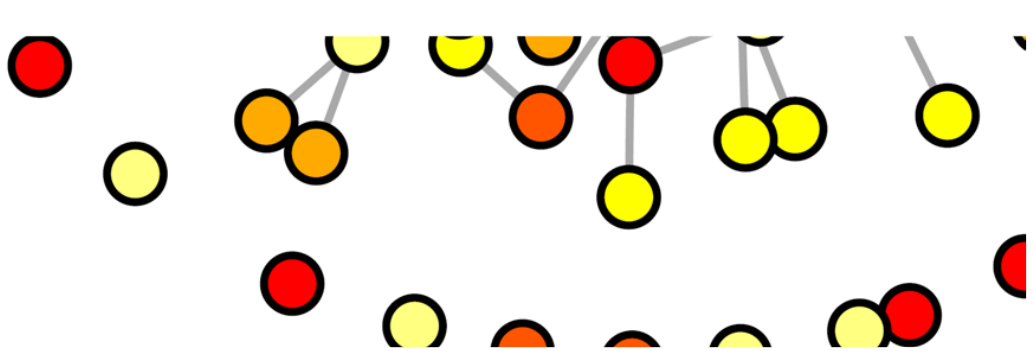


Network Analysis in Plant Pathology Research: Disentangling Complex Data

Course materials at:

github.com/GarrettLab/NetworkWorkshopAPS2024

Workshop teachers

Course materials at:
github.com/GarrettLab/NetworkWorkshopAPS2024

Ashish Adhikari, PhD

Romaric Mouafo Tchinda, PhD

Aaron Plex Sulá (goes by Plex)

Jacob Robledo Buritica, MS

Learning goals

Course materials at:
github.com/GarrettLab/NetworkWorkshopAPS2024

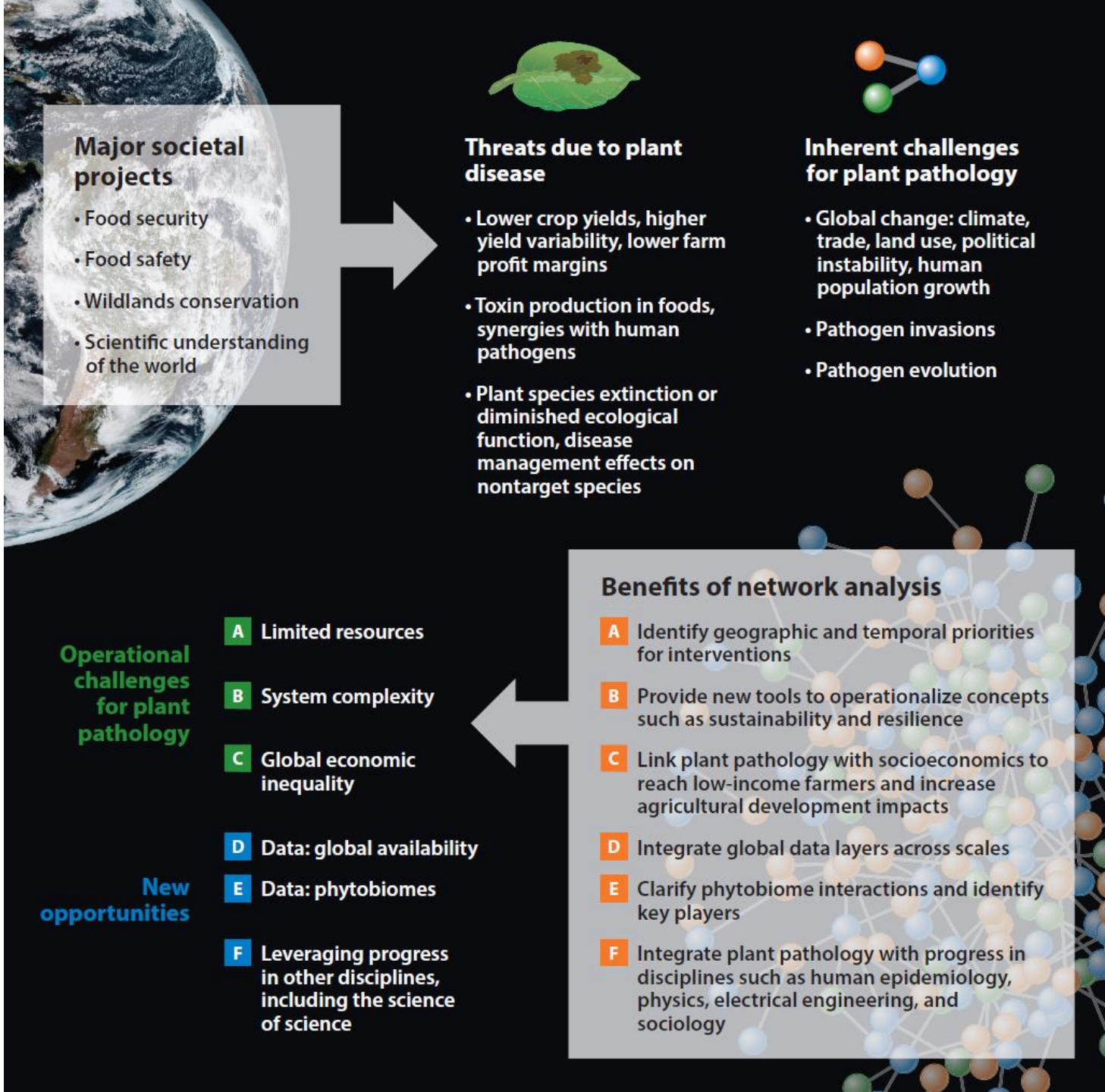
- Experience with R
  - No? Our goal is for you to get started with R, so you are ready to explore R more in the future
  - Yes? Our goal is for you to come away ready to use some new applications

- Experience with network analysis
  - No? Our goal is for you to get a taste of how network models may be useful in your research, ready for more exploration
  - Yes? Our goal is for you to come away ready to use some new applications in R

Annual Review of Phytopathology

Network Analysis: A Systems Framework to Address Grand Challenges in Plant Pathology

K.A. Garrett,[1,2,3] R.I. Alcalá-Briseño,[1,2,3]
K.F. Andersen,[1,2,3] C.E. Buddenhagen,[1,2,3,4]
R.A. Choudhury,[1,2,3] J.C. Fulton,[1,2,3]
J.F. Hernandez Nopsa,[1,2,3,5] R. Poudel,[1,2,3]
and Y. Xing[1,2,3]

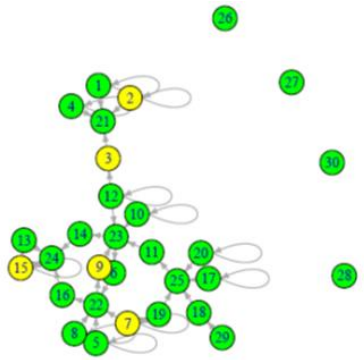


Outline for workshop (1-5 pm)

Course materials at:
github.com/GarrettLab/NetworkWorkshopAPS2024

- Introduction to networks (Plex)
- Introduction to R (Romaric)
- Break
- Networks in R (Romaric and Plex)
- Break
- Epidemic networks (Jacob)
- Break
- Microbiome networks (Ashish)
- R2M toolbox and conclusions (Karen)

Group introductions



- Your name
- Your institution
- The general topics you address in your work
- What type of questions would you like to answer with network analysis?
- If you already use network analysis, what is an example of your application?
- Fun fact about you

Course materials at:

github.com/GarrettLab/NetworkWorkshopAPS2024