

## Mark Payton, Ph.D.

Regents Service Professor and Head  
Department of Statistics  
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### Contact Information:

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### Education:

1991, Ph.D., Oklahoma State University (OSU), Statistics.  
1988, M.S., OSU, Statistics.  
1986. B.S.Ed., Missouri State University, Mathematics Education.

### Academic Appointments:

2013-Present, Head, OSU, Department of Statistics  
2011-Present, Regents Service Professor, OSU, Department of Statistics  
2010-2011, Interim Dean, OSU, Graduate College  
2006-2010, Associate Dean, OSU, Graduate College  
2001-2011, Professor, OSU, Department of Statistics.  
1996-2001, Associate Professor, OSU, Department of Statistics  
1991-1996, Assistant Professor, OSU, Department of Statistics

### Awards and Honors:

- Member of the International Statistical Institute
- Fellow of the American Statistical Association
- 2000: Fellow of the Royal Statistical Society

### Research Support:

- "Evaluation of Best Management Practices to Protect Surface Water Quality from Pesticides and Fertilizer Applied to Bermudagrass [*Cynodon dactylon* (L.) Pers.] Fairways," United States Golf Association Grant, \$125,286, 1995-1997
- "Microwave Radiation as a Pesticide Alternative for Stored Products," United States Department of Agriculture, \$230,000, 1998-2000.
- "Animal Models of Cold Air-induced Airway Disease," National Institute of Health, \$867,919, 2002-2005.
- "Phase IV Efficacy Study for the Equine Influenza Fraction of Fort Dodge Animal Health's Fluvac Innovation Double EFT Killed Virus Vaccine," Fort Dodge Animal Health, \$146,138, 2003-2004.
- "Dried Plum Reverses Bone Loss in Postmenopausal Women," United States Department of Agriculture, \$366,250, 2005-2008.
- "Momordica charantia Modulates Glucose and Lipid Parameters in High Fat Diet Induced Obesity," United States Department of Agriculture, \$306,743, 2007-2009.
- "Mango Supplementation Will Improve Glucose Response and Clinical Parameters of Pre-diabetic Subjects," National Mango Board, \$183,368, 2011-2013.

- "A Pilot Study Investigating the Effects of Mango Supplementation on Body Composition and Inflammatory Markers of Overweight Individuals," National Mango Board, \$140,013, 2011-2013.
- "Training National Needs Fellows for Application of Genomic and Computational Biology to Animal Production," USDA/NIFA NNF, \$242,500, 2013-2017.
- "Two-Phase Conservation and Enhancement of American Burying Beetle (*Nicrophorus americanus*) Monitoring Protocols in Oklahoma," US Fish and Wildlife Service/XTO Energy, Inc., \$1,130,725, 2012-2015.
- "Adapting Socio-Ecological Systems to Increased Climate Variability," NSF EPSCoR, \$4,000,000, 2013-2018.

#### Recent Publications:

1. Abd-Elmagid, A., Hunger, R.M., Garzon, C., Payton, M.E., and Melouk, H.A. (2017), "Effects of Osmotic and Matric Potentials on *Pyrenophora tritici-repentis*," *International Journal of Agriculture and Environmental Research*, vol. 3, 2470-2492.
2. Ayalew, S., Confer, A.W., Canaan, P.J., and Payton, M.E. (2017), "Proteomic and Bioinformatic Analyses of *Mannheimia haemolytica* Secretome by Liquid Chromatography and Tandem Mass Spectrometry," *Veterinary Microbiology*, available online at <http://dx.doi.org/10.1016/j.vetmic.2017.02.011>.
3. Bennett, R.S., Hatfield, R.D., Payton, M.E., and Chamberlin, K.D. (2017), "Lignin Content and Resistance to *Sclerotinia minor* in Peanut," *Peanut Science*, vol. 44, available online at doi: <http://dx.doi.org/10.3146/PS16-10.1>
4. Johnson, S.A., Feresin, R.G., Navaei, N., Figueroa, A., Elam, M.L., Akhavan, N.S., Payton, M.E., and Arjmandi, B.H. (2017), "Effects of Daily Blueberry Consumption on Circulating Biomarkers of Oxidative Stress, Inflammation, and Antioxidant Defense in Postmenopausal Women with Pre- and Stage 1-Hypertension: a Randomized, Controlled Trial," *Food and Function*, vol. 8, 372-380.
5. Kahn, B., Rebek, E., Brandenberger, L., Reed, K., Payton, M.E. (2017), "Companion Planting with White Yarrow or with Feverfew for Squash Bug, *Anasa tristis* (Hemiptera: Coreidae) Management on Summer Squash," *Pest Management Science*, vol. 73, 1127-1133.
6. Mbata, G.M., Eason, J., Payton, M.E., and Davis, M.F. (2017), "Putative Host Volatiles Used by *Habrobracon hebetor* (Hymenoptera: Braconidae) to Locate Larval of *Plodia interpunctella*, (Lepidoptera: Pyralidae), *Journal of Insect Behavior*, vol. 30, 287-299.
7. Paudyal, S., Opit, G.P., Arthur, F.H., Bingham, G.V., Payton, M.E., Gautam, S.G., and Noden, B. (2017), "Effectiveness of the ZeroFly® Storage Bag Fabric Against Stored-product Insects," *Journal of Stored Product Research*, vol. 73, 87-97.
8. Paudyal, S., Opit, G.P., Arthur, F.H., Bingham, G.V., Payton, M.E., Osekre, E.A., Danso, J.K., Manu, N., and Nsiah, E.P. (2017), "Field Evaluation of the Long-Lasting Treated Storage Bag, Deltamethrin Incorporated (ZeroFly® Storage Bag) as a Barrier to Insect Pest Infestation," *Journal of Stored Product Research*, vol. 70, 44-52.
9. Rupp, K., Ham, N.J., Blankenship, D., Payton, M.E., and Murray, K. (2017), "Pre and Post Hoc Analysis of Electronic Health Record Implementation on Emergency Department Metrics," *Baylor University Medical Center Proceedings*, vol. 30, 147-150.
10. Schoonover, M.J., Moser, D.K., Young, J.M., Payton, M.E., and Holbrook, T.C. (2017), "Effects of Tourniquet Number Application and Exsanguination on Amikacin Concentrations in the Radiocarpal and Distal Interphalangeal Joints after Low Volume Intravenous Regional Limb Perfusion in Horses," *Veterinary Surgery*, vol. 6, 675-682.
11. Shaible, M., Ben-Amotz, R., Caceres, A.V., Payton, M.E., Segev, Y., Shani, J. (2017), "Combined TPLO and LFS for Cranial Cruciate Ligament Rupture with Severe Rotational Instability in Dogs," *Journal of Small Animal Practice*, available online at DOI:10.1111/jsap.12648.
12. Thomas, J.E., Ohmes, C.M., Payton, M.E., Hostetler, J.E., and Reichard, M.V. (2017), "Minimum Transmission Time of *Cytauxzoon felis* by *Amblyomma americanum* to Domestic Cats in Relation to Duration of Infestation and Investigation of Ingestion of Infected Ticks as a Potential Route of Transmission," *Journal of Feline Medicine and Surgery*, available online at DOI: 10.1177/1098612X17691172.
13. Weinbrecht, K.D., Fu, J., Payton, M.E., and Allen, R.W. (2017), "Time-Dependent Loss of mRNA Transcripts from Forensic Stains," *Research and Reports in Forensic Medical Science*, vol. 7, 1-12.