Mentorship can be part of the solution to developing a more diverse global scientific workforce, but mentorship models focused on dyadic mentoring can reproduce hierarchies that reinforce the status quo. Reframing mentoring relationships as developmental mentor networks can more accurately describe the experiences of protégé, can deepen our understanding of how, why, and for whom mentoring “works,” and can empower protégé to effectively pursue their STEM career goals. This session will highlight research on developmental mentor network theory, including factors that promote the formation of diverse and robust mentorship networks and the impacts these networks can have on STEM career development.