

**College of Engineering: Annual Report of Center Activities  
July 1, 2014 – June 30, 2015**

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

<b>Director (2014-15)</b>	Molly Carnes & Amy Wendt
<b>Co-Director (2014-15)</b> (if applicable)	
<b>Leadership in 2015-16</b> (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 2014-15:

1. *Searching for Excellence & Diversity* workshops. We performed 6 workshops or workshop series to 119 faculty and staff. In addition, we visited 15 administrative search or awards committees to talk about unconscious bias.
2. *Enhancing Department Climate* workshops. We held one workshop series last year for a record number of participants—10 department chairs participated.
3. *Breaking the Bias Habit: A Workshop to Promote Gender Equity*. We had no requests in 2014/15 for this workshop on the UW-Madison campus.
4. *Vilas Life Cycle Professorships*. In FY15, our budget for these grants was \$372,000, and we received 24 applications and funded 15 of them. We argued for an increased

budget for the next year, and in April 2015 we were notified that our budget more than doubled, to \$850,000. We revised the criteria for the program to expand its reach across campus.

5. *Celebrating Women in Science & Engineering* grant program. We awarded all \$10,500 allocated to this program in 2014/15. We received 11 applications, funding 9 of them.
6. *Outside talks and workshops*.
  - a. *Searching for Excellence & Diversity*. We delivered this workshop in a “train the trainer” format to 3 universities (University of Minnesota, Ohio State University, University of Vermont) in 2014/15, bringing in \$55,000 to our 136 fund.
  - b. Purdue University invited Eve Fine and Jennifer Sheridan to their campus to deliver a talk and a “mini-workshop” on department climate to STEM chairs in January 2015.
  - c. *Breaking the Bias Habit*. We delivered this workshop at 3 different sites off-campus in 2014/15, including the University of Maine, the University of Rochester, and the Howard Hughes Medical Institute (HHMI). HHMI is considering funding a “scale-up” of this workshop to more campuses.
  - d. Molly Carnes, Amy Wendt, Jennifer Sheridan, and Eve Fine were invited to give 12 presentations, talks, or consulting about gender bias in academia in 2014/15, including at the University of Kansas, Cedar-Sinai Medical Center, Madison College, University of Rochester School of Medicine and Dentistry, University of Illinois, St. Olaf College, the Committee on Institutional Cooperation (CIC), Rosalind Franklin Society, North Dakota State University, Medical University of South Carolina, the Office of Science & Technology Policy, and Florida International University.
  - e. Presented a poster and panel presentation at the annual National Science Foundation ADVANCE PI meetings, May 27, 2015 in Baltimore, MD.
7. *Sales of WISELI materials*. In 2014/15, we sold over \$23,000 (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 2014/15, we published:
  - a. Sheehy, Ann M.; Christine Kolehmainen; and Molly Carnes. 2015. “We Specialize in Change Leadership: A Call for Hospitalists to Lead the Quest for Workforce Gender Equity.” *Journal of Hospital Medicine*.
  - b. Sheridan, Jennifer; Christine Maidl Pribbenow; Molly Carnes; Jo Handelsman; and Amy Wendt. Forthcoming. “Life Happens: The Vilas Life Cycle Professorship Program at the University of Wisconsin-Madison.” *In Family Friendly Policies and Practices in Academe* (Catherine R. Solomon and Erin K. Anderson, Eds.) Washington DC: Lexington Books.
  - c. Carnes, Molly, Patricia Devine, Linda Baier Manwell, Jennifer Sheridan, Cecilia Ford, Angela Byars-Winston, Carol Isaac, Eve Fine, and Julia Savoy. 2015. “Breaking the Bias Habit: A Workshop to Promote Gender Equity.” University of Wisconsin-Madison. [Guidebook]
  - d. Carnes, Molly; Patricia G. Devine; Linda Baier Manwell; Angela Byars-Winston; Eve Fine; Cecilia E. Ford; Patrick Forscher; Carol Isaac; Anna Kaatz; Wairimu Magua; Mari Palta; and Jennifer Sheridan. 2015. “Effect of an Intervention to

