College of Engineering: Annual Report of Center Activities
July 1, 2015 – June 30, 2016

Center name	Women in Science & Engineering Leadership Institute (WISELI)
Website URL	http://wiseli.engr.wisc.edu/
Location (building and room number(s))	3065 Mechanical Engineering Building, 1513 University Avenue
Scope of activities (check all that apply)	Research __X_ Teaching _____ Service/Outreach __X_

Director (2015-16)	Molly Carnes & Amy Wendt
Co-Director (2016-16) (if applicable)	
Leadership in 2016-17 (if not same as above)	

Center's mission and purpose:

WISELI's mission is to promote the participation and advancement of women in academic science and engineering. WISELI also has a broader goal of broadening participation in all STEM fields, and as such WISELI is home to the Wisconsin Alliance for Minority Participation (WiscAMP), an NSF-funded program with a goal of increasing the numbers of URM students receiving Bachelors degrees in a STEM discipline.

Summary of center activities over the past year:

WISELI administers workshops and grant programs to the UW-Madison campus and performs research. We also engage in income-generating activities, consisting of (1) delivering workshops to other campuses, (2) giving talks, and (3) selling our materials through our website.

In 2015-16:

1. *Searching for Excellence & Diversity* workshops. We performed 5 workshops or workshop series to 48 faculty and staff. In addition, we visited 11 administrative search or awards committees to talk about unconscious bias.
2. *Enhancing Department Climate* workshops. We held one workshop series last year in which 5 departments participated.
3. *Breaking the Bias Habit: A Workshop to Promote Gender Equity*. We had no requests in 2015/16 for this workshop on the UW-Madison campus. However, this workshop is currently in revision. The revised workshop (name TBD) has been presented to four groups to date. The revised workshop will be offered to all nine departments in the

College of Engineering in the 2016/17 academic year, and will also be offered to student groups, research centers, or other groups within CoE.

4. *Vilas Life Cycle Professorships.* In FY16, our budget for these grants was increased dramatically to $850,000. We revised the criteria to accept more types of applications, and as a result received 54 applications and funded 36 of them.

5. *Celebrating Women in Science & Engineering* grant program. We awarded all $10,500 allocated to this program in 2016/17. We received 16 applications, funding 12 of them.

6. *Outside talks and workshops.*
   a. *Searching for Excellence & Diversity.* We delivered this workshop in a "train the trainer" format to 1 university group (the Pennsylvania Consortium for the Liberal Arts) in 2015/16, bringing in $10,000 to our 136 fund.
   b. Jennifer Sheridan delivered a "mini-Bias Literacy" workshop at the annual meeting of the "Tri-Societies"—Soil Science Society of America, Crop Science Society of America, and American Society of Agronomy in November 2015.
   c. *Breaking the Bias Habit.* We delivered this workshop at 4 different sites off-campus in 2015/16, including the University of Virginia, Kansas State University, Massachusetts Institute of Technology, and American Family Insurance.
   d. Presented a pilot *Breaking the Bias Habit* workshop modified specifically for the Center for Sustainable Nanotechnology at the University of Minnesota in August, 2016.
   e. Molly Carnes, Amy Wendt, Jennifer Sheridan, and Eve Fine were invited to give 24 presentations, talks, or consulting about gender bias in academia in 2016/17, including at the Greater Tennessee HERC/Vanderbilt University, Anoka-Ramsey Community College, the Committee on Institutional Cooperation (CIC), Cedars-Sinai Barbra Streisand Women's Heart Center, MIT-9/University of Michigan, Kansas State University, Colorado State University, Princeton University, Lawrence University, and many groups and conferences at UW-Madison.
   f. Presented workshops or papers at three annual meetings: American Society for Engineering Education; Society of General Internal Medicine; and Annual Conference on Understanding Interventions that Broaden Participation in Science Careers.

7. *Sales of WISELI materials.* In 2015/16, we sold over $22,000 (gross) worth of search guidebooks, brochures, and our new "workshop in a box" kit for implementing the *Breaking the Bias Habit* workshop.

