

1154-97-102

**Audrey E Hendricks\*** ([audrey.hendricks@ucdenver.edu](mailto:audrey.hendricks@ucdenver.edu)), University of Colorado Denver, Campus Box 170, PO Box 173364, Denver, CO 80217-3364. *Successful and sustainable undergraduate research in statistics through vertical integration of experience and horizontal integration of disciplines.*

Undergraduate research is a powerful tool for exposing students to statistics and preparing them for data science careers. Scaling statistics undergraduate research programs to more than a handful of students can be a challenging investment of time and resources, especially for junior faculty. Here, I discuss how I developed a successful and sustainable program as an Assistant Professor including structuring meetings, examples of student self-assessment, progress reports, and mentorship. To increase sustainability, I built a team with varied research experience and use tiered and peer mentorship which encourages a cohesive group and enables students to gain leadership experience. PhD students' experiences in such a program enables them to port this model and promote undergraduate research at their future institutions. We use technology to enable virtual chats, sharing code, and tracking of action items. Vertical integration protects faculty time and enables a larger team, which engages students from a wide array of academic backgrounds. This variety of expertise leads to greater creativity and helps students learn to communicate across disciplines, an in-demand skill for careers in academic and industry where multidisciplinary collaboration is common. (Received August 07, 2019)