

The West Virginia University

Summer Undergraduate Research Experience (WVU SURE)

Publication List (*N* = 49 publications with SURE participants as co-authors)

2016 SURE Participants

1. Torres Arango, M.A.; Valença de Andrade, A.S.; Cipollone, D.T.; Grant, L.O.; Korakakis, D.; Sierros, K.A. Robotic Deposition of TiO₂ Films on Flexible Substrates from Hybrid Inks: Investigation of Synthesis–Processing–Microstructure–Photocatalytic Relationships. *ACS Appl. Mater. Interfaces*, **2016**, *8* (37), 24659-24670. (Domenic Cipollone/2016 SURE Participant)
2. Short, Z.D.; Siddiqui, M. Umair; Henriquez, M.F.; McKee, J.S.; Scime, E.E. A Novel Laser-Induced Fluorescence Scheme for Ar-I in a Plasma. *Rev. Sci. Instrum.* **2016**, *87*, 013505-1-013505-7. (Zachary Short/2016 SURE Participant; Miguel Henriquez/2015 SURE Participant)
3. Elliott, D.; Scime, E.; Short, Z. Novel Xenon Calibration Scheme for Two-Photon Absorption Laser Induced Fluorescence of Hydrogen. *Rev. Sci. Instrum.* **2016**, *87*, 11E504-1-11E504-3. (Zachary Short/2016 SURE Participant)
4. Siddiqui, M.U.; Thompson, D.S.; Mcllvain, J.M.; Short, Z.D.; Scime, E. E. Direct Measurements of Classical and Enhanced Gradient-Aligned Cross-Field Ion Flows in a Helicon Plasma Source Using Laser-Induced Fluorescence. *Phys. Plasmas* **2015**, *22*, 122103-1-122103-8. (Julianne Mcllvain/2015 SURE Participant; Zachary Short/2016 SURE Participant)
5. Siddiqui, M.U.; McKee, J.S.; Mcllvain, J.; Short, Z.D.; Elliott, D.B.; Lusk, G.; Scime, E.E. Electron Heating and Density Production in Microwave-Assisted Helicon Plasmas. *Plasma Sources Sci. Technol.* **2015**, *24*, 034016: 1-13. (Julianne Mcllvain/2015 SURE Participant; Zachary Short/2016 SURE Participant)

2015 SURE Participants

6. Zhang, Y.; McArdle, I.W.; Hubbard, J.W.; Akhmedov, N.G.; Söderberg, B.C.G. Total Synthesis of the Tetracyclic Indole Alkaloid ht-13-A. *Tetrahedron Lett.* **2016**, *57*, 2865-2867. (Ian W. McArdle/2015 SURE Participant)
7. Kaiser, J.; Bland, C.; Klinke II, D.J., Identifying Causal Networks Linking Cancer Processes and Anti-tumor Immunity Using Bayesian Network Inference and Metagene Constructs. *Biotechnol. Prog.* **2016**, *32* (2), 470-479 (Cassidy Bland/2015 SURE Participant)
8. Chen, L.; Bustin, K.A.; Hoover, J.M. Copper-Catalyzed Oxidative Decarboxylative C-H Arylation of Benzoxazoles with 2-Nitrobenzoic Acids. *Chem. Commun.* **2015**, *51*, 15059-15062. (Katelyn A. Bustin/2015 SURE Participant)
9. Yost, B.T.; Cushing, S.K.; Meng, F.; Bright, J.; Bas, D.A.; Wu, N.; Bristow, A.D. Investigation of Band Gap Narrowing in Nitrogen-Doped La₂Ti₂O₇ with Transient Absorption Spectroscopy. *Phys. Chem. Chem. Phys.* **2015**, *17*, 31039-31043. (Brandon T. Yost/2015 SURE Participant; Scott Cushing/2008 & 2009 SURE Participant; Joseph Bright/2012 SURE Participant)
10. Campbell, A.S.; Dong, C.; Maloney, A.; Hardinger, J.; Hu, X.; Wu, N.; Dinu, C.Z. A Systematic Study of the Catalytic Behavior at Enzyme-Metal-Oxide Nanointerfaces. *NanoLIFE*. **2014**, *4* (2), 1450005-1450016. (Andrew Maloney/2014 & 2015 SURE Participant; Alan Campbell/2010 SURE Participant)