8. *Research.* In 2015/16, we published:
   a. Kaatz, Anna; Y-G Lee; A. Potvien; Wairimu Magua; A. Filut; A. Bhattacharaya; R. Leatherberry; Xiaojin Zhu; and Molly Carnes. 2016. "Analysis of NIH R01 Application Critiques, Impact and Criteria Scores: Does the Sex of the Principal Investigator Make a Difference?" *Academic Medicine.* 91(8): 1080-1088.
   b. Isaac, Carol; Linda Baier Manwell; Patricia G. Devine; Cecilia Ford; Jennifer T. Sheridan; and Molly Carnes. 2016. "Difficult Dialogues: Faculty Responses to a Gender Bias Literacy Training Program." *The Qualitative Report.* 21(7):1243-1265.
   c. Fitzpatrick, Mary E.; Jennifer Sheridan; and Manuela Romero. 2016. "Changes in Undergraduate Engineering College Climate and Predictors of Major Commitment: Results from Climate Studies in 2008 and 2015." American Society for Engineering Education (ASEE) 2016 Conference Proceedings. June 2016.

d. Kaatz, Anna; Melissa Dattalo; Caitlin Regner; Amarette Filut; and Molly Carnes. In press. "Patterns of Feedback on the Bridge to Independence: A Qualitative Thematic Analysis of NIH Mentored Career Development Award Application Critiques." *Journal of Women's Health*.

e. Sheridan, Jennifer; Eve Fine; Molly Carnes; Amy Wendt; and Jo Handelsman. 2015. "*Searching for Excellence & Diversity*® Workshop: Improving Faculty Diversity by Educating Faculty Search Committees." In *Personalauswahl in der Wissenschaft* (C. Peus et al., Eds.) Berlin: Springer-Verlag.

f. Carnes, Molly; Christie Bartels; Carol Isaac; Anna Kaatz; and Christine Kolehmainen. In Press. "Why is John More Likely to Become Department Chair than Jennifer?" *American Clinical and Climatological Society*.

WiscAMP is an alliance of 19 colleges and universities throughout Wisconsin. This includes all UW-System schools, 4 private colleges, the UW Colleges, and Madison College. The main activities of WiscAMP are:

1. *WiscAMP Small Grants Program*. This program provides funds up to $25,000 per year to WiscAMP alliance members (not at UW-Madison) to create innovate programs that support the WiscAMP mission. Campuses apply for these awards and a review committee comprised of representatives from each of the 4 WiscAMP regions determines which proposals to fund. In 2015/16, 8 small grants were implemented at 7 non-UW-Madison institutions.

2. *WiscAMP Subawards:* Three institutions hold subawards which provide funding over the course of 5 years. UW-Milwaukee holds a subaward which supports comprehensive programming to support success for URM students majoring in STEM at that institution. Two-year institutions in the alliance are mandated subawardees. The Madison College WiscAMP Scholars Program has been successful in preparing URM students to transfer into STEM majors at four year institutions (most to UW-Madison). In 2015/16, the program activities at Madison College expanded to include any interested student in academic support and enhancement workshops in addition to the 5 WiscAMP funded scholars. Based on the success of the Madison College program, UW-College-Rock County continued the second year of their pilot version of the program in 2015-16.

3. *Excel Summer Program*. This summer program invites students from Alliance member campuses to the UW-Madison for eight weeks, to engage in academic enrichment experiences that will improve achievement and retention in the STEM major. In 2015/16, 21 students participated.

4. *WiscAMP Bridge to the Doctorate:* As a senior alliance with 10 years of continuous funding WiscAMP became eligible to apply for an LSAMP Bridge to the Doctorate (BD) award in 2014. The WiscAMP-BD provides fellowships for the first 2 years of graduate study with the aim of increasing the diversity of URM students who complete doctorates in STEM. In 2015 WiscAMP enrolled its first cohort of 12 URM doctoral students, 5 in the CoE, 5 in life, biological and medical sciences, and 2 in chemistry. All students are affiliated with either the GERS or the SciMed GRS communities. A grant to support a second cohort of URM Bridge to the Doctorate fellows was awarded in 2016 and an additional 12 students, 6 in CoE, 5 in the SciMed GRS affiliated programs and 1 in chemistry joined the WiscAMP-BD community in fall 2016.