- Break the Gender Bias Habit: A Cluster Randomized, Controlled Trial.” *Academic Medicine*. 90(2): 221-230.
- e. Kaatz, Anna; Wairimu Magua; David R. Zimmerman; and Molly Carnes. 2015. “A Quantitative Linguistic Analysis of NIH R01 Application Critiques from Investigators at One Institution.” *Academic Medicine*. 90(1): 69-75.
  - f. Kaatz, Anna and Molly Carnes. 2015. “Women at the Top: The Risks of Leading From a Glass Cliff.” *American Society for Cell Biology Newsletter*. January/February: 42-44.
  - g. Gutierrez, Belinda; Anna Kaatz; Sarah Chu; Dennis Ramirez; Clem Samson-Samuel; and Molly Carnes. 2014. “*Fair Play*: A Video Game Designed to Address Implicit Race Bias Through Active Perspective Taking.” *Games for Health Journal*. 3(6): 371-378
  - h. Fine, Eve; Jennifer Sheridan; Molly Carnes; Jo Handelsman; Christine Pribbenow; Julia Savoy; and Amy Wendt. 2014. “Minimizing the Influence of Gender Bias on the Faculty Search Process.” In *Advances in Gender Research: Gender Transformations in the Academy* (Vasilikie Demos, Catherine White Berheide, and Marcia Texler Segal, Eds.) Bingley, United Kingdom: Emerald Group Publishing.
  - i. Fine, Eve; Amy Wendt; Molly Carnes. (2014) “Gendered Expectations: Are We Unintentionally Undermining Our Efforts to Diversity STEM fields.” *XRDS: Crossroads The ACM Magazine for Students*. 20(4): 46-51.
  - j. Kaatz, Anna and Molly Carnes. 2014. “Stuck in the Out-Group: Jennifer Can’t Grow Up, Jane’s Invisible, and Janet’s Over the Hill.” *Journal of Women’s Health*. 23(6): 1-4.
  - k. Kaatz, Anna; Belinda Gutierrez; and Molly Carnes. 2014. “Threats to Objectivity in Peer Review: The Case of Gender.” *Trends in Pharmacological Sciences*. 35(8): 371-373.
  - l. Kolehmainen, Christine; Meghan Brennan; Amarette Filut; Carol Isaac; and Molly Carnes. 2014. “Afraid of Being “Witchy with a ‘B’”: A Qualitative Study of How Resident Enact Leadership in Cardiopulmonary Resuscitation.” *Academic Medicine*. 89(9): 1-6.

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 innovative 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 2014/15, 7 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 2014/15, 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 implemented a pilot version of the program in 2014-15.

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 2014/15, 16 students participated.
4. *Scholars Advance Opportunities for Academic and Career Development (WSAOA)*. Eight WiscAMP students (6 at UW-Madison, 1 at UW-Eau Claire and 1 at Beloit College) 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 one student at UW-Madison and both students at UW-Eau Claire and Beloit College.
5. *Broadening Participation through Bias Reduction*. In fall 2014 WiscAMP offered a pre-conference training in stereotype-based bias reduction. This training was 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 a pilot of the *Fair Play* training workshop. In addition to *Fair Play*, UW-Whitewater and UW-Milwaukee have held *Research Mentor Training* workshops to support faculty in the development of strong research mentoring and advising relationships with WiscAMP students. At the request of the Wisconsin State Geological and Natural History Survey, the WiscAMP executive director co-facilitated a workshop series for research faculty with the WSGNHS in preparation for WiscAMP students' participation in research experiences with the WSGNHS.
6. *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 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 and staff involvement:**

WISELI is a small center, with approximately 5.0 FTE of faculty/staff effort (including both WISELI and the WiscAMP program housed within WISELI). These faculty/staff include:

#### FACULTY

Molly Carnes, co-Director of WISELI and co-PI of WiscAMP. Professor of Medicine and Industrial & Systems Engineering. 13% (10% WISELI/no salary and 3% WiscAMP).

Amy Wendt, Co-Director of WISELI. Professor of Electrical & Computer Engineering. 1 Summer Month.

Douglass Henderson, co-PI of WiscAMP. Professor and Chair of Engineering Physics. 1 Summer Month.

**ACADEMIC STAFF**

Jennifer Sheridan, Executive & Research Director of WISELI (Associate Scientist). 100%.

Eve Fine, Researcher & Director of Curriculum Design and Implementation for WISELI (Researcher). 100%.