11. Doss, C.E.; Komar, C.M.; Cassak, P.A.; Wilder, F.D.; Eriksson, S.; Drake, J.F. Asymmetric Magnetic Reconnection with a Flow Shear and Applications to the Magnetopause. *J. Geophys. Res. Space Physics.* **2015**, *120*, 7748-7763. DOI: 10.1002/2015JA021489. (Christopher E. Doss/2015 SURE Participant)
12. McNeil, B.E.; Pisek, J.; Lepisk, H.; Flamenco, E.A. Measuring Leaf Angle Distribution in Broadleaf Canopies Using UAVs. *Agric. For. Meteorol.* **2016**, 218-219, 204-208. (Evelin A. Flamenco/2015 SURE Participant)
13. Gao, X.; Campbell IV, W.A.; Chaibva, M.; Jain, P.; Leslie, A.E.; Frey, S.L.; Legleiter, J. Cholesterol Modifies Huntingtin Binding to, Disruption of, and Aggregation on Lipid Membranes. *Biochemistry.* **2016**, *55*, 92-102. (Ashley E. Leslie/2015 SURE Participant; Pranav Jain/2015 SURE Participant)
14. Berger, T.R.; Montie, H.L.; Jain, P.; Legleiter, J.; Merry, D.E. Identification of Novel Polyglutamine-Expanded Aggregation Species in Spinal and Bulbar Muscular Atrophy. *Brain Research.* **2015**, *1628*, 254-264. (Pranav Jain/2015 SURE Participant)
15. Peng, H.; Xi, Y.; Ronaghi, N.; Dong, B.; Akhmedov, N.G.; Shi, X. Gold-Catalyzed Oxidative Cross-Coupling of Terminal Alkynes: Selective Synthesis of Unsymmetrical 1,3-Diynes. *J. Am. Chem. Soc.* **2014**, *136* (38), 13174-13177. (Nima Ronaghi/2014 & 2015 SURE Participant)
16. Fu, L.; Zhang, M.; Mastrantoni, K.; Perfetto, M.; Wei, S.; Yao, J. Bovine Lhx8, a Germ Cell-Specific Nuclear Factor, Interacts with Figla. *PLOS ONE*, **2016**, *11* (10), 1-13. (Kristen Mastrantoni/2014 & 2015 SURE Participant)

