

MEETING AGENDA

The Plant Microbiota

The Banbury Center, Cold Spring Harbor Laboratory, New York, USA April 14-17, 2019

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Organizers:

Jeffery Dangl, University of North Carolina and Howard Hughes Medical Institute; Paul Schulze-Lefert, Max Planck Institute for Plant Breeding Research; Julia Vorholt, ETH Zurich

Growing interest in the plant microbiota is being spurred by basic, curiosity-driven research that seeks to understand the principles underlying microbiota assembly and the impact of the microbiota on the plant host. There is also an increasing awareness that knowledge gained can be harnessed for rational bioprospecting and the discovery of agriculturally useful molecules, genes, and inoculants in plant-associated microbes. This Banbury meeting gathered plant and microbial scientists to discuss the latest advances in: (1) microbiota assembly and the plant innate immune system, (2) host colonization and mechanisms of interbacterial communication, (3) metabolic interdependence of the plant host and its associated microbes, (4) nutrient mobilization and nutritional functions provided by root-associated microbes, (5) microbial inter-kingdom interactions and microbiota homeostasis, (6) invasion and persistence in microbial consortia, and (7) commensal functions in pathogen protection.

SUNDAY, APRIL 14

Afternoon Participant arrivals 6:00 pm Reception, dinner

MONDAY, APRIL 15

7:15 am Breakfast at Robertson House



8:30 am Welcoming and Introductory Remarks

Rebecca Leshan, The Banbury Center, Cold Spring Harbor Laboratory Paul Schulze-Lefert, Max Planck Institute for Plant Breeding Research, Cologne, Germany

8:45 am **SESSION 1: Big Picture Microbiomes**

Susannah Tringe, DOE Joint Genome Institute, Walnut Creek, USA Venkatesan Sundaresan, University of California, Davis, USA Maggie Wagner, University of Kansas, Lawrence, USA Steven Kembel, University of Quebec at Montreal, Canada Detlef Weigel, Max Planck Institute, Tübingen, Germany

12:30 pm Luncheon at Robertson House

2:30 pm SESSION 2: Phyllosphere

Julia Vorholt, ETH Zurich, Switzerland Eric Kemen, University of Tübingen, Germany Benjamin Wolfe, Tufts University, Medford, USA

6:00 pm Reception, dinner

TUESDAY, APRIL 16

7:15 am Breakfast

8:30 am SESSION 3: Abjotic Stress and the Microbiome

Sarah Lebeis, University of Tennessee, Knoxville, USA Devin Coleman-Derr, USDA-ARS, Albany (CA), USA Ashley Shade, Michigan State University, East Lansing, USA

10:45 am SESSION 4: Metabolic Control of Microbiome Function

Klaus Schläppi, University of Bern, Switzerland

12:00 pm Luncheon at Robertson House

2:00 pm SESSION 5: Plant Immune System and the Microbiome

Paulo Teixeira, University of North Carolina, Chapel Hill, USA Cara Haney, University of British Columbia, Vancouver, Canada Sheng Yang He, Michigan State University & HHMI, East Lansing, USA





Paul Schulze-Lefert, Max Planck Institute for Plant Breeding Research, Cologne,

Germany

Corné Pieterse, Utrecht University, Utrecht, Netherlands

6:00 pm Reception, dinner

WEDNESDAY, APRIL 17

7:15 am Breakfast

SESSION 6: Multi-Kingdom Interactions 8:30 am

> Britt Koskella, University of California, Berkeley, USA Linda Kinkel, University of Minnesota, Saint Paul, USA

Stéphane Hacquard, Max Planck Institute for Plant Breeding Research, Cologne,

Germany

10:45 am SESSION 7: General Discussion and Wrap-Up

12:00 pm Luncheon at Robertson House

- END OF PROGRAM -



MEETING PARTICIPANTS

Devin Coleman-Derr, USDA-ARS

Jeffery Dangl, University of North Carolina & Howard Hughes Medical Institute

Urs Fischer, KWS SAAT SE

Barry Goldman, Indigo Ag

Stéphane Hacquard, Max Planck Institute for Plant Breeding Research

Cara Haney, University of British Columbia

Sheng Yang He, Michigan State University & Howard Hughes Medical Institute

Steven Kembel, University of Quebec at Montreal

Eric Kemen, University of Tübingen

Linda Kinkel, University of Minnesota

Britt Koskella, University of California, Berkeley

Sarah Lebeis, University of Tennessee

Qingli Liu, Syngenta Crop Protection

Corné Pieterse, Utrecht University

Jos Raaijmakers, Netherlands Institute of Ecology

Klaus Schläppi, University of Bern

Paul Schulze-Lefert, Max Planck Institute for Plant Breeding Research

Ashley Shade, Michigan State University

Venkatesan Sundaresan, University of California, Davis

Paulo Teixiera, University of North Carolina

Susannah Tringe, DOE Joint Genome Institute

Julia Vorholt, ETH Zurich

Maggie Wagner, University of Kansas

Detlef Weigel, Max Planck Institute Tübingen

Benjamin Wolfe, Tufts University