



Dr. David McClary

DVM, Senior Technical Dairy Consultant, Elanco Animal Health

Title: Making safe, affordable, and abundant food a global reality

David McClary is senior Dairy Technical Consultant with Elanco Animal Health. He has been with Elanco for 24 years. During that time David has been involved in research and technical support of such cattle products as bovine somatotropin (Posilac®), monensin (Rumensin®) an ionophore for cattle to improve feed and milk production efficiency, Micotil® an injectable antibiotic for treatment and control of bovine respiratory disease. David is from Scottsville, KY. He received his BS from Western Kentucky University in 1970 and DVM from Auburn University in 1974. Following graduation he practiced in Kentucky until 1978 when he returned to Auburn. He received a MS and diplomat of the American College of Theriogenologist (reproduction) in 1982. He continued on the staff at Auburn as an Assistant Professor until 1988 when he joined Elanco in Greenfield, IN as a dairy researcher. Since 1996 he has served as a Senior Cattle Technical Consultant providing global technical and research support for Elanco in both beef and dairy cattle. His areas of expertise include bovine reproduction, mastitis, and bovine respiratory disease.

Session I: Food Security and Ag Production Panelists

Dr. Ken Boote: Professor Emeritus in Agronomy, UF/IFAS

Research area(s): Crop physiologist/agronomist, research on responses of peanut, soybean, rice, maize,

common bean, and perennial forages to climatic factors of elevated temperature, elevated CO₂, and drought often considering cultivar effects. For the past 30 years, also developed and tested crop growth models for response to weather, management, soils, and cultivar variation

Dr. Walter Bowen: Director of International Programs in UF/IFAS

Research area(s): Walter is a soil scientist with a global portfolio of research and administrative experience. Walter earned his Ph.D. and M.S. at Cornell University, in Agronomy and Soil Science, with minors in agricultural economics and plant genetics. Walter's dissertation research was conducted in Brazil.

Session I: Food Security and Ag Production Moderator

Dr. Ken Quesenberry: Interim Chair of Agronomy, UF/IFAS

Research area(s): professor of forage breeding and genetics in the Agronomy department and had taught numerous courses including plant breeding, cytogenetics and plants that feed the world

Session I: Food Security and Ag Production Sponsor



Lunch with Dr. Dave Gustafson



Dr. Dave Gustafson

**Director, ILSI-RF Center
for Integrated Modeling of
Sustainable Agriculture &
Nutrition Security (CIMSANS)**

***Title: Climate Change and
Food Security Imperative:
Collaborate or Starve!***

Dave Gustafson is a Senior Fellow at Monsanto Company, where he serves as Director of Environmental & Ag Policy Modeling. He also serves as Director for the ILSI Research Foundation's new Center for Integrated Modeling of Sustainable Agriculture and Nutrition Security, a global forum for industry scientists to engage others from academia and the public-sector on the growing challenge to satisfy future nutrition needs in more sustainable ways. His academic training was at Stanford University and the University of Washington in Seattle, where he earned his B.S. and Ph.D. degrees, both in chemical engineering. His research on the environmental challenges surrounding agriculture has now spanned nearly 30 years. The initial focus of his work was the

development of new computer models for predicting the environmental behavior of crop chemicals, especially their potential impacts on water quality. In subsequent years, Dave developed new modeling approaches to pollen-mediated gene flow and the population genetics of insect and weed resistance. In 2007, Dave served as an inaugural member and theme lead for the Monsanto Fellows Climate Change Panel, which reported back to the company on the degree of scientific certainty in climate modeling, and how climate change is already impacting agriculture around the world. He now serves on various national and international teams looking at these issues, including the Executive Secretariat of the US Government's National Climate Assessment Development & Advisory Committee.