5. *Scholars Advance Opportunities for Academic and Career Development (WSAO)*. Eleven WiscAMP students (7 at UW-Madison, 1 at UW-La Crosse and 1 at Alverno

College and 2 at Lawrence University) received support for professional and academic development activities. Activities included conferences to present their research or attend workshops. Another use of the WSAOA is to supplement undergraduate research experiences so that students could spend more time in the laboratory. This was the case for five students at UW-Madison and students at UW-La Crosse and Lawrence University.

6. *WiscAMP Student Leadership Symposium.* In Spring 2016 WiscAMP held the first WiscAMP Student Leadership Symposium. This event brought together 56 URM students majoring in STEM from across the state for a one day workshop on leadership to broaden participation in STEM. The event was held in collaboration with the WISCIENCE center. WiscAMP-BD fellows presented on their research and strategies for success during a luncheon panel.

7. *Broadening Participation through Bias Reduction.* In fall 2015 WiscAMP repeated the pre-conference training in bias reduction before the WiscAMP Annual Meeting. In addition a "train the trainer" workshop was piloted with WiscAMP faculty and staff who had participated previously in the bias reduction workshop. These trainings were offered through collaboration with the *Fair Play* interactive video game development and research program, funded by NIH and led by Christine Pribbenow and Molly Carnes. WiscAMP faculty and staff participated in the *Fair Play* training workshop. Subsequently, the *Fair Play* workshops were offered at UW-Whitewater. In addition to *Fair Play*, UW-UW-Milwaukee held a *Research Mentor Training* workshop to support faculty in the development of strong research mentoring and advising relationships with WiscAMP students.

8. *Research.* One goal of WiscAMP is to promote institutional change that will enhance the recruitment, retention and graduation of URM STEM undergraduates. Research projects are initiated on an as-needed basis to further this goal. In 2014/15, WiscAMP undertook a survey of all STEM instructional faculty and staff at all WiscAMP member institutions. The WiscAMP evaluation coordinator and director are in the process of analyzing the survey responses. The survey will be repeated in 2018 to identify changes in attitudes and reported practices that relate to URM student success in STEM. Ongoing evaluation of the WiscAMP Excel program has led to one manuscript which is currently under revision for the journal *CBE-Life Sciences Education.*

Faculty/staff involvement:

Faculty			
Name	Department	School/College	Role in the Center
Amy Wendt	ECE	CoE	Co-Director
Molly Carnes	Medicine/ISE	SMPH/CoE	Co-Director, Co-PI of WiscAMP
Doug Henderson	EP	CoE	Co-PI of WiscAMP

Staff		
Name	Position Title	Role in the Center
Jennifer Sheridan	Associate Scientist	Executive & Research Director
Eve Fine	Associate Scientist	Director of Curriculum Design and Implementation

Christine Pribbenow	Associate Scientist	Director of Evaluation
Christine Fabian	Assistant Researcher	Evaluator
Katherine Fallon	Project Assistant	Project Assistant
Gail Coover	Assistant Scientist	Executive Director of WiscAMP
Barry Delin	Researcher	Evaluator
Manuela Romero	Associate Dean	Co-PI of WiscAMP
Denise Thomas	Financial Specialist	Support for WiscAMP and WISELI

Student and postdoctoral trainee involvement (if applicable):
The WiscAMP program has a direct mission to support students in STEM fields. For students attending UW-Madison, support is provided through the WiscAMP-BD fellowships, the Excel summer program, and the WSAO program. In 2015/16, WiscAMP directly supported 12 graduate students and 35 undergraduate students.