2014 SURE Participants

17. Petrone, A.B.; Barr, T.L.; Devlin, K.; Fournier, S.B.; Devallance, E.D.; Lee, K.; Chantler, P.D. Matrix Metalloproteinase Levels May Mediate Ischemic Stroke Incidence and Recovery in Stroke Patients with Metabolic Syndrome. *Stroke*, **2015**, *46* (Suppl 1, Int. Stroke Conf. Poster Abstracts), AWP386-AWP386. (Kelly Devlin/2014 SURE Participant)
18. Mertz, B.; Feng, J.; Corcoran, C.; Neeley, B. Explaining the Mobility of Retinal in Activated Rhodopsin and Opsin. *Photochem. Photobiol. Sci.* **2015**, *14*, 1952-1964. (Conor Corcoran/2013 SURE Participant; Brandon Neeley/2014 SURE Participant)
19. Elza, M.C.; Slover, C.; McGraw, J. B. Analysis of Wood Thrush (*Hylocichla mustelina*) Movement Patterns to Explain the Spatial Structure of American Ginseng (*Panax quinquefolius*) Populations. *Ecol. Res.* **2016**, *31* (2), 195-201. (Michael Elza/2014 SURE Participant)
20. Maditz, K.H.; Benedito, V.A.; Oldaker, C.; Nanda, N.; Lateef, S.S.; Livengood, R.; Tou, J.C. Feeding Soy Protein Isolate and n-3 PUFA Affects Polycystic Liver Disease Progression in a PCK Rat Model of Autosomal Polycystic Kidney Disease. *J. Ped. Gastroenter. Nut.* **2015**, *60*, 467-473. (Christopher Oldaker/2012 SURE Participant; Nainika Nanda/2013 SURE Participant; Sundus S. Lateef/2014 & 2016 SURE Participant)
21. Liang, J.; Ma, Y.; Sims, S.; Wu, L. A Patterned Porous Polymer Film for Localized Capture of Insulin and Glucose-Responsive Release. *J. Mat. Chem. B*, **2015**, *3* (7), 1281-1288. (Savannah Sims/2014 SURE Participant)
22. Li, J.; Ou, X.; Sims, S.; Li, W.; Wu, L. Hybrid Liquid Crystal Polymers from the Self-Assembly of Poly (Vinylpyridine) and Polyoxometalates via Multiple Non-covalent Bonds. *RSC Adv.* **2014**, *4* (100), 56998-57008. (Savannah Sims/2014 SURE Participant)
23. Hunsberger, H.C.; Weitzner, D.S.; Rudy, C.C.; Hickman, J.E.; Libell, E.M.; Speer, R.R.; Gerhardt, G.A.; Reed, M.N. Riluzole Rescues Glutamate Alterations, Cognitive Deficits, and Tau Pathology

Associated with P301L Tau Expression. *J. Neurochem.* **2015**, 135 (2), 381-394. (Rebecca Speer/2014 SURE Participant)

2013 SURE Participants

24. Thakellapalli, H.; Farajidizaji, B.; Butcher, T.W.; Akhmedov, N.G.; Popp, B.V.; Petersen, J. L.; Wang, K.K. Syntheses and Structures of Thiophene-Containing Cycloparaphenylenes and Related Carbon Nanohoops. *Org. Lett.* **2015**, 17 (14), 3470-3473. (Trevor Butcher/2013 SURE Participant)
25. Goodman, D.M.; Evans, T.; Campbell, M.; Panther, C.; Noble, A. The Robotic In-situ Surface Surface Exploration System for Space Exploration Objectives. *AIAA SPACE Forum 2016*, **2016**, 5535, 1-11. (Drew Goodman/2013 SURE Participant)
26. Morehead, M.; Jones, Q.; Blatt, J.; Holcomb, P.; Schultz, J.; DeFanti, T.; Ellisman, M.; Doretto, G.; Spirou, G.A. Poster: BrainTrek – An Immersive Environment for Investigating Neuronal Tissue. In *3D User Interfaces, 2014 IEEE Symposium on* **2014** March 29, pp. 157–158. (Quinn Jones/2013 SURE Participant)
27. Mickaliger, M.B.; Lorimer, D.R.; Boyles, J.; McLaughlin, M.A.; Collins, A.; Hough, L.; Tehrani, N.; Tenney, C.; Liska, A.; Swiggum, J. Discovery of Five New Pulsars in Archival Data. *Astrophys. J.* **2012**, 759 (2), 127-131. (Adam Collins/2012 SURE Participant; April Liska/2013 SURE Participant; Nathan Tehrani/2011 & 2012 SURE Participant; Craig Tenney/2012 SURE Participant)
28. Rosen, R.; Swiggum, J.; McLaughlin, M.A.; Lorimer, D.R.; Yun, M.; Heatherly, S.A.; Boyles, J.; Lynch, R.; Kondratiev, V.I.; Scoles, S.; Ranson, S.M.; Moniot, M.L.; Cottrill, A.; Weaver, M.; Snider, A.; Thompson, C.; Raycraft, M.; Dudenhoefer, J.; Allphin, L.; Thorley, J.; Meadows, B.; Marchiny, G.; Liska, A.;... Phan, E. The Pulsar Search Collaboratory: Discovery and Timing of Five New Pulsars. *Astrophys. J.* **2013**, 768 (1), 85-94. (April Liska/2013 SURE Participant)
29. Rane, A.; Lorimer, D.R.; Bates, S.D.; McMann, N.; McLaughlin, M.A.; Rajwade, K. A Search for Rotating Radio Transients and Fast Radio Bursts in the Parkes High-Latitude Pulsar Survey. *MNRAS.* **2016**, 455 (2), 2207-2215. (Natasha McMann/2013 SURE Participant)
30. Gigliotti, J.C.; Benedito, V.A.; Livengood, R.; Oldaker, C.; Nanda, N.; Tou, J.C. Feeding Different Omega-3 Polyunsaturated Fatty Acid Sources Influences Renal Fatty Acid Composition, Inflammation, and Occurrence of Nephrocalcinosis in Female Sprague-Dawley Rats. *Food Nut. Sci.* **2013**, 4, 125-136. (Nainika Nanda/2011 & 2013 SURE Participant; Christopher Oldaker/2012 SURE Participant)
31. Maditz, K.H.; Oldaker, C.; Nanda, N.; Benedito, V.; Livengood, R.; Tou, J.C. Dietary n-3 Polyunsaturated Fatty Acids or Soy Protein Isolate did not Attenuate Disease Progression in a Female Rat Model of Autosomal Recessive Polycystic Kidney Disease. *Nut. Res.* **2014**, 34 (6), 526-534. (Nainika Nanda/2011 & 2013 SURE Participant; Christopher Oldaker/2012 SURE Participant)