Luncheon Sponsored by



Session II: Energy



Dr. Sam Baldwin

Chief Science Officer at the Office of Energy Efficiency and Renewable Energy at the U.S. Department of Energy

Title: *Renewable Electricity Futures*

Sam Baldwin is a PhD. Physicist and currently serves as the Chief Scientist for the Office of Energy Efficiency and Renewable Energy at the U.S. Department of Energy. In previous positions he has served with the White House Office of Science and Technology Policy (OSTP), the National Renewable Energy Laboratory, the Congressional Office of Technology Assessment (OTA), Princeton University, the Sahelian Anti-Drought Committee (CILSS) in West Africa, the U.S. Senate, and elsewhere. He is the author or coauthor of 9 books and monographs at OSTP, OTA, DOE, and elsewhere, and more than 30 papers and technical reports on energy technology and policy, physics, and other issues. He was elected as a Fellow of the American Association for the Advancement of Science in 2007.



Dr. Brent Shanks

Mike and Jean Steffenson Professor in Chemical and Biological Engineering and Director of NSF's Engineering Research Center for Bio-renewable Chemicals at Iowa State University

Title: *Biofuels – Challenges and Opportunities*

Dr. Brent Shanks is the Mike and Jean Steffenson Professor of Chemical and Biological Engineering at Iowa State University and Director of the National Science Foundation Engineering Research Center for Biorenewable Chemicals (CBIRC). He received his

B.S. degree from Iowa State University in 1983 and M.S. and Ph.D. degrees from the California Institute of Technology in 1985 and 1988, respectively. From 1988 to 1999 he worked as a Research Engineer and Department Manager in the Catalyst Department at the Shell Chemical Company technology center in Houston, Texas. While at Shell, he was involved in the development and commercialization of catalysts used in petrochemicals production. He joined the faculty at Iowa State University in 1999 where his work has primarily involved the research and development of novel heterogeneous catalyst systems for efficiently converting biological-based feedstocks to chemicals and fuels.

Session II: Energy Panelists

J.L. Martinez: Sr. Director Office of Clean Energy, Florida Power & Light Company

Research area(s): Identifying and originating clean energy opportunities in the state to promote visibility, commitment and economic development. Most recently, Mr. Martinez led the Company's efforts in the development of three large solar projects and three large combined cycle natural gas facilities.

Dr. Gary Peter: Professor, School of Forest Resources and Conservation, UF/IFAS

Research area(s): Forest biology and genetics with a focus on improving stem growth and wood properties in southern pines. Current projects include developing high terpene pines for direct extraction of biofuels

Patrick Sheehan: Executive Director, Office of Energy, Florida Department of Agriculture and Consumer Services (FDACS)

Research area(s): International affairs division of the U.S. National Guard Bureau at the Pentagon, public policy and leadership positions in U.S. Department of State, the United States Congress, Office of the Secretary of Defense, Joint Chiefs of Staff, and U.S. military Geographic Combatant Commands.

Session II: Energy Moderator

Dr. Jennifer Curtis: Interim FESC Director,
Associate Dean for Research, College of
Engineering, Distinguished Professor of Chemical
Engineering, UF

Research area(s): Computational fluid dynamics
simulations used to design, optimize, and troubleshoot
multiphase flow devices in fossil fuel processing plants

Session II: Energy Sponsor



Session III: Infrastructure and Transportation



Tim Jackson

**PE, Senior Principal Planner,
Kittelson & Associates, Inc.
Transportation Engineering,
Orlando, FL**

***Title: Transportation and
Sustainable Economies***

Tim serves as a principal planner in the Orlando office of KAI. He formerly served as President of Glatting Jackson, Inc. a community planning firm which joined AECOM in 2010. With more than 30 years of experience, Tim helps public and private clients by creating innovative solutions for great cities.

Tim's work in community design, regional planning and visioning, masterplanning, integrated land use and transportation planning, context sensitive solutions, and livable transportation helps communities throughout North America become more connected, economically vibrant and sustainable.

