



*Oregon Institute of
Occupational
Health Sciences*

Annual Update 2019

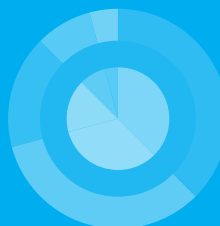
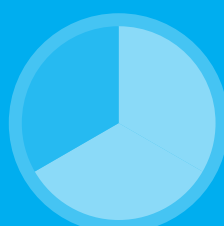
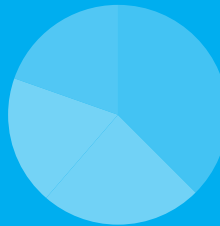
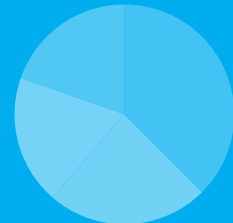
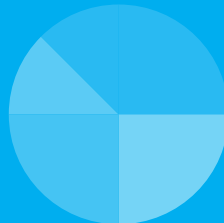
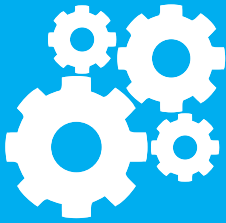


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About Us



Oregon Institute of Occupational Health Sciences is dedicated to improving the health and safety of the workforce. Since 1988 we have stood firmly at the intersection of the workplace and well-being. We are an internationally recognized team of scientists, and our work stretches from molecular-level research, to clinical studies, to programs in the workplace.

We are improving the lives of workers through biomedical and occupational research. With essential base funding through Oregon's Workers' Compensation system, we leverage this investment to obtain highly competitive federal grants that bring in more than twice the dollars provided by the Oregon base funding, substantially magnifying our impact. While our research receives national and international acclaim, our goal is to create safe, healthy workplaces right here in Oregon. Our [Advisory Committee](#) ensures stakeholder input to the direction of the Institute and the use of its state funds. Learn more about our accomplishments and funding from downloadable [Annual Reports](#) available on our [website](#).

A Message from our Director



2019 has been a significant year for The Oregon Institute of Occupational Health Sciences and it gives me great pleasure to present to you our brief Annual Update.

This Annual Update can be viewed as a timely interim report, and this information will also be included in our comprehensive Biennial Report which will encompass 2019-2020, and which will be published in Spring 2021. I also note that in this Annual Update, the financial statements cover 18 months rather than 12 months, as we feel it is more logical in future to re-align our reporting to the calendar year instead of the financial year at Oregon Health & Science University.

The Annual Update lists a number of our successes. Two of the principal metrics by which we judge our science are the competitive grants that we receive to support specific research projects, and our peer-reviewed publications. For 2019, I am very pleased to report that among 18 faculty members we have 41 ongoing grant awards, with over 60% of these coming from highly competitive federal funds such as the National Institutes of Health and the U.S. Department of Defense.

Moreover, in 2019 we published a remarkable total of 108 papers in peer-reviewed journals – which surpasses the previous total across the whole two-year period of 2017 and 2018. Thus, our faculty members have been exceedingly productive. Those funded and published research projects span basic, clinical and applied research across our thematic research areas, namely:

- (1) Injury, Treatment, Recovery and Prevention;
- (2) Total Worker Health®;
- (3) Sleep and Shiftwork: Impact on Health and Safety; and
- (4) Exposure Biology: Genome Instability and Human Disease.

Beyond those academic metrics, we also have a large number of education, outreach and dissemination activities that have also grown apace over the past year. These include our “Oregon and the Workplace” blog with over 50,000 page views, our ever more popular podcast series “What’s Work Got To Do With It?”, and our seminars and workshops that are viewed by hundreds of professionals interested in improving the health and safety of their workforces. Those activities are summarized on page 6 of the report.

