

# action in AGROFORESTRY

 The Center for Agroforestry  
University of Missouri

*A Global Center for Agroforestry, Entrepreneurship and the Environment*

Michael Gold and Calder Cleavelin, editors  
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## 4th Annual Symposium Addresses A Changing Climate

UMCA hosted its 4th Annual Research Symposium “Floods and Droughts: Agriculture, Agroforestry and Natural Resources in a Changing Climate,” January 9th on MU campus.

Over one hundred individuals attended the day-long symposium, which included ten different scientific presentations. There were active question and answer sessions following each presentation by an engaged audience. Others tuned in from afar to watch the live streamed event.

Climate scientists noted that our current weather patterns are characterized by increasingly extreme fluctuations, with more of the same expected into the future. Other speakers noted that agroforestry practices, consisting of diverse mixtures of woody perennials, perennial native grasses and annual crops, can be designed to provide ecosystem resilience and help to mitigate against extreme floods and drought. All streamed presentations will be posted on the UMCA website in the near future.

## Annual Research Review: 73 articles, seven patents

Following the Symposium, the MU Center for Agroforestry conducted its 14th Annual Research Review on MU campus. The Annual Research Review highlights the accomplishments of the previous year, in this case, 2012.

UMCA scientists, collaborating researchers, postdocs and graduate students gave presentations covering the full spectrum of UMCA’s diverse research, education and outreach portfolio, including environmental services, phytochemistry, tree/crop interactions, specialty crops, biomass, socio-economic-marketing, education, and outreach. UMCA and collaborating scientists were extremely productive in 2012, publishing an impressive 73 refereed research articles span-

ning the full array of UMCA activities. By the end of 2012, eight graduate students were enrolled in the new online agroforestry master’s program launched in 2011.

Dr. Chung-Ho Lin and his many research collaborators provided one of UMCA’s highlights for 2012, revealing that seven licensing and patent applications were either filed and/or in progress based on findings from their programs. Tied in with these “technology transfer” activities, MU has signed a license agreement with Tiger Energy LLC to transfer the developed technology resulting from the collaborative research efforts between UMCA, MU Radiology and Physics, and Cancer Nanotechnology Platform for commercial applications.

The commercialization will facilitate the process of transferring “benchtop” research discoveries to real-world applications. Patented technology “Super Enzymes’ for Conversion of Cellulose to Advanced Biofuel” will be utilized to immobilize and conjugate enzymes for better conversion efficacy, cost effectiveness and sustainability for commercial cellulosic biofuel production.

### Agroforestry: Online Master’s Degree Update

For Spring semester 2013, five courses are currently being offered, including:

- FOREST 4385/7385 – Agroforestry Theory, Practice and Adoption (Gold);
- FOREST 8385 – Ecological Principles of Agroforestry (Jose);
- ENVSCI 4396/7396 – Agroforestry for Watershed Restoration (Udawatta);
- SOIL 4313/7313 – Soil Fertility and Plant Nutrition (Motavalli);
- NATR 4353/7353 – Natural Resource Policy and Administration (Aguilar).

Additionally, with new enrollments for Spring ’13, there are currently ten students formally enrolled in the Online Master’s Degree Program in Agroforestry.



## Awards and Recognition

Dr. Michael Gold's \$74,842 NCR-SARE Professional Development Program grant "Increasing Agroforestry Adoption and Networking in the Midwest through Targeted Professional Development" (aka the Agroforestry Academy) has been named as the 2012 Paula Ford Professional Development Program Proposal of the Year.

From 1991-1997 Dr. Ford was the Program Coordinator for the Southern Region SARE program. She was the NCR-SARE Professional Development Program Coordinator at Kansas State University for 11 years (1999- 2009). To honor Dr. Ford's contributions to NCR-SARE, the Administrative Council created the "Paula Ford Professional Development Program Proposal of the Year" award.

Each year, one Professional Development Program funded project in the North Central region is given this special designation. This award is a recognition that began last year and goes to the proposal which best describes outcomes and evaluation for a professional development project. This honor is shared with Ms. Ina Cernusca who played a key role in helping to develop the evaluation dimension of the proposal.

## UMCA Economist

### Larry Godsey Takes New Post at Missouri Valley College

Dr. Larry Godsey, the Center's Economist, resigned his full time position with UMCA at the end of December to take on a new challenge heading up the Ag. Business program at Missouri Valley College in Marshall, MO.

Larry has been with the Center since 1999 and has become one of the nation's leading experts in the field of agroforestry economics and taxation.

While with the Center, Larry has conducted research on the economics of eastern black walnut agroforestry, non-timber forest product markets, timber markets, funding incentives for agroforestry, and taxation. Other studies included the economics of cottonwood for biomass, establishing silvopasture in an existing oak forest, competitive forces in the eastern redcedar, chestnut and shiitake industries, and vertical integration in the eastern black walnut nut meat market.

Larry has developed innovative, landowner friendly, excel-based Financial Decision Support Tools to support the growth of Missouri's eastern black walnut and elderberry industries. He has been the "go to" guy for all of his colleagues whenever we needed an economic dimension in our research program (which was almost always).

Over the years he has been a great friend, hard-working, dedicated and innovative, and always eager to help his colleagues in any way possible. His daily presence will be sorely missed.

But, all is not lost. Larry plans to continue his Center connections in the coming years. He will continue teaching his online Agroforestry Economics and Policy course as part of the Center's online master's degree in agroforestry. During his summers, Larry plans to continue to work with Center faculty on an array of agroforestry research projects and also participate in our agroforestry outreach efforts.

We wish him the best and know that he will not miss the daily commute from Marshall to Columbia.



*Photo: Dr Larry Godsey, economist*

## Events:

### Missouri Organics Association

Annual Conference  
Feb. 7-9, Springfield, MO  
University Plaza Hotel

More info and registration: [missouriorganics.org](http://missouriorganics.org)

*Featuring an all-day elderberry workshop!*

### Nut Show and Annual Meeting

Missouri Nut Growers Association  
Feb. 1-2, Nevada Community Center  
Nevada, MO

More information at the [MNGA website](http://MNGA website)



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