Tim currently serves as Chairman of the Board of 1000 Friends of Florida, a private not-for-profit corporation that has been advocating for smart growth since 1986. He led the organization's development of the Florida 2060 Plan, and has served on numerous advisory committees including the ULI Committee on Regional Cooperation in 2005, and the Leadership Committees for the Florida Transportation Plan 2025 Update and 2050 Plan.

He is an active member of the American Society of Civil Engineers. Activities have included co-chair of the 1999 and 2006 Specialty Conferences on Context Sensitive Solutions, co-chair of the Environmental Issues committee (1993 – 2010), and steering committee for the 2011 Green Streets and Highways Specialty Conference. He was the 2011 winner of the Wilbur Smith Award.

Tim is also active in the Urban Land Institute and the Congress for the New Urbanism.

**Dr. Josias Zietsman****Head of the Environment and Air Quality Division at Texas A & M Transportation Institute (TTI)*****Title: Applying Sustainability in the Transportation Sector***

Dr. Zietsman is the Head of the Environment and Air Quality Division at the Texas A&M Transportation Institute (TTI). Since joining TTI in the Spring of 1998 he has been principal investigator of several research projects covering the areas of air quality, sustainable transportation, performance measurement and transportation planning. He is also a member of the Graduate Faculty of Texas A&M University. In addition to his research experience, he has 3 years of highway construction experience and 7 years of metropolitan transportation planning experience. Dr. Zietsman has written numerous technical papers and reports and is a frequent speaker at national and international conferences and meetings. He is also an active member of the Transportation Research Board where he is Secretary of the Performance Measurement Council and member of the Air Quality and Sustainability Committees

**Dr. Blair Feltmate****Associate Professor in the Faculty of Environment, University of Waterloo*****Title: Key Lessons of the Climate Change Adaptation Project (Canada)***

Dr. Feltmate is an Associate Professor in the Faculty of Environment, University of Waterloo. Positions he holds include: Chair, Climate Change Adaptation Project (Canada); Chair, Pollution Probe; Advisory Board, Willis Energy Services; Co-Chair, Extreme Weather Task Force, City of

Toronto; Co-Chair, Greening Greater Toronto; Chair, Sustainable Electricity Program, Canadian Electricity Association; and Board Member, Sustainable Hamilton.

Previously, Dr. Feltmate was Director of Sustainable Development, Ontario Power Generation, and before that he was Vice President, Sustainable Development, Bank of Montreal. Earlier in his career, Dr. Feltmate developed the sustainable development programs for two dozen multi-national companies.

Session III: Infrastructure and Transportation Panelists**Jim Wood: Director of the Office of Policy Planning, Florida Department of Transportation (FDOT)**

Research area(s): 17 years of experience in planning, program administration, policy development, and inter-governmental coordination at the Florida Department of Environmental Protection. His work has focused on advancing multi-modal transportation systems, economic development initiatives, and regional and state scale conservation and recreation efforts.

Dr. Ruth Steiner: Associate Professor; Director: Center for Health and the Built Environment, Department of Urban and Regional Planning, UF

Research area(s): Transportation policy and planning, land use and transportation interactions, multi-modal transportation planning, growth management, transportation concurrency, and environmental impact assessment

Session III: Infrastructure and Transportation Moderator**Dr. Kirk Hatfield: Professor and Director of the Engineering School of Sustainable Infrastructure and Environment, UF**

Research area(s): Groundwater water flow and contaminant transport modeling, groundwater remediation, surface and ground water monitoring, water resource allocation modeling

