**Wednesday, April 26, 2017**
**POSTER SESSION IV:**
**ORIGIN AND EVOLUTION OF LIFE: EVOLUTION/GENETICS:**
**HOW DO SYMBIOSES ENABLE LIFE TO COLONIZE NEW HABITATS?**
**8:00 p.m. Main Hall**

Rao D. Follows M. J.
*Modeling Algal-Bacterial Mutualism in a Global Ocean: The Impact of Non-Trophic Interactions* **[#3406]**
This study includes non-trophic interactions (mutualism) into an existing marine microbial community to examine the impact on production and dynamics.

Peterson K. D. Crowther C. V. Hayes M. A. Gile G. H.
*Utilization of Dielectrophoretic Microfluidic Channels in Protist Separation to Enable Sybiosis Research* **[#3476]**
A dielectrophoretic separation device is being fabricated to isolate large microorganisms in symbiotic relationships for morphological and genetic analyses.

Gavelis G. S. Gile G. H.
*Genetically Engineering Cyanobacteria into Chloroplasts* **[#3482]**
We present a new model system for the field of chloroplast evolution.

Merrell T. L. Martini F. D. Gile G. H.
*The Evolutionary Origin of Spirotrichonympha in the Termite Genus Reticulitermes* **[#3485]**
Spirotrichonympha from Reticulitermes tibialis is more similar to Spirotrichonympha from Hodotermopsis than its closer relatives, Coptotermes and Heterotermes.