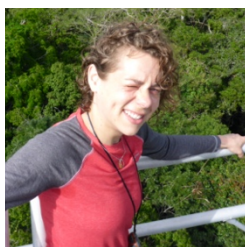


INCyTE 2021 Seminar Series Speakers



T. Davies-Barnard – I am a research fellow at the University of Exeter, where I work on improving the representation of the terrestrial nitrogen cycle in the JULES model. I'm interested in the relationship between changes in the climate and vegetation. My research has covered work on how the biogeophysics and biogeochemistry balance out at different scales and in different future scenarios, land use change, and terrestrial nitrogen and carbon cycles, particularly biological nitrogen fixation.



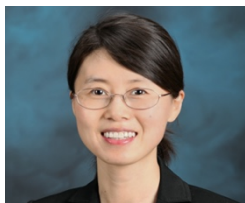
Katrin Fleischer – I am a postdoctoral scientist at the Max Planck Institute for Biogeochemistry. My research interest centers around C:P interactions in tropical forests. My research deals with the question on how plants acquire and use nutrients, and how heterogeneous nutrient cycling along natural soil fertility gradients determines the tropical forests' response to eCO₂ and climate change. I aim to synthesize knowledge from field observations and manipulation experiments to formulate process-based representations of nutrient cycling in terrestrial biosphere models.



Daniel Goll – I am a researcher at University Paris Saclay and specialize in the quantification of biogeochemical fluxes of C, N and P across land surfaces and the atmosphere, as well as understanding the response of these fluxes to global change - developing and using process-based models of the terrestrial biosphere. The modelling is done in combination with observational data on various temporal and spatial scales, including data from spaceborne sensors, ground-based monitoring networks, ecosystem scale manipulation experiments, ecological databases, and laboratory experiments.



Seeta Sistla – I am an assistant professor at [Cal Poly](#). Our lab studies how soils, plants, and microbial communities respond to environmental change, and how these changes can feedback to affect larger-scale ecosystem processes. This research combines biogeochemistry, microbial ecology, mechanistic modeling, and field studies. I am also interested in science education, integrating ecological research with art-making, and improving how scientific knowledge is used in decision-making and conservation efforts.



Xiaojuan Yang – I am a research scientist in the Environmental Sciences Division and the Climate Change Science Institute. My research interests lie in the interactions between carbon, nutrient, water, and energy in the terrestrial biosphere, with a special emphasis on building, evaluating, and applying numerical models that provide the capacity to test hypotheses and examine the implications of these interactions for climate change prediction.



Will Wieder – I am a scientist in the Climate and Global Dynamics Lab at the National Center for Atmospheric Research. With training as an experimental soil biogeochemist I'm interested in studying global biogeochemical cycles by evaluating and improving Earth System models by incorporating ecological theory and observations.



Sönke Zaehle – I am the director of the Biogeochemical Signals Department at the Max Planck Institute for Biogeochemistry. My main research interest lies in the quantification of the effects of nutrient limitation (nitrogen & phosphorus) on terrestrial biosphere dynamics (carbon cycling, water and energy balance, vegetation dynamics) and their interactions with the Earth system. My research focuses on the development and application of large-scale process-based terrestrial biosphere models to understand the interactions between land-surface and atmospheric processes.