Throughout 2019 these accomplishments and activities, along with collaborations with partners in Oregon and beyond, enable us to achieve our mission of promoting health and reducing disease and disability among workers across the nation, and particularly in Oregon

Respectfully submitted on behalf of our Institute,



Steven A. Shea, PhD

Director, Oregon Institute of Occupational Health Sciences

Outreach and Education



Connect



**Oregon and the
Workplace Blog**
52,000 page views

Podcasts
2400+ listens

Social Media
10,000+ impressions
monthly

Monthly Newsletter
2400 Subscribers

Learn



**Science
Seminars**
30 academic seminars
hosted

**Biannual
Symposia**
250 professionals
trained

**Classes and
Presentations**
1200 participants
trained

Lead



Exhibits
20 events & exhibits
staffed

**Summer
Internships**
28 undergraduates
mentored

**Collaborative
Partnerships**
20+ valued partners

Grants

Allen, Charles N	
Cellular Electrophysiology of the Suprachiasmatic Nuclei	NIH National Institute of Neurological Disorders and Stroke
Mechanisms of GABAergic Signaling in the Suprachiasmatic Nucleus Network	NIH National Institute of Neurological Disorders and Stroke
Anger, W. Kent	
Oregon Healthy Workforce Center P & E Core	CDC National Institute for Occupational Safety & Health
Berman, Fred W	
The National Pesticide Information Center at Oregon State University	Oregon State University
Bowles, Nicole P	
OCTRI KL2 Training Grant	DHHS National Institutes of Health
Effect of Tetrahydrocannabinol (THC) on Sleep in Humans.	American Sleep Medicine Foundation
A Natural Experiment for the Impact of Schedules on Sleep, Health, and Safety in Firefighters	Oregon Healthy Workforce Center
Butler, Matthew	
Apnea Patterns Predict Heart Disease and Mortality	NIH National Heart, Lung, and Blood Institute
Androgen Receptors and Sex Differences in the Biological Clock	NIH National Institute of Neurological Disorders and Stroke
Hammer, Leslie B	
Development and Evaluation of Veteran Supportive Supervisor Training (VSST): Improving Reintegration of the Oregon National Guard and Reserves in the Workplace	DOD U.S. Army Medical Research Acquisition Activity
Evaluation of a Work-Family and Sleep Leadership Intervention in the Oregon National Guard: A Behavioral Health Leadership Approach	DOD U.S. Army Medical Research and Materiel Command DO
Behavioral Health & Resilience Training for Military Leaders+B27	CDC National Institute for Occupational Safety & Health
Oregon Healthy Workforce Center	CDC National Institute for Occupational Safety & Health
Butler, Matthew	
Photosensitivity and Pain in Complex Traumatic Brain Injury	CDC National Institute for Occupational Safety & Health
Kretschmar, Doris E	
Creating New Drosophila Models to Study Tau Loss and Gain-Off Functions	NIH National Institute of Neurological Disorders and Stroke
Connecting Alzheimers Disease, APP, Circadian Regulation	NIH National Institute on Aging
FoxP1 as a Therapeutic Target for Huntington's Disease	Southern Methodist University
Links between Age-Related Changes in Energy Metabolism and Alzheimer's Disease	Oregon State University

