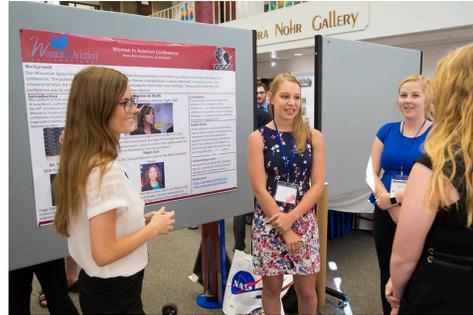




Preface to the Proceedings of the 29th Annual Wisconsin Space Conference

Judith Shapiro, a former president of Barnard College, captures the purpose of a liberal arts education in a way that resonates with me. “You want the inside of your head to be an interesting place to spend the rest of your life.” I might extend that imperative to all kinds of education and activities that enrich and rewire our brains to be more curious, thoughtful, and engaged with our universe. The peculiar obsession of solving research puzzles around Martian rotorcraft, plant growth in microgravity, or robotic mining hardware for the Moon, furnishes the inside of our heads with ideas and ways of understanding that will continue to enrich a life long after the work is complete.



WSGC students present their work at the 29th Annual Wisconsin Space Conference.

These brain fertilizers and more are captured here in these *Proceedings*, and represent the work of over one hundred student and faculty efforts across the state of Wisconsin. I have enjoyed reading each of these reports in both draft and final form, and I hope you feel the same sense of wonder and enjoyment that I do as I see what our Space Grant students are contributing to science, STEM education, and public engagement across the state.

Kevin M. Crosby, Director, WSGC *January, 2020*