Title: Alverno College "Launching the Future": An Intersectional Approach to Boosting Recruitment and Retention of Women in STEM Undergraduate Education

Institution: Alverno College

City/State: Milwaukee, WI

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Summary: Alverno College is pleased to apply for a NASA MUREP WCU Track 1 grant to build on, study, and disseminate a strong suite of current and proposed activities aimed at recruiting and retaining women—particularly women of color (WOC) and low-income women first-generation college students (LI/FG)—in STEM fields. Alverno is a Milwaukee, Wisconsin-based four-year undergraduate women's college, and Hispanic-Serving Institution (HSI). Many of Alverno's strengths lie in our outstanding, proactive, innovative programs with WOC and LI/FG students. Our current data-driven success models will be scaled in our proposed Launching the Future Program to address academic, personal, and professional barriers to STEM careers. Alverno is highly regarded for strength in serving women from under-resourced communities. This project will provide significant insights to help a wide range of higher education institutions locally, nationally, and globally better serve women from historically excluded communities. This will be particularly relevant to institutions that serve Black and Hispanic women, women who are first-generation college students, and women from economically under-resourced backgrounds. Additionally, Launching the Future is geared especially towards freshman and sophomore undergraduates given their heightened attrition risks. Launching the Future will provide thoughtful, evidence-based support for this population through two aligned objectives: (1) the NASA Ignite Scholars Program aimed at recruitment, and (2) the NASA Liftoff! Program aimed at retention. These programs will leverage a suite of evidence-based, tailored activities including targeted scholarships and stipends, the hiring and training of a STEM Admissions Counselor, cohort and community-building events, course-based undergraduate research and on-campus summer research experiences, and mentoring with women scientists and professionals from a variety of STEM fields. Importantly, these initiatives will be layered upon an existing strong ecosystem of student support services and community partnerships. Our intersectional approach is designed in response to local data on specific barriers to success and on the national literature on evidence-based strategies for increasing equity, success, and representation of women, and in particular women WOC, in STEM fields. Alverno's evaluation of the impact of these interventions and related support services on recruitment and retention will seed powerful guidance on how to best engage, recruit, educate, support, retain, and launch women into a wide range of exciting STEM careers. We will share this guidance through a "Launching the Future Guidebook" for higher education institutions seeking to adopt

equitable, sustainable strategies for bridging the critical national gender gap in STEM. Launching the Future will succeed through strong internal and external partnerships. Alverno has an exceptional legacy of supporting strong faculty/staff collaboration in service of our students. We will build on existing relationships as we undertake a planning process with several internal Alverno partners, enlisting campus units, programs, and leaders to shape an internal recruitment strategy and an external community outreach plan. While Alverno has strong existing partnerships with regional K-12 schools and with community organizations, phase 2 of our collaboration plan will involve approaching those relationships in a new way. We will deepen existing collaboration with community partners that work with talented high school students who fit our NASA scholar pool. These include local branches of national organizations such as National Center for Women & Information Technology, as well as local nonprofits such as Teens Grow Greens, an urban agriculture project.