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CAREER OBJECTIVES

Lead multidisciplinary teams of scientists and engineers to develop solutions for a sustainable bioeconomy that expands economic opportunities in rural America

RESEARCH INTERESTS

Develop technologies and systems to produce, harvest, store, process, and transport biomass for conversion to biofuels and biomaterials; build and apply simulation tools to design biomass supply chains that are cost-effective, sustainable, and safe

PROFESSIONAL EXPERIENCE

Oak Ridge National Laboratory, Bioenergy Resource & Engineering Systems Team Lead, 2018 – present

Supervise and mentor R&D staff members, postdocs and graduate students, and subcontractors. Contribute to ORNL bioenergy program strategic planning activities.

Oak Ridge National Laboratory, R&D Senior Staff, Environmental Sciences Division, 2016 – present R&D Staff, Environmental Sciences Division, 2012 – 2015

R&D Associate Staff, Environmental Sciences Division, 2007 – 2012

Principal investigator for multiple projects sponsored by the Department of Energy Bioenergy Technologies Office and Office of Science focused on simulation and analysis of supply chains to deliver biomass as a feedstock for production of biofuels and biomaterials, reducing risk in biomass supply chains, and development of biomaterials for large-scale additive manufacturing.

Univ. of Tennessee, Joint Associate Professor, Biosystems Engineering & Soil Science, 2016 – present

Univ. of Kentucky, Adjunct Professor, Biosystems & Agricultural Engineering, 2007-2016

Served on graduate research committees, contributed to proposal development, and mentored undergraduates in summer research experiences

Department of Energy, Technical Detailee, Bioenergy Technologies Office, 2008 – 2009

M&O contractor supporting DOE BETO staff by coordinating preparation of the Biomass Research & Development Board's Feedstock Logistics Interagency Working Group technical report *Biofuel Feedstock Logistics: Recommendations for Research and Commercialization* and by organizing the 2009 BETO feedstocks platform peer review sessions.

Univ. of Kentucky, Assistant Extension Professor, Biosystems & Agricultural Engineering, 2005 – 2007

Led applied research and extension programs for hay storage and livestock handling

Univ. of Florida, Graduate Research Fellow, Agricultural and Biological Engineering, 2002 – 2005

Univ. of Kentucky, Graduate Research Fellow, Biosystems & Agricultural Engineering, 2000 – 2002

Conducted research projects aimed at developing models of poinsettia root development for controlling mist propagation systems (MS, University of Kentucky, NSF fellowship) and experiments and modeling to determine plant evapotranspiration responses in a low-pressure Mars greenhouse environment (PhD, University of Florida, NSF and NASA fellowships)