WiscAMP UW-Madison Students		
Name	Position Title (e.g. RA)	WiscAMP Program Activity
Gregorio Abrajan	Undergraduate	Excel
Emmanuel Addams	Undergraduate	Excel/Leadership Symposium
George Akpan	Undergraduate	WSAO/Leadership Symposium
Tobi Alawode	Undergraduate	Excel/Leadership Symposium
Janerra Allen	Undergraduate	WSAO/Leadership Symposium
Marcus Bekele	Undergraduate	Leadership Symposium
Amber Brionez	Undergraduate	Leadership Symposium
Juan Catano	Undergraduate	Excel
Santiago Chavez	Undergraduate	Leadership Symposium
Adaugo Chukwu	Undergraduate	Excel/Leadership Symposium
Elisa Cruz	Undergraduate	Excel
Yanika Davis	Undergraduate	WSAO
Charles Fatunbi	Undergraduate	Leadership Symposium
Jonnathan Garcia-Huerta	Undergraduate	Leadership Symposium
Shaybrianna Groth	Undergraduate	Excel
Emilio Gutierrez	Undergraduate	Excel/Leadership Symposium
Enrique Guzman	Undergraduate	Excel
Oseghale Ituah	Undergraduate	WSAO/Leadership Symposium
Cory Jackson	Undergraduate	WSAO
Bethany Kapanke	Undergraduate	Excel/Leadership Symposium
Tyler Lampkins	Undergraduate	WSAO/Leadership Symposium
Devin Lafford	Undergraduate	Excel
Iaong Lee	Undergraduate	Leadership Symposium
Ruben Martin	Undergraduate	Excel
Francisco Martinez	Undergraduate	Leadership Symposium
Lauren Melidosian	Undergraduate	Leadership Symposium
Jose Miguel Hernandez Ochoa	Undergraduate	Leadership Symposium
Jessica Pachon	Undergraduate	Leadership Symposium
Jessica Rubio	Undergraduate	WSAO/Leadership Symposium
Jasmin Sanchez	Undergraduate	Leadership Symposium
Giangela Stokes	Undergraduate	Leadership Symposium
Manuel Torres	Undergraduate	WSAO

WiscAMP UW-Madison Students		
Name	Position Title (e.g. RA)	WiscAMP Program Activity
Fernando Umanzor	Undergraduate	Excel
Aldo Ventura	Undergraduate	Leadership Symposium
Malik Williams	Undergraduate	Excel
Kristina Black	RA	WiscAMP-BD
Katrina Carter	RA	WiscAMP-BD
Andy Madrid	RA	WiscAMP-BD
Kelly Montgomery	RA	WiscAMP-BD
Ruben Moreno	RA	WiscAMP-BD
Nancy Granda-Duarte	RA	WiscAMP-BD
Latonya Simon	RA	WiscAMP-BD
Darian Simone James	RA	WiscAMP-BD
Cuauhtemoc Rodriguez Sanchez	RA	WiscAMP-BD
Godwin Ashley Dilibe Offiah	RA	WiscAMP-BD
Josephine Eshon	RA	WiscAMP-BD
Beatriz Camacho	RA	WiscAMP-BD

On other campuses, 99 students received WiscAMP support through involvement with WiscAMP Subawards, Small Grants or participation in the WiscAMP Student Leadership Symposium.

Outside UW-Madison Students			
Name		Position Title	WiscAMP Institution & Activity
Tia	Baas	Undergraduate	Alverno WiscAMP Small Grant
Carissa	Babcock	Undergraduate	Alverno WiscAMP Small Grant
Richon	Badger	Undergraduate	Alverno WiscAMP Small Grant
Shakiya	Brumfield	Undergraduate	Alverno WiscAMP Small Grant
Na-Tiyana	Davis	Undergraduate	Alverno WiscAMP Small Grant
Tiffany	Fernandez	Undergraduate	Alverno WiscAMP Small Grant
Edna	Gonzalez	Undergraduate	Alverno WiscAMP Small Grant
Marquita	Holmes	Undergraduate	Alverno WiscAMP Small Grant
Kendraia	McKinley	Undergraduate	Alverno WiscAMP Small Grant
Nefertari	Miller-Wallace	Undergraduate	Alverno WiscAMP Small Grant
Adilene	Munoz-Sanchez	Undergraduate	Alverno WiscAMP Small Grant
Daisy	Perez	Undergraduate	Alverno WiscAMP Small Grant
Chiquita	Pryor	Undergraduate	Alverno WiscAMP Small Grant
Laura	Villafuerte	Undergraduate	Alverno WiscAMP Small Grant
Jamie	O'Neil	Undergraduate	Alverno Leadership Symposium
Irma	Quezada	Undergraduate	Alverno Leadership Symposium
Carolina	Quiroz	Undergraduate	Alverno Leadership Symposium
Lola	Davis	Undergraduate	Beloit WiscAMP Small Grant
Jordan	Garcia	Undergraduate	Beloit WiscAMP Small Grant
Jennifer	Santos-Arevalo	Undergraduate	Beloit WiscAMP Small Grant
Lukeson	Versulien	Undergraduate	Beloit WiscAMP Small Grant
Travis	Spice	Undergraduate	Col. of Menominee Excel (2015)
Phillip	Conor	Undergraduate	UW-Eau Claire Small Grant
Sheikh	Jammeh	Undergraduate	UW-Eau Claire Small Grant

