PROJECT SUMMARY
The STEM Talent Expansion Program—Center for Achievement, Retention and Student Success (CARSS), represents a coordinated and collaborative effort to effect a dramatic and sustainable enhancement of recruitment and increase in retention of University at Albany-State University of New York (UAlbany) students in STEM fields. This will be accomplished through the development and institutionalization of a comprehensive program that facilitates the successful transition and integration of incoming college freshmen and community college transfers into the senior college. It involves collaborations between the Departments of Biology, Chemistry, Mathematics and Physics, and leverages existing support mechanisms within the University to accomplish the following specific goals within the grant funding period:

1. A 40% to 50% increase in the 4-year graduation rates of a cohort of freshman with declared STEM majors.
2. A 40% to 50% increase in the 2-3 year graduation rates of transfer students entering into UAlbany in their junior year.
3. A 50% increase in the number of STEM graduates from historically underserved populations.
4. The institutionalization of the CARSS through realization of a number of institutional commitments including (a) the dedication of 1500 sq. ft. of space for CARSS advising and mentoring services for students in STEM fields; (b) the continuation of the CARSS Coordinator Staff line and continued funding support for the Peer Tutors and Mentors at the conclusion of the funding period; and (c) the continued provision of in-kind services such as the use of Academic Support Services personnel and resources after the funding period has ended.

Intellectual Merit
The described project will advance knowledge regarding how to enhance science literacy and student attraction and retention in STEM fields through the implementation of an over-arching program that will enable all STEM majors at UAlbany to benefit from academic support services, primarily in the form of peer mentoring and tutoring. Experience in implementing similar programs of smaller scope indicates that the availability of such services to students in STEM fields increases graduation rates. The programs most prominent feature is the offering of tutoring and mentoring services for all STEM majors, and it is anticipated that those students working through challenging “gateway” courses will benefit most dramatically. The leveraging of existing academic support mechanisms and the offering of additional interventions results in a program that is comprehensive in scope, and includes career counseling, faculty mentoring, a recruitment component that involves consultation with student families, and a variety of financial incentives. The program also is designed to recruit students from historically underserved populations into STEM majors.

Broader Impacts
The formative and summative assessments made in the evaluative component of the proposal will provide important information that will be published, and may be useful to other academic institutions wishing to increase their graduation rates by implementing similar successful measures. By increasing the number and diversity of STEM graduates, the program will contribute to the provision of a US workforce that is prepared to ensure a healthy economy, can respond to the demands for national security, and elevate the quality of life and standards of living in the US through technological and scientific advancements. Over the course of the funding period, significant increases will be made to increasing the graduation rates of all STEM majors, including those from historically underserved populations. Infrastructure at UAlbany will be enhanced in that a new center will be created in a dedicated 1500 sq. ft. space to specifically address the needs of STEM majors. Additionally, steps have been taken to ensure the continuity of the program at the end of five-year finding period. These include the institutionalization of the CARSS center, the provision of a CARSS coordinator staff line, and the provision of continued funding for peer tutors and mentors. The dissemination plan ensures that best practices associated with effecting increases in STEM major graduation rates will be widely publicized.