INLAND NORTHWEST
RESEARCH SYMPOSIUM
TUESDAY, APRIL 10, 2018
12:00 P.M.—3:00 P.M.
CCRS COURT & RM 260

11:00: Registration

12:00: Poster Presentations

2:00: Introduction:
John Roll, PhD
Vice Dean for Research, Elson S. Floyd College of Medicine

Keynote Speaker
Erin Flynn-Evans, PhD, MPH
NASA Ames Research Center
“Sleeping in Space: An Unexpected Challenge for Future Mars Explorers.”

Dr. Flynn-Evans is director of the NASA Ames Research Center’s Fatigue Countermeasures Laboratory in Silicon Valley, Calif, and a former instructor of Medicine, Division of Sleep Medicine, Brigham and Women’s Hospital and Harvard Medical School.

Dr. Flynn-Evans has extensive research experience examining the effects of sleep loss and circadian desynchrony in occupational settings, including among astronauts, airline pilots, physicians and other shift workers. Her laboratory-based research has focused on examining the effects of light on circadian, neuroendocrine, and neurobehavioral responses in humans and how these outcomes relate to the development of countermeasures for shift work. Her field research has involved integrating these measures of fatigue and associated countermeasures into complex operational settings.

Poster Board Numbers | Presenter’s Name | Poster Title
1. Tarana Arman | Microcystin-LR Hepatic and Renal Toxicity in Non-alcoholic Fatty Liver Disease
2. Zachary Evans | Risk Factors for Mumps Infection in K-12 Students Amongst Spokane County Schools
3. Robert Anderberg | Effect of Janus Kinase 2 on Kidney Serum Amyloid A in a Mouse Model of Diabetic Kidney Disease
4. Sihan Wang | Bacterial Membrane-formed Nanovesicles as a Vaccine Prevents Bacterial Infections
5. Nicklaus Millican | The effects of chronic antibiotic treatment on sleep in mice
6. Taylor McNees | Nuclear SNP markers for hybrid Spotted-Barred Owl identification
7. Ashley Massie | Sleep and fever caused by cell wall components of bacteria: the role of tumor necrosis factor-a
8. Brad Dieter | Reduction of H3K27Me3 near the Serum Amyloid A and Metabolic Memory Associated Inflammation in Podocytes
9. Sabrina Fechtner | Cannabinoid receptor 2 agonist (JWH-015) inhibits Interleukin-1β-induced inflammation in Rheumatoid Arthritis Synovial Fibroblasts
10. Rachel Harwood | Analysis of Mycoremediation of Soil Pollutants in the Spokane Watershed
11. Katie Hawkinson | Transposable Expression Levels in Social and Non-Social Insects
12. Shelby Bailess | Glial Regulation of Sleep/Wake in Drosophila melanogaster
13. Shannon Kozlovich | Menthol exhibits stereospecific inhibition of phase II UGT enzymes
14. Sabra Dunakey | Analysis of the Gut Microbiota of Apis with an AFLP
15. Teresa Bigand | Risk for Overeating Among Obese Adults with Chronic Pain
16. Teresa Bigand | Cannabis use is related to self-efficacy but not sleep or pain symptoms among adults prescribed opioids for persistent pain or opioid use disorders
17. Priyanka Bushana | Oxidative Stress & Sleep
19. Mahamudul Haque | Guanylate Binding Protein 5 (GBP5) Inhibits Rheumatoid Arthritis Synovial Fibroblast Mediated Inflammation and Tissue Destruction
20. Jacqueline Egger | The effect of pesticides on the MADs-box gene in Malus domestica

21. Naghmana Sherazi | TLR4 Genotype Is Associated with Nocturnal Sleep Duration and Consolidation

22. Carter Delp | TRPV3 and PER2 differences between Polar, Grizzly and Black bears

23. Nadia Bamfo | Reliability of Animal Models to Predict a Lack of Drug Metabolism in Humans

24. Marissa Pounds | Using Lichens as a model for coral reef symbiosis through cytoplasmic HSP70 protein in Algal cells

25. Madalyn Brown | Clinical Efficacy of Glutamine Supplementation in Mice with Aldehyde Dehydrogenase Sa1(aldhSa1-|-) Ablation, a Phenocopy of the GABA Metabolic Disorder Succinic Semialdehyde Dehydrogenase Deficiency (SSADHD)