Outside UW-Madison Students			
Name		Position Title	WiscAMP Institution & Activity
Nokoma	Kohl-Blomsness	Undergraduate	UW-Eau Claire Small Grant
Zabdiel	Ek-Vazquez	Undergraduate	Lawrence Small Grant
Gustavo	Figueroa	Undergraduate	Lawrence Small Grant
Loraina	Stinson	Undergraduate	Lawrence Small Grant
Emma	Saiz	Undergraduate	Lawrence Small Grant
Travis	Cobb	Undergraduate	Madison College Subaward
Sokhna	Gaye	Undergraduate	Madison College Subaward
Cedric	Price	Undergraduate	Madison College Subaward
Jonathan	Santana	Undergraduate	Madison College Subaward
Lamin	Moore	Undergraduate	Madison College Subaward
Maria	Vine	Undergraduate	Madison College Subaward
Sandra	Mejia	Undergraduate	MSOE/Leadership Symposium
Papakweski	Yorke	Undergraduate	MSOE/Leadership Symposium
Alexa	Aguirre	Undergraduate	UW-La Crosse Small Grant
Estefania	Cruz	Undergraduate	UW-La Crosse Small Grant
Adrienne	Hester	Undergraduate	UW-La Crosse Small Grant
Abel	Madrigal	Undergraduate	UW-La Crosse Small Grant
Mikka	Nyarko	Undergraduate	UW-La Crosse Small Grant
Alexander	Reyes	Undergraduate	UW-La Crosse Small Grant
Taylor	Anglin	Undergraduate	UW-Milwaukee Subaward
Cody	Becker	Undergraduate	UW-Milwaukee Subaward
Neziah	Bowers	Undergraduate	UW-Milwaukee Subaward
Teonna	Cooksey	Undergraduate	UW-Milwaukee Subaward
Jarincy	Flores-Rodriguez	Undergraduate	UW-Milwaukee Subaward
Brandon	Ford	Undergraduate	UW-Milwaukee Subaward
Brian	Gayfield	Undergraduate	UW-Milwaukee Subaward
Shady	Girgis	Undergraduate	UW-Milwaukee Subaward
Shavontae	Grant	Undergraduate	UW-Milwaukee Subaward
Keaunis	Grant	Undergraduate	UW-Milwaukee Subaward
Stephanie	Harleston	Undergraduate	UW-Milwaukee Subaward
Brandon	Hill	Undergraduate	UW-Milwaukee Subaward
Andrea	Hiscocks	Undergraduate	UW-Milwaukee Subaward
Kelsey	Homan	Undergraduate	UW-Milwaukee Subaward
Joannie	Huamani	Undergraduate	UW-Milwaukee Subaward
Michael	Huynh	Undergraduate	UW-Milwaukee Subaward
Kobina	Intsiful	Undergraduate	UW-Milwaukee Subaward
Garry	Jean-Pierre	Undergraduate	UW-Milwaukee Subaward
Mariela	Jimenez	Undergraduate	UW-Milwaukee Subaward
Victor	Jimenez-Rico	Undergraduate	UW-Milwaukee Subaward
Mao	Lee	Undergraduate	UW-Milwaukee Subaward
Diamond	Lewis	Undergraduate	UW-Milwaukee Subaward
Tommy	Lloyd	Undergraduate	UW-Milwaukee Subaward
Sue	Lor	Undergraduate	UW-Milwaukee Subaward
Alessandra	Maurtua	Undergraduate	UW-Milwaukee Subaward
Jason	Mealey	Undergraduate	UW-Milwaukee Subaward
Nicholas	Medina	Undergraduate	UW-Milwaukee Subaward

