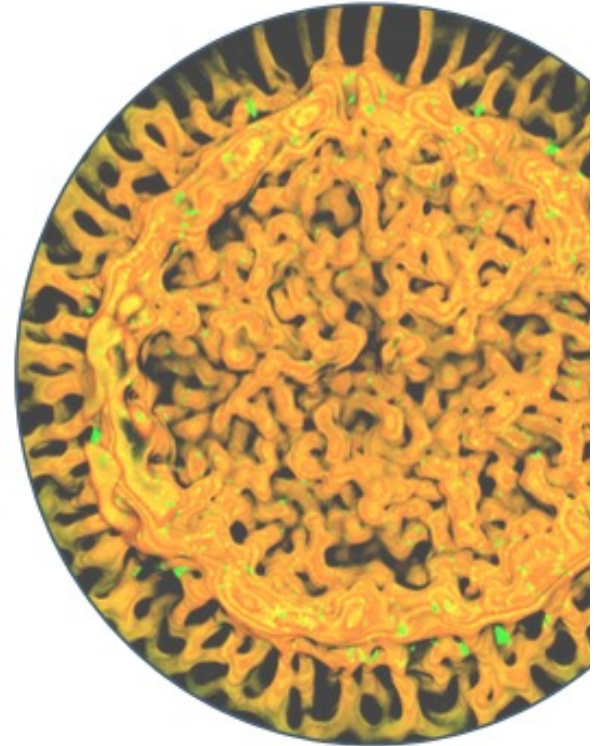


We live in a microbial world

The Center for Microbial Dynamics and Infection (CMDI) serves as a catalyst to bring together a disparate community of GT researchers (spanning biology, physics, chemistry, math, and engineering) to tackle critical questions on **the role microbes play in human and environmental health**.

CMDI scientists study bacteria and viruses and how they interact with humans, the environment, and each other. Our researchers span broad areas of expertise - from coral reef ecosystems to the rise of antibiotic resistant bacteria and the development of new therapies to treat infectious diseases.

A key premise in the Center's collective work is that systems as disparate as a coral reef and a chronic lung infection have much in common. Both are aquatic systems, characterized by complex biochemical exchanges among multiple microbial species, and undergoing human management interventions.



Spatial patterning in the growth of the pathogen *Vibrio cholerae*



Grad student Sarah Verlander uses metabolic and genomic approaches to study peatland microbes.

CMDI Activities

- Dedicated “writing coach” for grad students and postdocs supporting grant writing and other professional communication
- Weekly student-run seminar series, focused on new CMDI research
- Co-localization of microbiology research labs and networking hubs
- Research Envoys: a trainee-led outreach program to local undergraduate-serving institutions
- MicrobeATL: public discussions on role of microbes in human and environmental health
- Careers and Beers: talks from professionals in industry and government
- Pending REU and postbac research training programs
- Regular informal social events

CMDI Labs

- Sam Brown: infection dynamics
- Steve Diggle: antibiotic resistance, biofilms, quorum sensing
- Neha Garg: microbiome metabolites
- Brian Hammer: microbial interactions
- Mark Hay: coral reef chemical ecology
- Joel Kostka: microbial biogeochemistry
- Julia Kubanek: chemical signaling in marine environments
- Rachel Kuske: dynamical modeling
- Will Ratcliff: experimental evolution of multicellular complexity
- Frank Rosenzweig: evolution of complexity
- Peter Yunker: biophysics
- Marvin Whiteley: microbial physiology



microdynamics.gatech.edu

 [@GaTechMicrobes](https://twitter.com/GaTechMicrobes)

Director: Steve Diggle,
stephen.diggle@biosci.gatech.edu