26. Elena Skornyakov | Predicting Falls in Older Adults using the Short-Form 36 Health Survey

27. Elena Skornyakov | Predicting Future Falls in Community-Dwelling Older Adults using Balance Performance on the Tinett

28. Jessica Ochoa | Perceptions and Attitudes of Childhood Obesity from Mothers of Mexican Descent in Yakima, WA

29. Aimee Sutliff | Regulation of UGT2A1 by miR-196a & miR-196b and its implications for cancer risk

30. Shawna Beese | Sleepless in Spokane? Sleep Health Among Registered Nurses and Surgical Technicians

31. Elizabeth Dotson | Effects of Fatigue and Heart Rate Variability on Officer Performance in Deadly Force Simulations

32. Guillermo Mendez | Perceptions and Attitude of Mental Illness in the Community of Ritzville, Washington

33. Mackenzie Clark | The biological control of Tick-borne diseases using Wolbachia bacteria

34. Darian Sidebottom | Testosterone and Cortisol Modulate the Metabolic Effects of Sleep Restriction: A Randomized Order Placebo Controlled Dual Clamp Mechanistic Study

35. Ryan Leaming | Structure and composition of microbial communities in the Spokane River: Adaptations to survive heavy metal toxicity

36. Yadira Perez-Paramo | Characterization of Flavin Monoxygenase (FMO) and their Potential Role in Nicotine Dependence

37. Mariesa Sjoberg | An analysis of the genetic resilience of calcified corals under environmental stress

38. Senada Karmaj | Naturalistic field study of a flexible sleeper berth provision in US long-haul truck drivers

39. Aaron Howe | Increasing Female Student Enrollment in K-12 STEM Programs

40. Kari Gaither | MicroRNA mediated regulation of ATF5 contributes to homeostasis and benign to malignant transformation in breast cancer cells


42. Senthil Natesan | Lipid Partitioning of Drugs: Bilayer Location, Orientation and Conformation Studied by Molecular Dynamics Simulations

43. Senthil Natesan | Pharmacophore-based Virtual Screening for gamma-Hydroxybutyrate (GHB) Receptor Ligands

44. Hui Zhang | Chronic Alcohol Consumption Exacerbates Cancer-Associated Cachexia through Activating TNF-a|Myostatin-Mediated Signaling Pathways

45. Rachelle Brown | Landing Pilot Sleep—Is Third Break the Best Choice for Recuperation?

46. Samantha Riedy | Distinct Aspects of Psychomotor Vigilance Test (PVT) Performance during Sleep Deprivation

47. Samantha Riedy | U.S. Police Department Rosters: Fatigue, Sleepiness, and Public Complaints

48. Russell Hyslop | Pupil Diameter and Cognitive Load in ASD: Differences in ICA Metrics During Passive Viewing of Faces

49. Devon Grant | Repeated-Dose Caffeine Pharmacodynamics during 48 hours of Total Sleep Deprivation

50. Cydni Marshall | Dietary Analysis of Sea Lion consumption of Salmonid populations along the Pacific Northwest coast using qPCR and fluorescent species specific probes

51. Chris Davis | Unexpected sleep responses to undisturbed sleep, sleep deprivation and systemic lipopolysaccharide in mice deficient in the interleukin-1 receptor antagonist

52. Nicole Pereza | Manikins or Standardized Patients: Is There a Difference?

53. Halle Nelson | Analysis of the heat regulatory TRPV3 gene in ancient Camelops and modern Dromedarian Camels

54. Joseph Nguyen | Interleukin-1 enhances delta wave power in neuronal|glial co-cultures of wild type cells but not in cells lacking the neuron-specific IL|1 receptor accessory protein

55. Matthew Dolan | An analysis of possible mutations directly affecting poison resistance in multiple voltage gated ion channels of Camponotus rasilis

56. Francis Neff | Analysis of the Pleiotropic TRPV3 Gene in Columbian Mammoth

57. Mark Van Dam | Linguistic Complexity of Boys and Girls with and without Siblings

58. Mark Van Dam | Lexical Variability in the Speech of Preschoolers Who Are Hearing Impaired

59. Beverly Etchey | Electronic Cigarettes: A Smoking Cessation Aid or an Unregulated Health Hazard

60. Brendon Winston | Student Attitudes to Health Care Information Technology and Patient Privacy


62. Summer Rose | The Prevalence of Abuse in the LGBTQ Community in Spokane