Outside UW-Madison Students			
Name		Position Title	WiscAMP Institution & Activity
Anye	Ngwa	Undergraduate	UW-Milwaukee Subaward
Uchechi	Nwosu	Undergraduate	UW-Milwaukee Subaward
Juan	Orjuela	Undergraduate	UW-Milwaukee Subaward
David	Ortega	Undergraduate	UW-Milwaukee Subaward
Leanna	Ostrowski	Undergraduate	UW-Milwaukee Subaward
Hector	Quintero	Undergraduate	UW-Milwaukee Subaward
Kalin	Reed	Undergraduate	UW-Milwaukee Subaward
Daysia	Reid	Undergraduate	UW-Milwaukee Subaward
Samantha	Rissling	Undergraduate	UW-Milwaukee Subaward
Mawata	Sheriff	Undergraduate	UW-Milwaukee Subaward
Brittany	Taylor	Undergraduate	UW-Milwaukee Subaward
Cuauhtemoc	Tenorio	Undergraduate	UW-Milwaukee Subaward
Shoua	Vang	Undergraduate	UW-Milwaukee Subaward
Favian	Velasco	Undergraduate	UW-Milwaukee Subaward
Ame	Xiong	Undergraduate	UW-Milwaukee Subaward
Tommy	Yang	Undergraduate	UW-Milwaukee Subaward
Ali	Yusuf	Undergraduate	UW-Milwaukee Subaward
Carla	Echeveste	Undergraduate	UW-Milwaukee/Leadshp Symp
Giselle	Irankunda	Undergraduate	UW-Milwaukee/Leadshp Symp
Leonardo	Serrato	Undergraduate	UW-Milwaukee/Leadshp Symp
Alana	Martalock	Undergraduate	UW-Platteville Small Grant
Christian	Ortiz	Undergraduate	UW-Platteville Small Grant
Noreen	Rodrigues	Undergraduate	UW-Platteville Small Grant
Ricardo	Salazar	Undergraduate	UW-Platteville Small Grant
Kimberly	Gutierrez	Undergraduate	UW-Platteville/Leadershp Symp
Anthony	Xiong	Undergraduate	UW-Platteville/Leadershp Symp
Deyshia	Kinsey	Undergraduate	UW-Stevens Point/Leadrshp Symp
Angelique	Meinel	Undergraduate	UW-Stevens Point/Leadrshp Symp
Bryce	Thomas	Undergraduate	UW-Stevens Point/Leadrshp Symp

Industry involvement (if applicable):
N/A

Funding history and forecast:
WISELI was originally funded with a large National Science Foundation grant (2002-2006). Part of the cooperative agreement with NSF at the time was that after the initial grant ended, the campus would continue to fund WISELI; specifically, the campus would continue to support the position of the Executive Director. Jennifer Sheridan has filled that position since 2002 and the campus/Provost's Office has provided the funds for her salary to the campus since the grant ended in 2006.

In addition to this support, WISELI has secured grant funding from NSF and NIH. In 2004, WISELI was successful in obtaining an NSF Alliance for Minority Participation (AMP) grant. Currently in its third renewal, this grant funds the WiscAMP program through the WISELI center

UDDS. The WiscAMP program has been successful at obtaining grant funding to support its student-diversity goals, including UW System funding and a new NSF grant, "Bridge to the Doctorate."

In addition to this current and past grant funding, WISELI supports itself through other 101 contributions from throughout campus, from income-generating activities, and from a small amount of gift funds.