EDUCATION

Ph.D., Agricultural and Biological Engineering, University of Florida, 2005

M.S., Biosystems and Agricultural Engineering, University of Kentucky, 2002

B.S., Agricultural Engineering, Summa Cum Laude, University of Tennessee, 1999

RESEARCH FUNDING

- E. Webb and S. Ozcan. *Bioderived Materials for Large-scale Additive Manufacturing* (2018-2020). Department of Energy Bioenergy Technologies Office, \$1,039,380
- Feedstock Conversion Interface Consortium (2019-2021). Department of Energy Bioenergy Technologies Office, \$14 million/year [Roles: Co-lead Task 2.4 Feedstock Variability at the Macro-scale, funding to ORNL: \$200K/year; and lead Task 8.1 Feedstock supply modeling, funding to ORNL: \$200K/year]
- Tuskan et al. *Center for Bioenergy Innovation* (2018-2022). Department of Energy Office of Science, Total funding: \$125 Million [Role: lead feedstocks technoeconomic analysis, \$600K]
- Chinn, M. S. (North Carolina State University) et al. *Next Generation Miscanthus: Hybrid Performance Evaluation and Enhanced, Sustainable Feedstock Production and Supply in the Southeast U.S. for Biofuels and Bioproducts* (2019-2023). Department of Energy Bioenergy Technologies Office, Total funding: \$4.6 million [Role: lead biomass supply chain analysis, task funding: \$270K]
- E. Webb and Keith Kline. *IBR Codes and Standards* (2015-2019). Department of Energy Bioenergy Technologies Office, \$1.88 million
- Comer, K. et al. *Enabling Sustainable Landscape Design for Continual Improvement of Operating Bioenergy Supply Systems* (2016-2011). Department of Energy Bioenergy Technologies Office, Total funding: \$12 million [Role: conduct biomass supply chain analysis, ORNL task funding: \$145K]
- Volk, T. A. et al. *Improved Advanced Biomass Logistics Utilizing Woody Feedstocks in the Northeast and Pacific Northwest* (2016-2019). Department of Energy Bioenergy Technologies Office, Total funding: \$4.6 million [Role: lead biomass supply chain analysis, task funding: \$250K]
- Feedstock Conversion Interface Consortium. *System-Wide Throughput Analysis* (2018). Department of Energy Bioenergy Technologies Office, \$450K
- Feedstock Conversion Interface Consortium. *Feedstock Variability* (2018). Department of Energy Bioenergy Technologies Office, \$200K
- E. Webb and S. Sokhansanj. *Feedstock Supply System Analysis* (2013 – 2017). Department of Energy Bioenergy Technologies Office, \$2.85 million
- Sokhansanj, S. and E. Webb. *Feedstock Logistics* (2007-2013). Department of Energy Office of Biomass Programs, \$4 million
- Webb, E. *China Bioenergy Feedstock Supply Analysis* (2009-2011). Department of Energy Office of Biomass Programs, \$450K
- Langholtz, M., E. Barnett, E. Webb, M. Downing (2011). *An operations plan for supplying feedstock to ORNL Biomass Steam Plant from an ORNL Biomass Farm*. ORNL Operation Improvement Program, \$90,000.
- Rials, T. (University of Tennessee) et al. (2011). *Southeast Partnership for Integrated Biomass Supply Systems (IBSS)*. USDA Agriculture and Food Research Initiative, \$15 million (funding provided for student support for ORNL).
- Nokes, S. (University of Kentucky) et al. (2010-2015). *On-farm Biomass Preprocessing Towards an Integrated High Solids Transporting/Storing/Processing System*. USDA Biomass Research and Development Initiative, \$6,932,786 (\$90,000 to ORNL).
- Pillai, R., S. Daw, C. Finney, S. Nukala, and E. Wilkerson (2009). *Value Chain Analysis for the Development of Sustainable Biomass-based Steam Plant Operations*. ORNL internally funded project. \$135,000
- Leiby, P. D. Oladosu, E. Wilkerson (2009-2011). *Decision Support for Secure and Sustainable Bioenergy System*. ORNL Laboratory Directed Research and Development Fund \$700,000

PROFESSIONAL LICENSURE

Professional Engineer, 2007 - present

HONORS AND AWARDS

- ORNL Environmental Sciences Division Science Serving Society Award, 2017
- ASABE Presidential Citation, 2009
- Outstanding Dissertation, University of Florida Agricultural and Biological Engineering, 2005
- NASA Graduate Student Researchers Program Fellowship, 2003 - 2005
- National Science Foundation Graduate Research Fellowship, 2000 - 2003
- University of Kentucky Gamma Sigma Delta Outstanding M.S. Student, 2001
- AGCO Student Design Competition – Finalist team, 1999
- University of Tennessee Agricultural Engineering Undergraduate with Professional Promise, 1999
- University of Tennessee College of Agricultural Sciences and Natural Resources Outstanding Junior, 1998; Outstanding Senior, 1999
- ASAE Student Honor Award, 1999

PROFESSIONAL SOCIETIES AND ACTIVITIES

- American Society of Agricultural and Biological Engineers (ASABE)
 - Board of Trustees (elected by membership), 2019-2022
 - *Resource Magazine*, Editorial Committee, 2019 - present
 - Boyd-Scott Graduate Student Research Competition Committee, Chair, 2019
 - Professional Engineers Institute
 - Nominating Committee, 2011-2013
 - Bioenergy Engineering Conference Planning Committee, 2009
 - T-11: Energy Committee, 2008-present; Vice-Chair, 2008; Chair, 2009-2010
 - FPE-709: Biomass Energy & Industrial Products Committee, 2007 - present
 - M-164: Preprofessional Engineer of the Year Committee, 2008-present; Chair, 2008; Vice-Chair 2009
- AIChE, 2017 - present
- ORNL Postgraduate Program Advisory Committee, EESD representative, 2017-present
- ORNL Women in Science & Engineering committee (WiSE), 2017-present
- University of Tennessee Institute of Agriculture Advisory Council, 2014 – present
- ORNL Energy and Environmental Sciences Division Director's Roundtable, 2014-2015
- INFORMS, 2014
- University of Kentucky Biosystems and Agricultural Engineering Advisory Council, 2010 - 2013
- ORNL Committee for Women, 2007-2008
- Sigma Xi (research)
- Tau Beta Pi (engineering)
- Gamma Sigma Delta (agriculture)