2012 SURE Participants

32. Langan, T.J.; Nyakubaya, V.T.; Casto, L.D.; Dolan, T.D.; Archer-Hartmann, S.A.; Yedlapalli, S.L.; Sooter, L.J.; Holland, L.A. Assessment of Aptamer-Steroid Binding Using Stacking Enhanced Capillary Electrophoresis. *Electrophoresis.* **2012**, 33, 866-869. (Laura D. Casto/2011 & 2012 SURE Participant from West Virginia Wesleyan College; Tiffany Dolan/2010 SURE Participant)

2011 SURE Participants

33. Otto, R.A.; Paker, I.; Bane, L.; Beamer, S.; Jaczynski, J.; Matak, K.E. Survival of *Listeria innocua* After Isoelectric Solubilization/Precipitation with Acetic and Citric Acids. *J. Food Prot.* **2011**, *74* (8), 1348-1352. (Loren Bane/2010 & 2011 SURE Participant)
34. Yan, W.; Ye, X.; Weise, K.; Petersen, J.L.; Shi, X. Synthesis of Allene Triazole Through Iron Catalyzed Regioselective Addition to Propargyl Alcohols. *Chem. Commun.* **2012**, *48* (29), 3521-3523. (Keith Weise/2011 SURE Participant)
35. Ye, X.; He, Z.; Ahmed, T.; Weise, K.; Akhmedov, N.G.; Petersen, J.L.; Shi, X. 1, 2, 3-Triazoles as Versatile Directing Group for Selective sp² and sp³ C–H Activation: Cyclization vs Substitution. *Chem. Sci.* **2013**, *4* (9), 3712-3716. (Keith Weise/2011 SURE Participant)