WISELI and WiscAMP will continue to pursue grant funding for various projects. Currently, we are working with the College of Engineering, and the UW-Madison Office of the Provost, to scale-up our bias literacy workshops and develop a new bias literacy workshop based on racial/ethnic implicit bias. Details of the award amounts and funding sources are still in development as of September, 2016.

WISELI

101 Funding. WISELI receives 101 funding from several sources, totaling around $178,000. The Office of the Provost (~$85,000), the School of Medicine and Public Health (~$65,000), and the College of Engineering (~$20,000) provide the largest 101 allocations.

136 Funding. WISELI does a number of income-generating activities, earning between $50,000 and $100,000 annually from these efforts.

Other Funding. WISELI has some funding remaining in a 150 account, and also has access to some gift funds. WISELI also administers the Denice Denton endowment funds.

WiscAMP

144 Funding. WiscAMP is primarily funded via two federal grants through the National Science Foundation:

1. Wisconsin Alliance for Minority Participation, National Science Foundation 8/1/14 – 7/31/19, PI: UW Provost, mandated by NSF. $3,000,000.
2. WiscAMP Bridge to Doctorate, National Science Foundation 4/1/15 – 3/31/17. PI: UW Provost, mandated by NSF. $987,000.

101 Funding, UW-System contributes $110,000 non-salary support each year of the WiscAMP alliance award to supplement alliance-wide activities.

150 Funding, UW-Madison contributes $120,000 each year to support the WiscAMP project.

Other Funding, UW-Madison and the Graduate School have committed resources to cover the full tuition remission, fringe benefits and segregated fees for the first cohort of 12 Bridge to the Doctorate Scholars. Because the tuition remission amounts required on grants increased after NSF review of this proposal, this commitment was necessary for UW-Madison to receive this award.

Evaluation:

WISELI: WISELI tracks the status of women faculty annually, monitoring: percentage of women by rank and department, salary, promotion, attrition, awards and honors, and participation on major committees. All data are located online:

. In addition, all workshop and grant programs administered by WISELI are continually evaluated. Each program has its own metrics for success and in-depth evaluation of each program is initiated every few years.

In 2015/16, WISELI implemented a campus-wide climate survey for all tenured/tenure-track faculty, CHS faculty, and clinical faculty. The survey was in the field from February-May 2016. We received a 58.3% response rate overall. The data are currently being analyzed, with reports expected by the end of 2016.

WiscAMP: The main goal of WiscAMP is to double the numbers of underrepresented minority students earning a Bachelor's Degree in one of the STEM disciplines throughout the alliance within the 5-year grant cycle. In Cycle II, this goal was accomplished, doubling from 169 graduates in 2009 to 341 graduates in 2013. In 2014, the new baseline is 341 graduates, with a goal of 642 graduates by 2019. The project reported 369 URM STEM graduates across the Alliance in 2015, the year for which the most recent data are available.

WiscAMP Annual Reports to NSF are distributed to the Governing Board and all WiscAMP Faculty and Campus Liaisons. Additional data are reported to the external national evaluator for the LSAMP program each year. In addition to tracking aggregate outcomes in enrollments and degree attainment, three evaluation activities have been implemented to document programmatic outcomes.

WiscAMP Excel: Students complete pre- and post-program questionnaires to identify immediate outcomes of program participation on their commitment to pursuing a STEM major and their confidence that they will be able to succeed in meeting academic milestones. Subsequent to participation, students are tracked and provide self-reported evidence of their continued enrollment in a STEM major, and whether they are entering or planning to enter graduate school. Faculty and instructional staff participate in a focus group debriefing. Students also provide on-line program evaluation.

Level-1 Student Tracking: Every 4 years, WiscAMP faculty or staff members, who have implemented subawards or small grants, are asked to provide information about students who received funding through the WiscAMP program at their institution.

Aggregate Retention: Every 4 years the UW-System Office of Policy Analysis and Research provides data to document URM and non-URM student retention in STEM majors across the alliance. An additional query provide information about URM and non-URM student time and credit to degree as well as GPA.