TECHNICAL WORKING GROUPS

- Biomass Research & Development Board Interagency (BRDI) Feedstock Logistics Working Group, 2008-2009, 2011 – present; Feedstock Production & Management Working Group, 2018 - present
- Biomass Industry Panel on Codes and Standards, Co-chair, 2014 - 2017
- Southeastern Partnership for Integrated Biomass Supply Systems, Switchgrass Team, 2011
- USDA Feedstock Logistics Advisory Team, 2008
- Southern Biomass Transportation and Logistics Working Group, 2008

Professional Development

- ORNL Emerging Leader Pathway, 2019-2020; Learning at the Speed of Trust (2019)
- Situational Leadership, 2015
- ORNL Mentoring Program, Protégé, 2011
- Project Management Foundation Skills, 2011

ADVISING

- Bhavna Sharma, Postdoctoral Researcher, 2017-2018
- Devita Amal, Virginia Tech Ph.D. Student, 2016-2018
- Joanna Quiah, Higher Education Research Experience, Summer 2018
- Luke Martin, Science Undergraduate Laboratory Internship, Summer 2018
- Magen Shedden, University of Tennessee M.S. Student, 2016-2018
- Jake Childs, Science Undergraduate Laboratory Internship, Summer 2017; Higher Education Research Experience, Fall 2017
- Hernan Chavez, University of Texas at San Antonio, Ph.D. awarded in May 2017
- Mackenize Morris, Science Undergraduate Laboratory Internship, Summer 2016
- Vincent Ruggeri, IBSS South East Energy Development Fellowship, Summer 2016
- Dami Fasina, IBSS South East Energy Development Fellowship, Summer 2016
- Oluwafemi Oyediji, Advanced Short-Term Research Opportunity, 2015
- Johnson Luma, Science Undergraduate Laboratory Internship, Summer 2015
- Steven Gail, Higher Education Research Experience, Summer 2015
- Kirk Copley, IBSS South East Energy Development Fellowship, Summer 2015
- Eric Vogt, IBSS South East Energy Development Fellowship, Summer 2015
- Emma Tobin (co-advised), IBSS South East Energy Development Fellowship, Summer 2015
- Justine Barry, Science Undergraduate Laboratory Internship, Summer 2014
- Thomas Loxley, Higher Education Research Experience, Summer 2014
- Steven Gail, Higher Education Research Experience, Summer 2014
- Taylor Trippe, Higher Education Research Experience, Summer 2014
- Magen Shedden, Higher Education Research Experience, Summer 2014
- Magen Shedden, Higher Education Research Experience, Summer 2013
- Magen Shedden, Southeast Partnership for Integrated Biomass Supply Systems, 2012-2013
- Robert Grisso, HERE Faculty Appointment (sabbatical from Virginia Tech), 2012
- Yun Wu, Post-Master's appointment, 2010-2011
- M. Wesley Brummette, Higher Education Research Experience, 2011
- Sara Ivy, Tennessee Governor's Academy Internship, 2010-2011
- Kevin Caffrey, Advanced Short-Term Research Opportunity, 2010
- Jamie R. Marsh, advisory committee, M.S. in Biosystems and Agricultural Engineering, University of Kentucky, completed August 2008

