Hi all,

Dr. Marnie Rout will be on campus to give a Department of Plant Pathology seminar on Feb. 3, 2016.

Her title is “**The Role of the Plant Microbiome in Invasion Ecology and the Relevance to Ecosystem Health**.”

Her seminar is scheduled for the **LF Peterson Building, room 113 Wednesday, Feb 3 from 4:00 – 5:00 PM**.

Dr. Rout is currently an assistant professor at UT Tyler.



**Dr. Rout’s Research Interests**

As an Ecosystem Ecologist, I am interested in the continuum of pathogenic - mutualistic relationships

between plants and microbial symbionts. My research is among the forefront in Plant Science quantifying

**impacts of the microbiome on plant trait expression, genetics, community composition, and ecosystem**

**functions**. Using an interdisciplinary approach integrating plant-microbial ecology and physiology with

bioinformatics, I am using microbiome-focused research to understand disturbances and disruptions to

plant productivity. I am currently applying this knowledge to investigate a variety of ecological

disturbances, including plant invasions, prescribed fire, and land use changes associated with

urbanization, agricultural practices, and threats to food security resulting from global climate shifts.

Currently funded projects include: 1) uncovering the molecular mechanisms utilized by the microbiome

to regulate nutrient acquisition and invasive performance in Johnsongrass (*Sorghum halepense*), with emphasis on conditions leading to plant stress (USDA-NIFA-AFRI collaboration); 2) water, soil and plant monitoring, restoration, and educational outreach related to the Cypress River Basin and Caddo Lake

Watershed (USFWS/ Collins Academy Education Outreach collaboration).

Please let Shana Childers ([shana.childers@agnet.tamu.edu](mailto:shana.childers@agnet.tamu.edu)) know if you would like to meet with her.

Thank you,

Sandy

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