In 2015-16 two new initiatives have led to additional evaluation activities. As part of the third 5-year cycle of funding, WiscAMP has committed to supporting the use of evidence-based participation broadening practices in teaching, mentoring and advising. The *Fair Play* training initiative and research mentor training workshops are intended to support STEM faculty and staff in their efforts to increase retention and success of all students in STEM. The baseline alliance-wide survey of STEM faculty and staff will help document the impact of these efforts. This survey is being supplemented with one-on-one key informant interviews.

Challenges/opportunities/plans for 2016-17:

In addition to maintaining the workshop and grant programs currently operating through WISELI, in 2016/17 WISELI's main (new) project will be to develop and pilot a race-based implicit bias

workshop in the College of Engineering, and across campus as well. Based on the successful "Breaking the Bias Habit: A workshop to promote gender equity" workshop, we will create a similar workshop that explores the impact of race/ethnic bias on processes in academia. The College of Engineering has provided support for a graduate student to assist with the development of the curriculum, and we implemented a pilot workshop for CoE deans and chairs in August 2016.

In 2016-17 WiscAMP will continue to offer the *Fair Play* program so that all STEM departments across all alliance institutions will have access to the training. We will look for opportunities to implement the training so that the evaluation will include a comparator group.

WiscAMP's other major challenge for 2016/17 is developing the Bridge to the Doctorate (BD) program. This program provides generous support for the first 2 years of graduate training and is being implemented in collaboration with the GERS, SciMed GRS and TEAM Science programs. Most WiscAMP-BD faculty advisors reported that they are pleased with the progress of their WiscAMP-BD students. Doubling the number of students from 12 in 2015/16 to 24 in 2016/17 places an additional demand on the GERS and SciMed GRS program staff, particularly the coordinators. The LSAMP Bridge to the Doctorate award mechanism does not include resources in its budget for additional administrative staff. WiscAMP program staff are working with the GERS and SciMed GRS program staff to identify the best strategies for implementing the program without disrupting the GERS and SciMed GRS programs and communities. In 2016/17 WiscAMP-BD fellows will have the benefit of participating in the TEAM Science professional development seminar in addition to the GERS and SciMed GRS seminars. Each community offers a variety of approaches to professional development in STEM. Formative evaluation of the WiscAMP-BD program will include group interviews and a survey to track the effectiveness of these efforts.

Federal Research Highlight (if applicable)
(Provide a <u>few sentences</u> in response to each question below, for one federally funded research project in the Center. This information will be used by the CoE Dean's Office to prepare an annual "Federal Research Highlights and Impacts" report for the UW-Madison Federal Relations Director, Ben Miller, who advocates for the campus in Washington, DC.)

1. Title and brief description of project: (Please include name and department affiliation of lead PI)

   Wisconsin Alliance for Minority Participation (WiscAMP). WiscAMP is an NSF-funded program consisting of 19 colleges and universities throughout the state of Wisconsin with a goal of increasing the numbers of under-represented minority (URM) students receiving Bachelors degrees in a STEM discipline. The PI is mandated to be the provost of the lead institution, and thus Sarah Mangelsdorf is PI.

2. What is the funding agency and overall funding amount? (Please include timing of project – when was it originally funded, how long is the grant, etc?)
   WiscAMP was first funded in 2004, renewed in 2009 and renewed a second time in 2014. Our current project is for $2.5 million from 8/1/2014 through 7/31/2019.

3. What is the impact on the state or significance to the nation? (What problem is the project attempting to solve or what are the major contributions to society?)

Between 2009 and 2013, WiscAMP successfully DOUBLED the numbers of underrepresented minority students receiving baccalaureate degrees in STEM fields across the state of Wisconsin. WiscAMP students have successfully entered doctoral programs at tier 1 institutions across the country. WiscAMP is developing the diversity of the advanced degree STEM workforce.

4. Are there external partners involved in the program? (Please list key partners from outside the University who are working with the project)

WiscAMP works successfully with 18 other campuses throughout Wisconsin: All UW System schools (13), Alverno College, Beloit College, Laurence University, and Milwaukee School of Engineering, the UW Colleges, and Madison College.