Poster Reception

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Plum Creek

Growing Value from Exceptional Resources

Session IV: Wildlife and Natural Systems Management



John Pait

**Sr. VP for Sales, Marketing
and Product Development
ArborGen**

***Title: Success Factors in
Public-Private Natural
Resources Research***

John Pait has worked in research and management roles in the forest products industry for over twenty five years. A native of Atlanta, GA, he received B.S. and M.S. degrees in forest management and silviculture at the University of Georgia Warnell School of Forestry and Natural Resources. John's career in major forest products companies has focused on developing and implementing cutting-edge silviculture, genetics and nursery technologies to increase forest productivity and investor returns. Prior to joining ArborGen, was a senior vice president of business development for CellFor Corporation in Atlanta, Ga., led forestry R&D at Smurfit-Stone and then managed the Forest Productivity Groups at Georgia-Pacific, The Timber Company and Plum Creek Timber Company. In his role at ArborGen, John provides commercial and strategic leadership for the company's global business interests including seedling sales, marketing, genetics research and product development. John serves as a board member

of the Forest Landowners Association and is a member of the Society of American Foresters and several state forestry associations.



Dr. Kier Klepzig

**Assistant Director, Southern
Research Station, USDA Forest
Service**

***Title: Symbiosis in forest
science: partners and pests***

Although a native Midwesterner, with roots in Chicago and Wisconsin, Kier has spent the past 18 years working on interactions between insects and microbes in the South. Kier received his BS in 1986 from the University of Wisconsin-Platteville with a double major in Biology and Reclamation. He then moved the University of Wisconsin-Madison where he studied under Ken Raffa and Gene Smalley, gaining a MS (1989) and a PhD (1994), both with a double major in Entomology and Plant Pathology. Kier's taught at Southern University, before joining the Forest Service in Pineville, LA in 1995.

Kier was a research entomologist and then project leader there for 14 years before being named Assistant Director of the Southern Research Station in Asheville, NC.

Kier is a devoted Packers fan and sings bass with the acapella quartet Aire (like them on Facebook).

Please welcome Kier as he discusses symbiosis in forests and forestry research.



Dr. Karl Havens

Director, Florida Sea Grant Program, Professor in the School of Forest Resources & Conservation, UF/IFAS

Title: *Apalachicola Bay Oyster Decline 2012 – Evaluating Effects*

of Harvesting, River Flow, Drought and Predation

Karl Havens is Director of the Florida Sea Grant College Program and a Professor in the School of Forest Resources & Conservation in UF/IFAS. He received his PhD from West Virginia in 1984, and held faculty positions at the University of Pennsylvania and Kent State University. Prior to becoming Sea Grant Director he was Chair of the UF/IFAS Department of Fisheries and Aquatic Sciences. His research focuses on effects of anthropogenic and natural stressors on food webs in shallow lakes and estuaries. He has published over 140 peer-reviewed journal articles in his area of expertise, as well as book chapters, review papers and a book on shallow lake eutrophication. He is a member of the Florida Oceans Council, the Florida Oceans Alliance, and since fall 2012, has been serving as Chair of the UF Oyster Recovery Team.



Dr. Thomas Eason

Deputy Director, Division of Habitat and Species Conservation, Florida Fish and Wildlife Conservation Commission

Title: *Florida Fish and Wildlife: Adapting to Transformational Change*

Thomas Eason works as a wildlife biologist and administrator for the Florida Fish and Wildlife Conservation Commission (FWC). He received his B.S. and M.S. in Wildlife Science at Virginia Tech and the University of Tennessee, respectively, and completed his Ph.D. in Ecology from the University of Tennessee. He began his career working on black bear ecology and management and subsequently has taken on a variety of duties for the FWC focused on wildlife diversity conservation. He began his career with FWC as the Leader of the Bear Management Section and most recently served as the Deputy Director of Policy and Planning Development for the Division of Habitat and Species Conservation (HSC). He now serves as Division Director for HSC.

Session IV: Wildlife and Natural Systems Management Panelists

Dr. Thomas Hootor: Director, Center for Landscape Conservation Planning, Department of Landscape Architecture, College of Design Construction and Planning, UF

Research area(s): The application of landscape ecology and conservation biology to regional planning, greenway and wildlife corridor design, large carnivore ecology and conservation, focal species habitat modeling, and Geographic Information Systems applications in conservation planning