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8:00 AM Sunday, October 8, 2017 | Breakout Session 3, Suite 4-5

Where can research take you? Developing skills for success in academia and beyond

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Being engaged in research improves student retention and success in STEM fields. However, often students, especially those underrepresented in STEM disciplines, lack an understanding of what constitutes "research," and how research skills can be transferred across curriculum and in different career fields. During January 2017, we at UW-Whitewater organized a three-day Winter Research Institute for underrepresented STEM students. Seventeen students applied to participate in the Institute. Selected participants were at different stages of their undergraduate career, with a range of experiences in conducting extra-curricular mentored research in various STEM disciplines. They were paid a stipend, and provided with breakfast, lunch, and on-campus housing during the Institute. Faculty and staff from different disciplines facilitated workshops on developing transferrable research skills essential for academic success, such as data analyses and visualization, written communication, conducting literature reviews, etc. Invited guest speakers and panelists discussed career and graduate school options in STEM fields. The Institute also included a session on addressing stereotype threats and implicit bias in STEM disciplines. Student participants constituted a focus group on barriers and challenges they have faced in STEM courses, and suggested best practices to recruit and retain underrepresented students in STEM disciplines. Two social psychologists from UW-Whitewater Psychology Department conducted the focus group interviews. Overall, participants found the institute to be highly informative and helpful for developing practical skills and for identifying future career options. They also provided insightful perceptions on common characteristics of excellent research mentors and STEM instructors, ways to motivate students to persevere, and their own developing identities as scientists. In this breakout session, we will share the lessons learned and assessment results from different sessions in the Institute, and potential ways to use these results for broadening participation of underrepresented students in STEM disciplines.