



Action in Agroforestry

June 2017 Vol. 8, No. 6

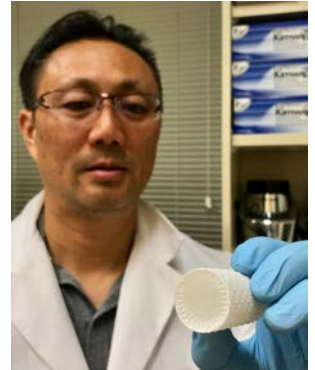
Michael Gold and Megan Tyminski, editors

Dr. Chung-Ho Lin Team Receives UM System FastTrack Pitch Competition Award

Among competitors from UMC, UMKC, UMSL, and MST, the team led by UMCA's Dr. Chung-Ho Lin won the MU System FastTrack pitch competition (\$50,000 award) for their technology "A novel continuous flow system for blood type conversion". Their continuous-flow enzymatic bioreactor system constructed by 3-D printing/modeling has demonstrated successful conversion of blood type A to universal blood type O. Other team members include Dr. Hsin-Yeh Hsieh (MU Veterinary Pathobiology and MU Life Science Center), Dr. George Stewart (MU Veterinary Pathobiology and MU Life Science Center), Dr. Daniel Smith (Transfusion Medicine, Department of Pathology & Laboratory Medicine, Indiana University), Dr. Shibu Jose (MU School of Natural Resources), and Ronald Wood (CEO, Tiger Energy Solutions, LLC.).

Potential clients of the technology include blood banks and transfusion services in all hospitals, military clinics, and VA medical centers. The expected market for blood type conversion technology ranges from \$500 million to \$1 billion/year worldwide.

The funding received from the UM FastTrack program will be used to help optimize the system and bring the product to the market. UM FastTrack is a funding program of the UM Office of Academic Affairs, Research and Economic Development. The program is directed toward the development, testing, prototype construction, or market analysis of innovative technologies originating from a campus of the University of Missouri System.



Center for Agroforestry Kicks Off Agroforestry High School Summer Institute in Mt. Vernon, MO

Supported by a USDA SARE PDP grant, fifteen High School Agriculture Science Educators gathered at the MU SW Research Center, June 22-23, 2017, Mt. Vernon, Missouri. Classroom and hands on training are combined to teach HS educators about agroforestry and forestry for use in their HS curriculum. Trainers included UMCA MS Graduate Research Assistant Hannah Hemmelgarn, Dr. Hank Stelzer and Dr. Michael Gold.

The Goals of the Agroforestry Institutes are to:

- 1) Enhance teacher and student access to sustainable agriculture resources, highlighting the capacity for applications of agroforestry practices to sustain Missouri's farms and forests;
- 2) Increase teacher and student understanding of and skills acquisition for agroforestry practices and the ecological principles that guide their design and management; and
- 3) Promote the implementation of agroforestry practices with Natural Resources Conservation Service agroforestry incentives on Missouri's farms and forests by educating the next generation of farmers and foresters about these opportunities.

Agroforestry Summer Institute, cont'd



The Agroforestry High School Summer Institutes are a collaboration between the University of Missouri Center for Agroforestry (UMCA), MU Dept. of Agriculture Education and Leadership, and the Missouri Department of Elementary and Secondary Education (DESE) with FFA. This was the first of six 2-day Agroforestry Institutes to train 90 high school Missouri agriculture educators between 2017 and 2019.

KUDOS

Spring 2017 Agroforestry Graduate Certificate Awarded

Kyle Stolzenburg. Advisor: Dr. Gold. Start: Fall 2013 – Finish: Spring 2017.

Mitch C. Johnson, Matheus Dela Libera Tres, Andrew L. Thomas, George E. Rottinghaus, and C. Michael Greenlief. 2017. Discriminant Analyses of the Polyphenol Content of American Elderberry Juice from Multiple Environments Provide Genotype Fingerprint. *Journal of Agricultural and Food Chemistry* 65:4044-4050.

UPCOMING EVENTS

Uncommon Fruit Trials

July 15, 1:30 pm

CARANDALE FARM

1046 Tipperary Rd, Oregon, WI

For nearly 50 years, Dale and Cindy Secher have developed an integrated cropping system that incorporates all available management tools to maximize production and food safety, while minimizing environmental impact. Fruits include many varieties of pears, plums, cherries, aronia, sea berry, currants, gooseberries, blackberries, elderberries, and Saskatoon. Free and open to public. Contact: Savanna Institute.

224-544-9095 info@savannainstitute.org

Silvopasture Camp

Two-Day Grower Workshop & Field Tours, August 4-5, 2017

Location: SE MN

University of Minnesota Extension, University of Wisconsin Extension, and the Savanna Institute jointly host a silvopasture workshop featuring training, networking, and field tours. Contact: Savanna Institute.

224-544-9095 info@savannainstitute.org