

CAES SEMINAR SERIES

"After the Plant-Root Microbiome... What Next?"

Dr. Ben Niu

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Wednesday, May 17, 2017

12:00 noon to 1:00 p.m.

Food and coffee will be available at 11:45 a.m.

Jones Auditorium The Connecticut Agricultural Experiment Station 123 Huntington Street, New Haven, CT

The following is from Dr. Niu's recent PNAS publication.

Many species of microbes colonize plants as members of complex communities. The high complexity of such plant microbial communities poses great difficulty for any experimental analyses aimed at understanding the principles underlying such microbe-plant interactions. In this work, we assembled a greatly simplified, yet representative, synthetic bacterial model community that allowed us to study the community assembly dynamics and function on axenic maize seedlings. This model community interfered with the growth of a plant pathogenic fungus, thus protecting the plant. This model system will prove to be a useful system for future research on plant-microbe interactions.

Niu, B., Paulson, J.N., Zheng, X. and Kolter, R., 2017. Simplified and representative bacterial community of maize roots. *Proceedings of the National Academy of Sciences*, *114*(12), pp. E2450-E2459.

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