Different effects of temperature on pitcher plant rotifer clones

Evolution plays a key role in directly altering ecology in natural communities. As populations evolve in response to higher temperatures, the indirect effects of these trait changes on interspecific interactions are not well understood. I aim to observe these indirect effects on the competitive ability of pitcher plant rotifers (*Habrotrocha rosa)*. The water-filled leaves of the carnivorous pitcher plant *Sarracenia purpurea* harbor a diverse community well-suited for studying microevolution in the context of ecology. *Habrotrocha rosa* is a bacterivorous bdelloid rotifer that likely experiences interspecific competition with other bacterivorous members of the pitcher plant leaf water community, like the ciliate *Tetrahymena*. Additionally, *H.* rosa exhibits apomixic parthenogenetic reproduction, meaning individuals reproduce asexually and without meiosis, resulting in clonal offspring. Clones of *H. rosa* isolated from field samples of leaf water were grown in microcosms at 25C and 30C for 42 days. Population growth rate and dry mass, both key traits in competition and temperature response, were estimated for each clone. Here we present data that indicate rotifer clones have different growth rates in response to temperature, supporting the potential for rapid evolution in natural populations. A separate, ongoing evolution experiment will aim to investigate evolution-mediated indirect effects of temperature on competition between *H. rosa* and a natural competitor, *Tetrahymena* sp*.*