2010 SURE Participants

36. Bagchi, M.; Cortes Nieves, A.; McLaughlin, M.A Search for Dispersed Radio Bursts in Archival Parkes Multibeam Pulsar Survey Data. *Mon. Not. R. Astron. Soc.* **2012**, *425* (4), 2501-2506. (Angela Cortes/2010 SURE Participant)
37. Whitelam, C.; Jafri, Z.; Bourlai, T. Multispectral Eye Detection: A Preliminary Study. In *Pattern Recognition (ICPR)*, 2010 20th International Conference on. *IEEE.* **2010** (August), 209-212. (Zain Jafri/2010 SURE Participant)
38. Bourlai, T.; Jafri, Z. Eye Detection in the Middle-Wave Infrared Spectrum: Towards Recognition in the Dark. In *2011 IEEE International Workshop on Information Forensics and Security. IEEE.* **2011** (November), 1-6. (Zain Jafri/2010 SURE Participant)
39. Yates, E.A.; Owens, S.L.; Lynch, M.F.; Cucco, E.M.; Umbaugh, C.S.; Legleiter, J. Specific Domains of A β Facilitate Aggregation on and Association with Lipid Bilayers. *J. Molec. Bio.* **2013**, *425*, 1915-1933. (Michael Lynch/2010 SURE Participant; Charles Umbaugh/2011 SURE Participant)
40. Wright, M.F.; Bowdridge, E.; McDermott, E.L.; Richardson, S.; Scheidler, J.; Syed, Q.; Bush, T.; Inskeep, E.K.; Flores, J.A. Mechanisms of Intracellular Calcium Homeostasis in Developing and Mature Bovine Corpora Lutea. *Biol. Reprod.* **2014**, *90* (3), 55: 1-12. (Erica McDermott/2010 SURE Participant)
41. Robinson, S.L.; Panaccione, D.G Chemotypic and Genotypic Diversity in the Ergot Alkaloid Pathway of *Aspergillus Fumigatus*. *Mycologia.* **2012**, *104*, 804-812. (Sarah Robinson/2010 SURE Participant)
42. Robinson, S.L.; Panaccione, D.G. Heterologous Expression of Lysergic Acid and Novel Ergot Alkaloids in *Aspergillus Fumigatus*. *Appl. Environ. Microb.* **2014**, *80*, 6465-6472. (Sarah Robinson/2010 SURE Participant)

2009 SURE Participants

43. Tou, J.C.; Altman, S.N.; Gigliotti, J.C.; Benedito, V.A.; Cordonier, E.L. Different Sources of Omega-3 Polyunsaturated Fatty Acids Affects Apparent Digestibility, Tissue Deposition, and Tissue Oxidative Stability in Growing Female Rats. *Lipids Health Dis.* **2011**, *10* (1), 1-14. (Elizabeth Cordonier/2009 SURE Participant)
44. Pifer, P.M.; Yates, E.A.; Legleiter, J. Point Mutations in A β Result in the Formation of Distinct Polymorphic Aggregates in the Presence of Lipid Bilayers. *PLoS One.* **2011**, *6* (1), e16248: 1-11.
45. Kumar, B.; Pifer, P.M.; Giovengo, A.; Legleiter, J. The Effect of Set Point Ratio and Surface Young's Modulus on Maximum Tapping Forces in Fluid Tapping Mode Atomic Force Microscopy. *J. Appl. Phys.* **2010**, *107* (4), 044508: 1-8. (Phillip Pifer/2009 SURE Participant)
46. Shelton, V.J.; Shelton, A. G.; Azain, M.J.; Hargrave-Barnes, K.M. Incorporation of Conjugated Linoleic Acid into Brain Lipids is not Necessary for Conjugated Linoleic Acid-Induced Reductions in Feed Intake or Body Fat in Mice. *Nut. Res.* **2012**, *2* (11), 827-836. (Abigail Shelton/2009 SURE Participant)
47. Mousa, A.Y.; Broce, M.; Sticco, A.; Viradia, R.; Monnett, S.; Yacoub, M.; Bates, M.C.; AbuRahma, A.F. IP087. Validation of Subclavian Duplex Velocity Criteria to Grade the Degree of Stenosis in Occlusive Subclavian Artery Disease. *J. Vasc. Surg.* **2016**, *63* (6), 84S-85S. (Ravi Viradia/2009 SURE Participant; NOTE: publication as M.D. medical researcher)
48. AbuRahma, A.F.; Yacoub, M.; Hass, S.M.; AbuRahma, J.; Mousa, A.Y.; Dean, L.S.; Viradia, R.; Stone, P.A. Compliance of Postendovascular Aortic Aneurysm Repair Imaging Surveillance. *J. Vasc. Surg.* **2016**, *63* (3), 589-595. (Ravi Viradia/2009 SURE Participant; NOTE: publication as M.D. medical researcher)