PUBLICATIONS

1. Kooduvalli, Komal, Bhavna Sharma, Erin Webb, Uday Vaidya, and Soydan Ozcan (2019). "Sustainability Indicators for Biobased Product Manufacturing: A Systematic Review." *Journal of Sustainable Development* 12 (1): p55. <https://doi.org/10.5539/jsd.v12n1p55>.
2. Ilic, Dusan, Kenneth Williams, Richard Farnish, Erin Webb, and Gary Liu (2018). On the challenges facing the handling of solid biomass feedstocks. *Biofuels Bioprod. Biorefining* 12, 187–202.
3. Ebadian, Mahmood, Magen Shedden, Erin Webb, Shahab Sokhansanj, Mark Eisenbies, Timothy Volk, Justin Heavey, and Karl Hallen (2018). Impact of Parcel Size, Field Shape, Crop Yield, Storage Location, and Collection Equipment on the Performance of Single-Pass Cut-and-Chip Harvest System in Commercial Shrub Willow Fields. *BioEnergy Research* <https://doi.org/10.1007/s12155-018-9902-7>
4. Wang, Yu, Mahmood Ebadian, Shahab Sokhansanj, Erin Webb, Hisham Zerriffi, and Anthony Lau (2018) A Novel Risk Analysis Methodology to Evaluate the Economic Performance of a Biorefinery and to Quantify the Economic Incentives for Participating Biomass Producers. *Biofuels, Bioproducts and Biorefining*, 12(3): 453-473 <https://doi.org/10.1002/bbb.1862>
5. Webb, Erin, Robert Chambers, and Keith Webster (2018). Addressing Fire Risk in Biomass Storage. *Resource Magazine* 25(4):4-7.

6. Sharma, Bhavna, Robin Clark, Michael R. Hilliard, and Erin Webb (2018). Simulation Modeling for Reliable Biomass Supply Chain Design under Operational Disruptions. *Frontiers in Energy Research* 6 <https://doi.org/10.3389/fenrg.2018.00100>
7. Oyedeggi, O., S. Sokhansanj, and E. Webb. 2017. Spatial Analysis of Stover Moisture Content During Harvest Season in the United States. *Transactions of the ASABE* (in press).
8. Chavez, H., K. K. Castillo-Villar, and E. Webb. 2017. Development of the IBSAL-SimMOpt Method for the Optimization of Quality in a Corn Stover Supply Chain. *Energies* 10:1137.
9. Wang, Y., M. Ebadian, E. Webb, and S. Sokhansanj. 2017. Impact of the biorefinery size on the logistics of corn stover supply - a scenario analysis. *Applied Energy* 198:360-376.
10. Hosseinizanda, H., C. J. Lim, E. Webb, S. Sokhansanj. 2017. Economic analysis of drying microalgae *Chlorella* in a conveyor belt dryer with recycled heat from a power plant. *Applied Thermal Engineering* 124: 525-532
11. Ebadian, M., S. Sokhansanj, and E. Webb. 2017. Estimating the required logistical resources to support the development of a sustainable corn stover bioeconomy in the USA. *Biofuels, Bioproducts, and Biorefining* 11:129-149
12. U.S. Department of Energy. 2016. *2016 Billion-Ton Report: Advancing Domestic Resources for a Thriving Bioeconomy, Volume 1: Economic Availability of Feedstocks*. M. H. Langholtz, B. J. Stokes, and L. M. Eaton (Leads), ORNL/TM-2016/160. Oak Ridge National Laboratory, Oak Ridge, TN. 448p. {Lead author for Chapter 6 – To the Biorefinery: Delivered Forestland and Agricultural Resources}
13. Castillo-Villar, K. K, H. Minor-Popocatl, and E. Webb. 2016. Quantifying the Impact of Feedstock Quality on the Design of Bioenergy Supply Chain Networks. *Energies* 9(3):203.
14. Sokhansanj, S., E. G. Webb, and A. T. Turhollow. 2016. Evaluating industrial drying of cellulosic feedstock for bioenergy: a systems approach. *Biofuels, Bioproducts, and Biorefining* 10(1): 47-55.
15. Webb, E., M. Hilliard, C. Brandt, S. Sokhansanj, L. Eaton, and M. Martinez Gonzalez. 2014. *Spatial Analysis of Depots for Advanced Biomass Processing*. ORNL/TM-2014/503.
16. Sokhansanj, S. and E. Webb. 2014. *Investigating Options to Reduce the Logistical Cost of Microalgae Feedstock for Biofuels and Bioproducts*. ORNL/TM-2014/463.
17. Sokhansanj, S., A. Turhollow, and E. Webb. 2014. *Simulation of the DOE High-Tonnage Logistics Projects: Auburn University*. ORNL/TM-2014/505.
18. Sokhansanj, S., E. G. Webb, and A. Turhollow. 2014. *Evaluating industrial drying of cellulosic feedstocks for bioenergy – A systems approach*. ORNL/TM – 2014/165.
19. Davison, B. H., C. C. Brandt, A. M. Guss, U. C. Kalluri, A. V. Palumbo, and E. G. Webb with R. Stouder. 2014. *Report on Impact of Biotechnology on US Bioenergy*.
20. Webb, E. G. and S. Sokhansanj. 2014. *Sensitivity Analysis of Biomass High-Tonnage Logistics Projects*. Oak Ridge National Laboratory. ORNL/TM-2013/568.
21. Lautala, P. T., M. R. Hilliard, E. G. Webb, I. Busch, J. R. Hess, M. S. Roni, J. Hilbert, R. M. Handler, R. Bittencourt, A. Valente, and T. Laitinen. 2015. Opportunities and Challenges in the Design and Analysis of Biomass Supply Chains. *Environmental Management* 56(6):1397-415.
22. Davison, B. H., C. C. Brandt, A. M. Guss, U. C. Kalluri, A. V. Palumbo, R. L. Stouder, and E. G. Webb. 2015. The impact of biotechnological advances on the future of U. S. Bioenergy. *Biofuels, Bioproducts, and Biorefining* 9(5):454-467.
23. Langholtz, M., E. Webb, B. L. Preston, A. Turhollow, N. Breuer, L. Eaton, A. King, S. Sokhansanj, S. S. Nair, and M. E. Downing. 2014. Advancing Climate Risk Management for the U.S. Cellulosic Biofuels Supply Chain. *Climate Risk Management* 3: 96-115.

