



GORDON RESEARCH CONFERENCES

FINAL PROGRESS REPORT

ISME

2019 GRC/GRS Microbial Population Biology

July 7-12, 2019

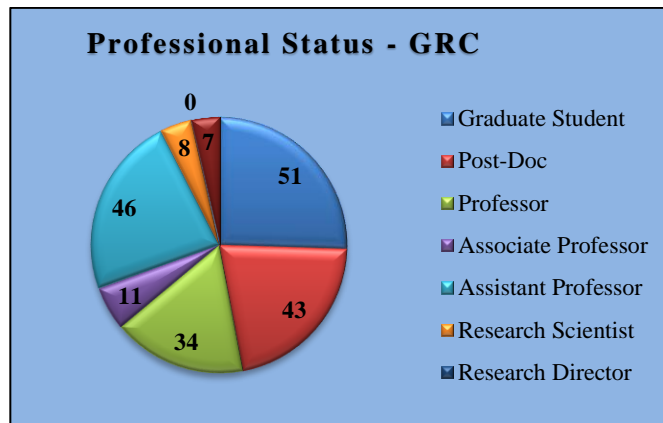
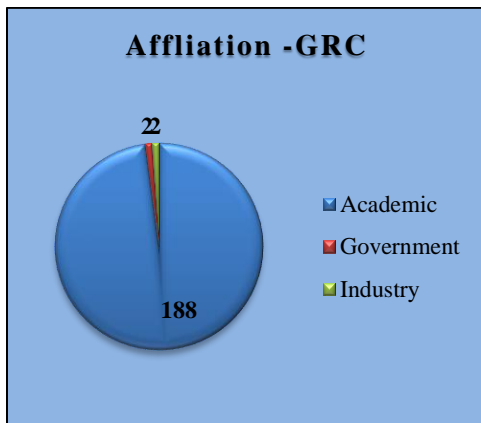
Operational Summary

The Gordon Research Conference (GRC) on Microbial Population Biology was held at Proctor Academy in Andover, NH. The meeting covered a variety of scientific topics and the content presented was highly rated by participants.



Conference Participants

The Conference was well-attended with 200 participants. Scientists from academia represented 94% of the participants while attendees from government accounted for 1% and those from industry totaled 1%. The meeting also attracted a strong mix of young investigators and senior scientists. Students and post-docs accounted for 47% of all attendees. Approximately 44% of the participants at the 2019 meeting were women.



Conference Program

Microbial populations exhibit a diverse set of interactions that occur at different spatial and temporal scales. These interactions were the focus of the 2019 Microbial Population Biology Gordon Research Conference. We explored how molecular interactions within and between cells influence collective dynamics at the scale of populations. We probed how interactions between microbes and their mobile genetic elements (such as plasmids and phage) affect evolutionary trajectories and gene flow. We surveyed chemical and physical interactions between different microbial populations to understand microbial community dynamics. We explored interactions between microscopic and macroscopic organisms to uncover the assembly, evolution and impact of various microbiomes. We investigated the evolution of novel ecological and functional interactions, as well as the origin of higher-order interactions across some of the major evolutionary transitions. We also explored how our field interacts with other domains. We tackled how concepts from microbial population biology connect to medicine, leading to a better understanding and treatment of cancer as well as various infectious diseases. Finally, also revealed how microbial population biology impacts industry, art and science communication.

Conference Budget

Funding provided by ISME supported partial registration for 1 speaker and partial travel support for 2 professors at the GRC.

Conference Feedback

Participants had an opportunity to provide feedback at the end of the Conference. The feedback collected from the meeting was extremely positive. Evaluations included numerous positive remarks regarding talks, poster presentations and diversity of systems.

GRC would like to thank the ISME for its continued support of the meetings. The contributions received have been critical to the success of the conferences and are having a measurable impact in advancing the frontiers of science worldwide.

Dr. Benjamin Kerr, GRC Chair
University of Washington

Dr. Nancy Ryan Gray
President and Chief Executive Officer
Gordon Research Conferences