



## Robert T. Burns

**Robert T. Burns, PE, ASABE Fellow** is the 2021 recipient of the Henry Giese Structures & Environment award for his outstanding contribution to the advancement of knowledge of the positive environmental management of livestock and poultry production systems.

Burns is a professor in the biosystems engineering department and Soil Science and Precision Livestock Farming Specialist and Precision Livestock Farming Program Coordinator at the University of Tennessee in Knoxville. Burns' areas of expertise include precision livestock farming systems and design of animal waste management systems and nutrient management planning for livestock and poultry operations. He also specializes in comprehensive nutrient management planning, phosphorus recovery, anaerobic digestion, solids separation and control of air emissions from animal feeding operations.

Burns has made significant contributions to advancing the knowledge of environmental management of livestock and poultry production systems. His work regarding livestock and poultry air emissions, manure management and nutrient management planning is recognized nationally and internationally.

Burns has published 450 peer-reviewed articles, conference proceeding papers, extension publications, and major research reports. He has also authored or edited five books. Burns has received a number of awards throughout his career

including the Iowa State University College of Engineering Superior Engineering Extension award and the ASABE Iowa Section's Young Engineer of the Year award. He was also awarded the ASABE G.B. Gunlogson Countryside Engineering award, the Young Extension Worker award, and was inducted as an ASABE Fellow in 2016.

A 27-year member of ASABE, Burns has been a leader and member on a number of technical committees including the Plant, Animal and Facility Systems Facilities and Systems Group. He also served as a member of the Membership Development Council, the Professional Engineering Institute committee, and the G.B. Gunlogson Countryside Engineering award committee. Burns currently serves on the Food and Agriculture Organization of the United Nations Technical Advisory Group on Methane. He is also a member of the USDA Agricultural Air Quality Task Force and a member of the Board of Directors for the International Research Center for Animal Environment and Welfare. Burns is a member of the Port Air Science Policy Advisory committee, the International Research Center for Animal Environment and Welfare Board of Directors, and the International Council of the Faculty of Agrobiotechnical Sciences.