just Hours . . .
10:00 – 10:40 a.m.	**Plenary Session** Daniel Mollicone A Comprehensive Approach to Fatigue Risk Management in Trucking Operations
10:40 – 11:00 a.m.	**Coffee Break**
11:00 a.m. – 12:30 p.m.	**Breakout Sessions 1 + 2** See page 6-7
12:30 – 1:30 p.m.	**Lunch** With Sleep and Performance Research Center lab tours
1:30 – 3:00 p.m.	**Breakout Sessions 3 + 4** See page 8-9
3:00 – 3:15 p.m.	**Closing**
3:15 p.m.	Transportation available to Coeur d'Alene for registered participants of the Shiftwork2019 meeting

GENERAL INFORMATION

WEBSITE
www.go.wsu.edu/industryday

CONTACT INFO
email: industry.day@wsu.edu
phone: +1 (509) 496-1639

SUNDAY WELCOME RECEPTION
Time: 4:30 – 6:00 p.m.
Location:
WSU Health Sciences Spokane
Nursing Building Courtyard
103 East Spokane Falls Boulevard
Spokane, WA 99202

MONDAY INDUSTRY DAY PROGRAM
Time: 8:00 a.m. – 3:15 p.m.
Location:
WSU Health Sciences Spokane
Center for Clinical Research and Simulation
412 East Spokane Falls Boulevard
Spokane, WA 99202

PARKING
A complimentary parking pass is provided for the event, which must be displayed in your vehicle window. See page 10-11 for a campus map with parking locations. At any of the campus parking lot pay stations, enter code **1296** for your complimentary parking pass for the event.

REGISTRATION
The registration desk will be open Sunday at the Nursing Building Courtyard from 4:15 – 6:00 p.m. and Monday at the Center for Clinical Research and Simulation from 7:45 a.m. – 11:00 a.m. Check in at the desk on either day to receive your badge. Admission to the welcome reception and to all meals and sessions is limited to registered attendees.

WI-FI
Connect to “Campus Visitor” and open your browser. You will be prompted to enter a Network Login. Find “Need an account? Click here” to set up a visitor account with your name and email address. Once you accept the terms of use and register, you will be given an account username and guest password, which can be used to login on multiple devices for the next 24 hours.

TRAVEL & ACCOMMODATIONS
There are several hotels within walking distance of the event. Participants are expected to book their own hotel rooms and make their own transportation arrangements.

Participants of the Shiftwork2019 meeting in Coeur d’Alene will be contacted about local transportation arrangements separately.

BREAKOUT SESSION #1

11:00 a.m. – 12:30 p.m.
Shift Work, Sleep, and Well-Being

MANAGEMENT OF SLEEP AND FATIGUE IN UNSCHEDULED OPERATIONS

Dr. Adam Fletcher is recognized globally as an expert on worker sleep, alertness, and risk-based fatigue management. He has held positions as a research scientist in Australia and for the US Army in Washington, D.C. With his team at Integrated Safety Support, Adam consults globally to government and industry organizations on how to practically improve safety, productivity and compliance in 24-hour work environments. He is also currently an Adjunct Professor at the University of South Australia.

Adam Fletcher
CEO & Principal Consultant, Integrated Safety Support

Associate Professor Jill Dorrian holds a PhD in sleep and chronobiology research, and a Master of Biostatistics degree. Her previous fellowship at the University of Pennsylvania involved designing and conducting investigations for the National Space Biomedical Research Institute (a research arm of NASA) assessing approaches for measuring stress in astronauts. Jill is Co-Director of the Behaviour-Brain-Body Research Centre (BBB) and Editor-in-Chief of a new peer-reviewed online journal, "Eat, Sleep, Work."

Jill Dorrian
Associate Professor, University of South Australia

RESOURCES AND EDUCATIONAL TOOLS TO IMPROVE SLEEP AND WELL-BEING OF SHIFT WORKERS

Dr. Imelda Wong is a Senior Service Fellow at the National Institute for Occupational Safety and Health, and is a co-leader of the Working Hours, Sleep and Fatigue workgroup. She has served as a Director for the Working Time Society since 2011. Dr. Wong received her Doctorate in Occupational Hygiene and Epidemiology from the University of British Columbia. Her primary research focus is on the adverse health and safety outcomes associated with shift work. Her past studies include determining the cost in lost time from work due to work injury associated with shift work, and developing novel, non-invasive methods of studying heart disease risk among this group of workers. She has recently co-chaired a series of consensus papers from the Working Time Society which provide key guidance statements on effective strategies to mitigate adverse outcomes associated with non-standard hours. Her current projects include a study of new technologies to detect fatigued driving among oil and gas workers, and another which examines the effectiveness of noise control strategies on improving worker sleep, health and well-being.