24. Webb, E. G., S. Sokhansanj, and A. Turhollow. 2013. *Simulation of the DOE High-Tonnage Biomass Logistics Demonstration Projects: AGCO Corporation*. Oak Ridge National Laboratory. ORNL/TM-2013/323.
25. Webb, E. G., S. Sokhansanj, and A. Turhollow. 2013. *Simulation of the DOE High-Tonnage Biomass Logistics Demonstration Projects: FDC Enterprises*. Oak Ridge National Laboratory. ORNL/TM-2013/338.
26. Webb, E. G., S. Sokhansanj, and A. Turhollow. 2013. *Simulation of the DOE High-Tonnage Biomass Logistics Demonstration Projects: TennEra LLC*. Oak Ridge National Laboratory. ORNL/TM-2013/375.
27. Webb, E. G., S. Sokhansanj, and A. Turhollow. 2013. *Simulation of the DOE High-Tonnage Biomass Logistics Demonstration Projects: SUNY*. Oak Ridge National Laboratory. ORNL/TM-2013/376.
28. Grisso, R. D. and E. G. Webb. 2012. *Determining Available Work Days for Biomass Logistics Systems: Proposed Method*. Oak Ridge National Laboratory. ORNL/TM-2012/260 (in review).
29. Webb, E. G. and Y. Wu. 2012. *A case study of agricultural residue availability and cost for a cellulosic ethanol conversion facility in the Henan province of China*. Oak Ridge National Laboratory. ORNL/TM-2011/534.
30. Webb, E., M. Langholtz, E. Barnett, K. Caffrey, M. W. Brummette, M. Downing. 2011. *Utilizing resources of the Oak Ridge Reservation to promote forest health and supply wood chips to the ORNL biomass steam plant*. Oak Ridge National Laboratory. ORNL/TM-2011/525.
31. Langholtz, M., K. Caffrey, E. Barnett, E. Webb, M. W. Brummette, M. Downing. 2011. *Demonstration of the BioBaler harvesting system for collection of small-diameter woody biomass*. Oak Ridge National Laboratory. ORNL/TM-2011/524.
32. Fulcher, A., et al. 2011 "Controlled Environment Technology and Use-Using Transpiration Chambers to Detect Initial Transpiration in Cuttings and Quantify Transpiration in Seedlings." *Acta Horticulturae* 893: 1037.
33. Turhollow, A. F., E. G. Webb, and M. Downing. 2010. *Review of Sorghum Production Practices: Applications for Bioenergy*. Oak Ridge National Laboratory. ORNL/TM-2010/7.
34. Turhollow, A. F., E. G. Wilkerson, and S. Sokhansanj. 2009. *Cost Methodology for Biomass Feedstocks: Herbaceous Crops and Agricultural Residues*. Oak Ridge National Laboratory. ORNL/TM-2008/105.
35. Wilkerson, E. G. and R. D. Perlack. 2008. Chapter 3 – Resource Assessment, Economics and Technology for Collection and Harvesting. In *Renewable Energy from Forest Resources of the United States*. B. Soloman and V. Luzadis, ed.
36. Gunderson, C. A., E. B. Davis, H. I. Jager, T. O. West, R. D. Perlack, C. C. Brandt, S. D. Wulschleger, L. M. Baskaran, E. G. Wilkerson, and M. E. Downing, 2008. Exploring Potential U. S. Switchgrass Production for Lignocellulosic Ethanol. Oak Ridge National Laboratory, ORNL/TM-2007-183.
37. S. Sokhansanj, A. F. Turhollow, and E. G. Wilkerson. 2008. *Development of the Integrated Biomass Supply Analysis and Logistics (IBSAL) Model*. Oak Ridge National Laboratory, ORNL/TM-2006/57.
38. Wilkerson, E. G., D. B. Blackwelder, R. D. Perlack, D. J. Muth, and J. R. Hess. 2008. *A preliminary assessment of the state of harvest and collection technology for forest residues*. Oak Ridge National Laboratory, ORNL/TM-2007/195.
39. Wilkerson, E. G., R. A. Bucklin, P. A. Fowler, and V. Y. Rygalov. 2007. Convective Heat Transfer of Radish Leaves in Hypobaric Conditions. *Transactions of the ASABE* 50(3): 981-991.
40. Wilkerson, E. G., R. A. Bucklin, and P. A. Fowler. 2007. Development of Small-Scale Hypobaric Plant Chambers. *Applied Engineering in Agriculture* 23(4): 531-537.
41. Wilkerson, E.G., R. S. Gates, S. Zolnier, S. T. Kester, and R. L. Geneve. 2005. Transpiration Capacity in Poinsettia Cuttings at Different Rooting Stages and the Development of a Cutting Coefficient for Scheduling Mist. *Journal of the American Society for Horticultural Science* 130(3):295-301.

