# Action in Agroforestry

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Michael Gold and
Savannah Kannberg, editors

## Agroforestry and Climate Change Workshop

An invitation-only National Climate Change Assessment Workshop entitled "Agroforestry and Climate Change: Reducing Threats and Enhancing Resiliency in Agricultural Landscapes" was held May 28-30, 2014 in Nebraska City, Neb., as part of the process of writing a USDA Technical Report concerning agroforestry as a tool for climate change adaptation and enhancing resiliency for food production.

The workshop highlighted agroforestry practices in the Americas and internationally. It focused on multiple areas where scientific research is growing and climate benefits can be seen: microclimate modification; habitat diversification; increasing resiliency for food production; maintenance and protection of natural resource services; agroforestry practices on islands, tribal lands and Canada; agroforestry accounting; and agroforestry tools and resources for adaptation and implementation.

A major outcome of this workshop will be a report which brings together the findings and perspectives of leading experts in agroforestry science and application and an initial outline for the USDA Technical Report. The Technical Report is due in October 2015 and will feed into the 2017 National Climate Assessment.

During the workshop, UMCA faculty presented or contributed to the following topics:

- Ecosystem Services from Agroforestry Practices - Jose
- Importance of Agroforestry for Food Production in Temperate Regions - Gold
- Economic Decision-making Tools - Godsey
- Water Benefits - Dosskey, Udawatta

A group photo taken of the conference attendees at the National Climate Change Assessment Workshop in Nebraska City, Neb.

KUDOS

# UMCA scientists receive Mizzou Advantage research awards

Mizzou Advantage, the MU initiative to promote interdisciplinary research and education, announced $3.8 million worth of competitive grant awards to 45 teams of researchers. Every project Mizzou Advantage funds falls in one of four areas: Food for the Future, Media of the Future, Sustainable Energy and One Health/One Medicine. UMCA scientists Chung-Ho Lin and Shibu Jose both received awards as PIs and Co-PIs.

**Development of a Novel Continuous Flow Saccharification Process for Advanced Biofuel Production (Sustainable Energy)** - $50,000
PI: Chung-Ho Lin-Bioremediation and Phytochemistry, MU Center for Agroforestry Forestry, and Department of Forestry
Co-PI: George C. Stewart- Veterinary Pathobiology, College of Veterinary Medicine and MU Life Sciences Center; Kattesh V. Katti- MU Cancer Nanotechnology Platform, Department of Physics and Radiology, and Biological Engineering; Shibu Jose- MU Center for Agroforestry and Department of Forestry; Hsin-Yeh Hsieh- Department of Veterinary Pathology and MU Life Sciences Center; Ronald R. Wood-Chief Executive Officer of Tiger Energy Solutions, LLC and Founder and principal officer of Wood Capital, LLC

**A Novel Spore Display System for Bioremediation of Dioxins (One Health, One Medicine)** - $50,000
PI: George C. Stewart- Department of Veterinary Pathobiology, College of Veterinary Medicine and MU Life Sciences Center
Co-PI: Chung-Ho Lin-Bioremediation and Phytochemistry, MU Center for Agroforestry Forestry, and Department of Forestry; Hsin-Yeh Hsieh; Zhiqiang Hu- Civil and Environmental Engineering; Lei Yang- Department of Marine Environment and Engineering and Center for Water Resources Studies, National Sun Yat-sen University (Taiwan), China Petrochemical Development Corporation (Taiwan)

**Accelerating Advanced Biofuels Production: A Three Pronged Approach (Sustainable Energy)** - $300,000
PI: Shibu Jose- MU Center for Agroforestry and Department of Forestry
Co-PI: Kattesh V. Katti; Chung-Ho Lin-Bioremediation and Phytochemistry, MU Center for Agroforestry Forestry, and Department of Forestry; Felix Fritschi- Division of Plant Science; George C. Stewart; Christine Costello- Biological Engineering; Wilfred Vermeris- Agronomy, University of Florida; Srinivasa Rao- ICRISAT, India; Ronald R. Wood **Endocrine Disrupting Activity Associated with Hydraulic Fracturing for Natural Gas and Oil (One Health, One Medicine)** - $75,000
PI: Susan Nagel- Obstetrics, Gynecology, and Women's Health
Co-PI: Chris Kassotis- Obstetrics, Gynecology, and Women's Health; Wade Davis- Biostatistics and Research Design Unit, Health Management and Informatics; Chung-Ho Lin; Jane McElroy-Family and Community Medicine; Donald Tillitt-US Geological Survey and Division of Biological Sciences; Avner Vengosh- Geology, Duke University; Karla Washington-Family and Community Medicine

**Environmental Toxicants & Low SES Children's Health & Learning (One Health, One Medicine)** - $30,000
PI: Gustavo Carlo-Human Development and Family Studies, Center for Family Policy and Research
Co-PI: Jane McElroy; Chung-Ho Lin; Susan Nagel; Francisco Palermo- Human Development and Family Studies; Wade Davis; Heather Hunt- Bioengineering

# USDA SARE - online local food educational products

SARE outreach has created the Farm to Table: Building Local and Regional Food Systems topic room, an online collection of educational products SARE grantees made during their SARE-funded projects. Growing and Marketing Elderberries in Missouri, from UMCA, has been included.

Head to www.sare.org/local-food to find resources on marketing, distribution, food processing, training and more.

## Upcoming Events

**June 20 - 22, 2014** — Chestnut Growers of America Annual Meeting; High Rock Farm, Gibsonville, NC.
For further information: www.wcga.net/annmtg2014.htm

**August 10 - 13, 2014** — Northern Nut Growers Association Annual Meeting; Oregon State University, Corvallis, OR.
Find out more at: www.nutgrowing.org

The Center for Agroforestry
University of Missouri
A Global Center for Agroforestry, Entrepreneurship and the Environment

203 Anheuser-Busch Natural Resources
(573) 882-0240
centerforagroforestry.org
Shibu Jose, Ph.D., Director