Imelda Wong
Member, Board of Directors, Working Time Society

BREAKOUT SESSION #2

11:00 a.m. – 12:30 p.m.
Fatigue Risk Management: Strategical and Tactical Implementation

PREDICTIVE, PROACTIVE, AND REACTIVE FATIGUE RISK MANAGEMENT IN AVIATION

Tomas Klemets has, since the late nineties, specialized in airline crew management, working with a large number of airline operators world-wide helping them to find the optimal blend of crew productivity, real costs, quality of life aspects, roster stability and flight safety. Tomas leads the crew scheduling safety work at Jeppesen and has presented results and findings at a large number of safety conferences and in safety journals over the last decade and is the leading Jeppesen fatigue risk management expert.

Tomas Klemets
Head of Scheduling Safety, Jeppesen

MANAGING SHIFT WORK THROUGH ACTIVE WORKER PARTICIPATION: "NUDGING" APPROACHES WORK SUCCESSFULLY

Hans Spanjers obtained a Master's degree in labor and organization psychology from the University of Antwerp. Currently, he works as the CEO of the Duurzaam Inzetbaarheid Centrum (Centre for Sustainability) in the Netherlands. Hans is an expert in executing programs and projects for employers and employees that work in shifts. Besides his work for the Duurzaam Inzetbaarheid Centrum, Hans is the author of two books on the subject. The first is a recipe book with dishes designed for shiftworkers. The second is a broader manual which delves into topics such as sleep, food, exercise and social context. Hans' specialty is translating scientific findings into practical advice, based on the principles of positive psychology. Hans believes that "nudging" employees in the direction of better behaviors and lifestyles is oftentimes much more successful than other approaches.

Hans Spanjers
CEO, Duurzaam Inzetbaarheid Centrum (Centre for Sustainability in the Netherlands)

BREAKOUT SESSION #3

1:30 – 3:00 p.m.
PVT: The Gold Standard Measure of Alertness

WHAT DOES THE PSYCHOMOTOR VIGILANCE TEST (PVT) MEASURE AND WHY IS IT IMPORTANT?

David Dinges, MS, MA, PhD is a tenured Professor at the University of Pennsylvania School of Medicine in Philadelphia, and an internationally renowned neurobehavioral scientist with 40 years of experience conducting research on human performance capability relative to sleep deprivation, work hours, and stressful conditions, in the areas of health care, military operations, space flight, and transportation. He invented and validated both the 10-minute Psychomotor Vigilance Test (PVT) and the 3-minute brief PVT (i.e., PVT-B). He derives no income from these measures. His extensive body of published research has been supported over the past 40 years by U.S. federal agencies including NASA, NIH, DOT and DoD.

David Dinges
Professor and Director, Unit for Experimental Psychiatry, Perelman School of Medicine, University of Pennsylvania

USE OF THE PSYCHOMOTOR VIGILANCE TEST IN FITNESS FOR WORK ASSESSMENTS

Dr. Daniel Mollicone is Chief Scientist and CEO of Pulsar Informatics. Dr. Mollicone holds degrees in Engineering Physics and Biomedical Engineering. Dr. Mollicone has played an active role in the development of the field of fatigue risk management. He has acted as principal investigator on research funded by the US Department of Transportation (DOT), US Federal Aviation Administration (FAA), US Department of Defense (DoD), National Aeronautics and Space Administration (NASA), Civil Aviation Safety Authority of Australia (CASA), Natural Sciences and Engineering Research Council of Canada (NSERC) and Transport Canada related to assessment of fitness for duty and fatigue risk management.