Lloyd, R. Stephen	
Targeting DNA Base Excision Repair in Acute Myeloid Leukemias	DHHS NIH National Cancer Institute
Development of Agonists of the DNA Glycosylase OGG1 for the Prevention of Obesity and Obesity-Associated Diseases	OHSU Foundation
Novel Targets in Cancer Chemotherapy Chemical Biology of Guanine Alkylation	Vanderbilt University
DNA Adduct-Induced Mutagenesis	Vanderbilt University
McHill, Andrew W	
Uncovering Circadian Mechanisms of Poor Cardiometabolic Health	NIH National Heart, Lung, and Blood Institute
Montgomery, Dede	
Oregon Healthy Workforce Center Outreach Core	CDC National Institute for Occupational Safety & Health
Olson, Ryan B	
Improving Occupational Health in Oregon: Turning Data to Action	OHA Health Services, Public Health Division
COMPASS -- Personal Support Worker Adaptation	Oregon Home Care Commission
SHIFT Onboard: Protecting New Transit Operators Against Safety and Health Hazards	NIH National Heart, Lung, and Blood Institute
R2P Coordination - Consultant Agreement No. 3001-909-11	Center for Construction Research and Training
Community of Practice and Safety Support Tailored for Pain Management (COMPASS-TPM)	Oregon Healthy Workforce Center
Oregon Healthy Workforce Center-Tech 4 Rest	CDC National Institute for Occupational Safety & Health
Rao, Xiaoquan	
Role of Lipid Oxidation in Air Pollution-Induced Atherosclerosis	DHHS NIH National Institute of Environmental Health
Rozanov, Dmitri V	
Single Cell TCR Sequencing for Early Detection of Breast Cancer	OHSU Knight Cancer CEDAR
Shea, Steven A	
Circadian Rhythms and Cardiovascular Risk	NIH National Heart, Lung, and Blood Institute
Circadian Mechanisms of Cardiovascular Risk in Obesity	NIH National Heart, Lung, and Blood Institute
Sleep and Circadian Mechanisms Contributing to Disparity in Prevalence of Hypertension Between Black and White Americans	NIH National Heart, Lung, and Blood Institute
Oregon Healthy Workforce Center-Active Workplace	CDC National Institute for Occupational Safety & Health
Thosar, Saurabh S	
Circadian Rhythms of Vascular Function in Cardiovascular Disease	Sleep Research Society Foundation
OCTRI KL2 Training Grant	DHHS National Institutes of Health
Turker, Mitchell S	
GCR Simulator Validation Studies with Human and Mouse Models	University of California, Berkeley
NeuroPredict™ A Screening Assay for Chemicals that Affect the Differentiation of Human Neural Cells	Nzumbe, Incorporated
Weinhouse, Caren	
Do Inter-Individual Genetic Differences Affect DNA Methylation Responses to Mercury Exposure?	Medical Research Foundation of Oregon

Publications

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Financial Statement July 1, 2018 - December 31, 2019*

Income

Workers Compensation Income	5,970,670
Total Grants and Contracts	7,159,233
OHSU Support	752,986
Misc.Sources	74,286