42. Wilkerson, E.G., R.S. Gates, S. Zolnier, S.T. Kester, and R.L. Geneve. 2005. Predicting rooting stages in poinsettia cuttings using a root zone temperature-based model. *Journal of the American Society for Horticultural Science* 130(3):302-307.
43. Bucklin, R. A., P. A. Fowler, V. Y. Rygalov, R. M. Wheeler, Y. Mu, I. Hublitz, E. G. Wilkerson. 2004. Greenhouse Design for the Mars Environment: Development of a Prototype, Deployable Dome. *Acta Horticulturae* 659: 127-134.
44. Geneve, R.L., R.S. Gates, S. Zolnier, E. Wilkerson, and S. T. Kester. 2004. Environmental Control Systems for Mist Propagation of Cuttings. *Acta Horticulturae* 630:297-303.
45. Wilkerson, E. G. and R. S. Gates. 2003. Controlled Environment System for Studying Root Zone Temperature Effects on Cutting Propagation. *Applied Engineering in Agriculture* 19(4): 483-489.
46. Pordesimo, L. O., E. G. Wilkerson, A. R. Womac, and C. N. Cutter. 2002. Process Engineering Variables in the Spray Washing of Meat and Produce. *Journal of Food Protection* 65(1): 222-237.
47. Shubin S., S. Kester, E. Wilkerson, J. Buxton and R. L. Geneve. 2001. Design of a propagation unit that independently controls atmospheric and medium moisture. *Combined Proceedings International Plant Propagator's Society* 51:518-520.