Daniel Mollicone
CEO, Pulsar Informatics

BREAKOUT SESSION #4

1:30 – 3:00 p.m.
Helping Nursing and Other Health Care Workers Doing Shift Work

COMBINING OUR EXPERTISE FOR BETTER SOLUTIONS: THE SAFER NURSING 24/7 PROJECT

Dr. Philippa Gander is a Research Professor at the Sleep/Wake Research Centre at Massey University. Her original research training was in chronobiology (PhD University of Auckland, New Zealand, 1980). After a Senior Fulbright Fellowship at Harvard Medical School (1980-1982), she joined the Fatigue Countermeasures Program at NASA, returning to New Zealand to establish the Sleep/Wake Research Centre in 1998. Dr. Gander has a particular interest in integrating scientific knowledge with sector expertise to improve the management of sleep, fatigue and shift work in a range of industries including healthcare, and has received multiple national and international awards for her work in this area. Her presentation will cover findings from a recent national survey of New Zealand nurses' work patterns, a new endorsed National Code of Practice for managing fatigue and shift work for hospital-based nursing, and implementation trials that are now being developed.

Philippa Gander
Research Professor, Sleep/Wake Research Centre, Massey University

NAPPING FOR SHIFT-WORKING NURSES: SCIENCE FICTION OR FUTURE REALITY?

Dr. Wilson is a registered nurse and assistant professor at the Washington State university College of Nursing. She has held shiftwork positions in hospital settings and now conducts research with healthcare workers in a quest to find solutions to the negative effects of sleep disruption. She is core faculty with the Washington State University Sleep and Performance Research Center and is currently funded by the National Institutes of Health's Center for Complementary and Integrative Heath studying the relationship of pain and sleep in Veterans, and by the Agency for Healthcare Research and Quality (AHRQ) studying the impact of shift-accumulated fatigue on patient care among 12-hour day and night shift-working nurses. Her research teams have published studies comparing nurses' performance and sleepiness during 12-hour day and night shifts and have discovered relationships between workplace breaks and sleepiness. Dr. Wilson will share results from several recent studies and offer tips for promoting a more rested healthcare workforce.

Marian Wilson
Assistant Professor, College of Nursing, Washington State University

WASHINGTON STATE UNIVERSITY
HEALTH SCIENCES SPOKANE

412 E Spokane Falls Blvd.
Spokane, WA 99202-9131

PHONE NUMBERS
Campus Safety & Security...509-358-7995
Parking.....509-368-6999
WSU Spokane.....509-358-7500
EWU Spokane.....509-828-1394

- Campus Safety & Security
- Accessible parking
- Bus stop
- Electric car charging station
- Metered parking (2-hour parking)
- Pay Stations/Pay By Plate
- Motorcycle parking
- Café
- Campus Safety phones
- Free parking (1 hr limit)
- Other buildings around campus
- Trails and walking paths

EXHIBITOR

Integrated Safety Support
ENHANCING FUTURE WORKFORCES TODAY

Integrated Safety Support was founded in 2006 to advise government and industry clients on how to better manage occupational sleep, alertness and fatigue issues in their workforces. The company was founded by Dr. Adam Fletcher, who has worked globally as a research scientist and industry consultant for almost 25 years. Integrated Safety Support provides digital training resources, worker fatigue apps, risk assessment tools, contract research and strategic advice in all 24-hour industry settings.

FATIGUE RISK MANAGEMENT
INDUSTRY DAY

EXHIBITOR

PULSAR INFORMATICS

Pulsar Informatics makes products to help safety management teams identify fatigue risk in operations so that they can make the necessary adjustments to reduce risk, improve safety, and optimize performance.

Pulsar Informatics is a technology company founded in 2001 by Dr. Daniel Mollicone, who serves as Chief Executive Officer and Chief Scientist. Over the past two decades, we have performed numerous fatigue research studies for the Navy, NASA, Department of Transportation, and other government agencies. These R&D projects were conducted in many locations around the world including the polar regions, under the ocean and on the International Space Station. Our experience from this seminal work contributed to the development of our fatigue risk management technologies, which today are being used across multiple industries. Our tools help safety management teams identify fatigue risk in operations so that they can make the necessary adjustments to reduce risk, improve safety, and optimize performance.

The Sleep and Performance Research Center (SPRC) at Washington State University is a coalition of basic and applied research laboratories aiming to understand the neurobiology of sleep and sleep loss, and the effect of sleep loss on metabolism, immune function, cognitive performance and behavior, all with the aim of ensuring adequate, recuperative sleep and/or mitigating the effects of inadequate sleep.

Elson S. Floyd
College of Medicine

Washington State University's Elson S. Floyd College of Medicine is Washington's community-based medical school. The College of Medicine seeks to expand medical education and health care access in communities across the state through inter-professional collaboration. The college is home to the departments of Biomedical Sciences, Medical Education and Clinical Siences, Speech and Hearing Sciences, Health Policy and Administration, and Nutrition and Exercise Physiology.