2008 SURE Participants

49. Wang, D.; Gautam, L.N.S.; Bollinger, C.; Harris, A.; Li, M.; Shi, X. 1, 2, 3-Triazole Bound Au (I)(TA-Au) as Chemoselective Catalysts in Promoting Asymmetric Synthesis of Substituted Allenes. *Org. Lett.* **2011**, *13* (10), 2618-2621. (Cynthia Bollinger/2008 SURE Participant; Alexandria Harris/2009 & 2010 SURE Participant)

Oral/Poster Presentation Abstracts (SURE participants as co-authors)

- Lateef, S.; Mock, K.; Benedito, V.; Tou, J. High Fructose Corn Syrup-55 Alters Hepatic Metabolism to Increase Risk of Non-Alcoholic Fatty Liver Disease in Female Sprague-Dawley Rats. *The FASEB Journal*, **2016**, *30* (1 Supplement, Exp. Biology 2016 Mtg. Conf. Abstract), 628-2. (Sundus Lateef/2014 & 2016 SURE Participant)
- Maditz, K.; Oldaker, C.; Nanda, N.; Livengood, R.; Benedito, V.; Tou, J. Investigating Omega-3 Polyunsaturated Fatty Acid and/or Soy Protein Isolate Supplementation on Renal Inflammation in a Rat Model of Polycystic Kidney Disease (1034.13). *The FASEB Journal*. **2014**, *28* (1 Supplement), 1034-13. Nainika Nanda/2011 & 2013 SURE Participant; Christopher Oldaker/2012 SURE Participant)
- Maditz, K.H.; Mock, K.; Knecht, A.; Nanda, N.; Oldaker, C.; Tou, J. The Effect of Omega-3 Polyunsaturated Fatty Acid and Soy Protein Isolate Supplementation on Kidney Function in Female Polycystic Kidney Diseased Rats. *The FASEB Journal*. **2013**, *27* (1_MeetingAbstracts), 1083-7. (Nainika Nanda/2011 &

2013 SURE Participant; Adam Knecht/2011 SURE Participant; Kaitlin Mock/2010 SURE Participant; Christopher Oldaker/2012 SURE Participant)

Miller, M.S.; Oldaker, C.; Maditz, K.; Tou, J.C. Effects of Soy Protein Isolate and/or Omega-3 Polyunsaturated Fatty Acid Supplementation on Bone Health in Female Rats with Polycystic Kidney Disease. *The FASEB Journal*. **2013**, 27 (1_MeetingAbstracts), 794-11. (Matthew Miller/2012 SURE Participant; Christopher Oldaker/2012 SURE Participant)

Oldaker, C.R.; Gigliotti, J.; Benedito, V.; Tou, J. Different Dietary Sources of Omega-3 Polyunsaturated Fatty Acids Influences Renal Fatty Acid Composition, Gene Expression, and Risk of Nephrocalcinosis in Female Rats. *The FASEB Journal*. **2013**, 27 (1 Supplement), 794-9. (Christopher Oldaker/2012 SURE Participant)

Mock, K.; Tou, J.; Benedito, V.; Gigliotti, J. Consumption of Different Sources of Omega-3 Fatty Acids Alters Lipogenic Gene Expression in Growing Rats. *The FASEB Journal*. **2013**, 27 (1 Supplement), 345-5. (Kaitlin Mock/2010 SURE Participant)

Cordonier, E.; Altman, S. N.; Gigliotti, J.; Tou, J. Feeding Omega-3 Fatty Acids from Different Sources on Tissue Fatty Acid Composition and Oxidative Stability in Rats. *The FASEB Journal*. **2010**, 24 (1_MeetingAbstracts), 474-1. (Elizabeth Cordonier/2009 SURE Participant)

Ippagunta, S.M.; Kanosky, K. M.; Barnes, K.M. Use of a Mouse Model for Conjugated Linoleic Acid-Induced Changes in Adipose Depots. *The FASEB Journal*. **2010**, 24 (1 Supplement), 927-5. (Kayla Kanosky/2009 SURE Participant)