PRESENTATIONS

* First author is student advisee, **Invited

- * Sharma, Bhavna, Robin Clark, Michael Hilliard, Erin Webb. Simulation modeling for reliable biomass supply chain design under operational disruptions. INFORMS Business Analytics Conference, Baltimore, MD, April 15-17, 2018
- **Webb, Erin, Robert Chambers, Magen Shedden, Keith Webster, Dan Steppan, John Pieper, Freddie DuPont. Designing corn stover bale storage yards to reduce potential fire growth and spread. 40th Symposium on Biotechnology for Fuels and Chemicals, Clearwater, FL April 28 – May 2, 2018.
- Bhavna Sharma, Robin Clark, Michael Hilliard, Erin Webb. Simulation modeling for reliable biomass supply chain design under operational disruptions. ASABE Annual International Meeting, Detroit, MI July 29 – August 1, 2018.
- * Zhao, Xianhui, Erin Webb, Soydan Ozcan, Halil Tekinalp, Tim Theiss, Darby Ker. Bioderived Materials for Large-Scale Additive Manufacturing. ASABE Annual International Meeting, Detroit, MI July 29 – August 1, 2018.
- Webb, Erin, Robert Chambers, Timothy Theiss, Joanna Quiah, Keith Webster. Designing corn stover bale storage yards to reduce potential fire growth and spread. ASABE Annual International Meeting, Detroit, MI July 29 – August 1, 2018.
- Webb, Erin, John Field, Tom Richard, Mary Biddy, Brian Davison, Wellington Muchero, Katrien Devos, Gerald Tuskan. Technoeconomic Analysis of Biofuel Feedstock Supplies to Inform Plant Development R&D. 2018 Genomic Sciences Program Annual Principal Investigator (PI) Meeting, Tysons's Corner, VA February 25-28, 2018.
- Biddy, Mary, Erin Webb, Nicholas Grundl, Rebecca Hanes, Brian Davison, Gerald Tuskan. Agile Technoeconomic and Life Cycle Assessments at the CBI. 2018 Genomic Sciences Program Annual Principal Investigator (PI) Meeting, Tysons's Corner, VA February 25-28, 2018.
- *Childs, J. and E. Webb. 2017. Biofiber Reinforcement in 3D printing as a Coproduct for Biofuel Feedstock Supply Chains {poster}. ASABE Annual Meeting, Spokane, WA, July 16-19, 2017.
- *Amal, D., E. Webb, C. Brandt, and L. Eaton. 2017. Modeling Biomass Supply Chain Disruptions in the US {poster}. ASABE Annual Meeting, Spokane, WA, July 16-19, 2017.
- *Shedden, M. and E. Webb. 2017. Optimized perimeter cut to improve headland space for maneuvering equipment and reduced turn time. ASABE Annual Meeting, Spokane, WA, July 16-19, 2017.
- Ebadian, M., S. Sokhansanj, M. Shedden, and E. Webb. 2017. Modeling to improve harvest and collection efficiencies for willow and poplar plantations. ASABE Annual Meeting, Spokane, WA, July 16-19, 2017.
- *Sharma, B., C. Brandt, and E. Webb. 2017. Spatial multi-feedstock biomass supply chain modeling framework for the U.S. ASABE Annual Meeting, Spokane, WA, July 16-19, 2017.
- *Amal, D., E. Webb, and A. Salado. 2017. Biomass Supply Chain Risk: A Systematic Review. ASABE Annual Meeting, Spokane, WA, July 16-19, 2017.
- Webb, E. Developing strategies to reduce the risk of fire spread in biomass bale storage yards. ASABE Annual Meeting, Spokane, WA, July 16-19, 2017.