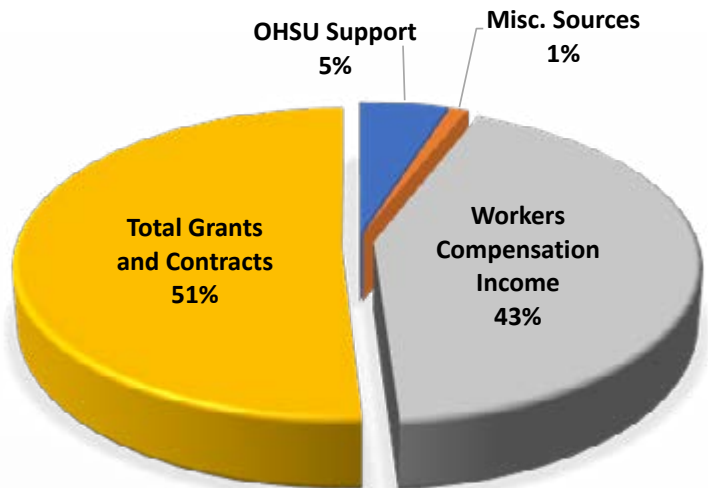


Expenses

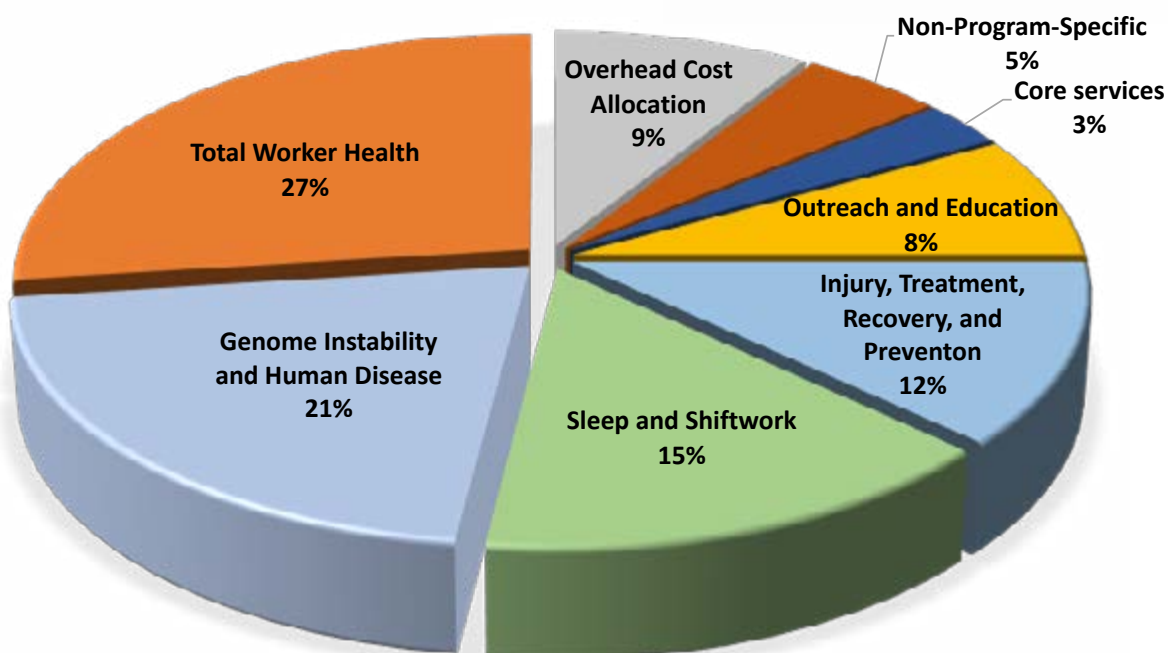
All Salaries and Fringe Benefits	6,531,211
Services and Supplies	5,088,144
Bond Principal and Interest	353,481
OHSU Overhead Cost Allocation	406,413



Income by Source



Expenses by Program



*Subsequent reports will show calculations on a calendar year basis.

Oregon Institute of Occupational Health Sciences

Director and Professor: Steven A. Shea, Ph.D. 2012 - present
 Associate Director of Applied Research and Professor: W. Kent Anger, Ph.D. 1989 - present
 Associate Director of Basic Research and Professor: Stephen R. Lloyd, Ph.D. 2003 - present
 Associate Director for Administration: Jen Prissel, M.A. 2017 - present

Faculty

Charles Allen, Ph.D. 1990-present
 W. Kent Anger, Ph.D. 1989-present
 Nicole Bowles, Ph.D. 2019-present
 Matt Butler, Ph.D. 2013-present
 Leslie Hammer, Ph.D. 2015-present
 Emily Huang, Ph.D. 2019-present
 David Hurtado, Sc.D. 2015-present
 Doris Kretzschmar, Ph.D. 2002-present
 Stephen Lloyd, Ph.D. 2003-present
 Amanda McCullough, Ph.D. 2003-present
 Andrew McHill, Ph.D. 2017-present
 Ryan Olson, Ph.D. 2005-present
 Xiaoquan Rao, Ph.D. 2018-present
 Steven Shea, Ph.D. 2012-present
 Saurabh Thosar, Ph.D. 2018-present
 Mitch Turker, Ph.D., J.D. 1996-present
 Caren Weinhouse, Ph.D. 2018-present

Affiliated/Secondary Faculty

Jonathan Emens, M.P.H. 2016-present
 Miranda Lim, M.D., Ph.D. 2014-present
 Suzanne Mitchell, Ph.D. 2012-present
 Peter Spencer, Ph.D., F.A.N.A., FRCPath
 1987-present

Scientific Staff

Shalene Allen, B.S. 2015-present
 Lindsey Alley, M.S. 2019-present
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 Sade Beasley, B.B.A. 2018-2019
 Fred Berman, D.V.M., Ph.D. 2001-present
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 Jessie Zhen, B.A. 2019-present

Administrative Staff

Jennifer Barker, M.B.A. 2013-present
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 Alisa Mukai, B.A. 2012-present
 Dan Olson, B.S. 2004-present
 Jen Prissel, M.A. 2017-present
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 Savannah Scott, B.S. 2019-present



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