- *Chavez, H., E. Webb, K.Castillo-Villar, M. Ebadian, S. Sokhansanj. 2016. Modeling cost of quality in a discrete event biomass supply chain model. IBSS Annual Meeting, Oak Ridge, TN July 27-28, 2016.
- *Fasina, O. and E. Webb. 2016. Answering Logistical Questions in the BT16 with data from the Supply Characterization Model. ASABE Annual Meeting, Orlando, FL, July 17-20, 2016.
- *Fasina, O. and E. Webb. 2016. Answering Logistical Questions in the BT16 with data from the Supply Characterization Model. IBSS Annual Meeting, Oak Ridge, TN July 27-28, 2016.
- Hilliard, M., E. Webb, C. Brandt, L. Eaton, G. Gresham, E. Searcy, and S. Sokhansanj. 2016. BT16: To the Biorefinery: Estimating Delivered Costs. Bioenergy 2016, Washington, DC, July 12-13, 2016 (Invited).
- McCullough-Amal, D., E. Webb, C. Brandt, T. Alland, L. Eaton. 2016. Modeling Bioenergy Industry Evolution. IBSS Annual Meeting, Oak Ridge, TN July 27-28, 2016.
- *Morris, M. and E. Webb. 2016. Modeling Fire Risk in Biomass Storage Yards. ASABE Annual Meeting, Orlando, FL, July 17-20, 2016.
- *Morris, M. and E. Webb. 2016. Modeling Fire Risk in Biomass Storage Yards. IBSS Annual Meeting, Oak Ridge, TN July 27-28, 2016.
- *Oyedeki, O., S. Sokhansanj, and E. Webb. 2016. Spatial Analysis of Stover Moisture Content During Harvest Season in the United States. ASABE Annual Meeting, Orlando, FL, July 17-20, 2016.
- Steppan, D. L. and E. G. Webb. 2016. Biomass Commodity Classification Testing. 2016 NFPA SupDet (Suppression and Detection) Symposium, San Antonio, TX. Presentations are available at: <http://www.nfpa.org/2016supdetpapers>
- *Ruggeri V., M. Hilliard, E. Webb. 2016. Illustrating Logistical Cost of BioEnergy Feedstocks using Tableau and the Supply Characterization Model. Modeling Bioenergy Industry Evolution. ASABE Annual Meeting, Orlando, FL, July 17-20, 2016.
- *Ruggeri V., M. Hilliard, E. Webb. 2016. Illustrating Logistical Cost of BioEnergy Feedstocks using Tableau and the Supply Characterization Model. Modeling Bioenergy Industry Evolution. IBSS Annual Meeting, Oak Ridge, TN July 27-28, 2016.
- **Webb, E. 2016. Addressing biomass fire risk. Industry Outlook into BioMass and Overcoming the Handling Difficulties. International Powder & Bulk Solids Conference, May 3-5, 2016 .
- **Webb, E., M. Hilliard, C. Brandt, L. Eaton, G. Gresham, E. Searcy, and S. Sokhansanj. 2016. BT16: To the Biorefinery Delivered Cost Scenarios. ASABE Annual Meeting, Orlando, FL, July 17-20, 2016.
- **Webb, E., M. Hilliard, A. Myers, L. Eaton, M. Langholtz. 2016. Interactive BT16 Bioenergy Knowledge Discovery Framework. ASABE Annual Meeting, Orlando, FL, July 17-20, 2016.
- Webb, E. G. 2015. Addressing fire risk in biomass handling and storage. *American Society of Agricultural and Biological Engineers Annual International Meeting*, New Orleans, LA.
- *Oluwafemi, O., E.G. Webb, and S. Sokhansanj. 2015. Simulating Field Drying of Corn Stover across the US (poster). *American Society of Agricultural and Biological Engineers Annual International Meeting*, New Orleans, LA.
- *Shedden, M., L. Stewart, E.G. Webb, N.Labbe, T. Rials. 2015. Optimized Stacking of Large Square Bales for In-stack Drying of Switchgrass (poster). *American Society of Agricultural and Biological Engineers Annual International Meeting*, New Orleans, LA.
- Webb, E. G. 2015. Addressing fire risk in biomass handling and storage. *American Society of Agricultural and Biological Engineers Annual International Meeting*, New Orleans, LA.
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- Wilkerson, E. G. 2007. *Planning and Building Hay Barns that Work*. Tennessee Nutrition Conference. Franklin, Tennessee.
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COURSES TAUGHT

- *BAE 581: Physics of Plant and Animal Environments*, Spring 2007, Biosystems and Agricultural Engineering, University of Kentucky
- *BAE 427: Structures and Environment Design*, Fall 2001, Spring 2006, Spring 2007, Biosystems and Agricultural Engineering, University of Kentucky
- *AOM 4642: Structures and Environment*, Fall 2003, Agricultural Operations Management, University of Florida