Christine Pribbenow, Evaluation Director of WISELI (Associate Scientist). 15%.

Gail Coover, Executive Director of WiscAMP (Assistant Scientist). 100%.

Barry Delin, Evaluator of WiscAMP (Researcher). 50%.

Manuela Romero, co-PI of WiscAMP. Associate Dean for Undergraduate Affairs, College of Engineering. 5% (no salary).

**UNIVERSITY STAFF**

Denise Thomas, Financial Specialist for WiscAMP, Graduate Engineering Research Scholars (GERS), and WISELI (Financial Specialist Senior). 100% (25% WISELI, 25% GERS, and 50% WiscAMP).

**Student and postdoctoral trainee involvement (if applicable):**

The WiscAMP program has a direct mission to support students in STEM fields. Direct support for students is provided through the small grants distributed across the state, as well as the Excel program. On the UW-Madison campus in 2014/15, WiscAMP directly funded 14 students:

Student Name	Department/Major	Year	Program
Cory Jackson	Engr. Mechanics	Senior	WSAOA
Janerra Allen	Materials Science	Junior	Excel & WSAOA
Manuel Torres	Geology	Senior	WSAOA
Oseghale Ituah	Biology	Sophomore	WSAOA
Vaughn Williams	Biology	Senior	WSAOA
Yanika Davis	Biology	Sophomore	WSAOA
Alberto Prado	Mechanical Engr.	Freshman	Excel
Angel Saucedo	Materials Science	Freshman	Excel
Miguel Lomeli	Electrical Engr.	Freshman	Excel
Cesar Gutierrez	Zoology	Sophomore	Excel
Rodrigo Umanzor	Biomedical Engr.	Freshman	Excel
Tasi-Jo McFarlane	Biology	Freshman	Excel
Xavier Lunar	Nuclear Engr.	Freshman	Excel
Vong Lor	Pharmacology	Freshman	Excel

On other campuses, 91 students received WiscAMP support:

Student Name	Campus	Department/Major	Year	Program
Daniel Decarli	UW-Platteville	Engr.	Undergrad	Excel
Ernest Soto	UW-Superior	Chemistry	Undergrad	Excel

Student Name	Campus	Department/Major	Year	Program
Sandra Meija	MSOE	Mechanical Engr.	Undergrad	Excel
Yeng Her	UW-Platteville	Mechanical Engr.	Undergrad	Excel
Michal Vang	UW-Platteville	Mechanical Engr.	Undergrad	Excel
Jordan Garcia	Beloit College	Biology	Undergrad	Excel
Jennifer Santos	Beloit College	Biochemistry	Undergrad	Excel
Badger, Richon	Alverno	Chemistry	Undergrad	WiscAMP Small Grant
Munoz-Sanchez, Adilene	Alverno	Chemistry	Undergrad	WiscAMP Small Grant
Pryor, Chiquita	Alverno	Chemistry	Undergrad	WiscAMP Small Grant
Baas, Tia	Alverno	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Babcock, Carissa	Alverno	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Brumfield, Shakiya	Alverno	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Davis, Na-Tiyara	Alverno	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Fernandez, Tiffany	Alverno	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Holmes, Marquita	Alverno	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
McKinley, Kendraia	Alverno	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Miller-Wallace, Nefertari	Alverno	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Perez, Daisy	Alverno	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Villafuerte, Laura	Alverno	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Gonzalez, Edna	Alverno	Math	Undergrad	WiscAMP Small Grant
Versulien, Lukeson	Beloit	Chemistry	Undergrad	WiscAMP Small Grant
Davis, Lola	Beloit	Undeclared/Other	Undergrad	WiscAMP Small Grant
Ek-Vazquez, Zabdiel	Lawrence	Life/Bio Sciences	Undergrad	WSAOA
Price, Cedric	Madison Col	Engineering	Undergrad	WiscAMP Subaward
Gaye, Sokhna	Madison Col	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Santana, Jonathan	Madison Col	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Cobb, Travis	Madison Col	Physics-Astonomy	Undergrad	WiscAMP Subaward
Conor, Phillip	UW-EC	Chemistry	Undergrad	WiscAMP Small Grant
Kohl-Blomsness, Nokoma	UW-EC	Chemistry	Undergrad	WiscAMP Small Grant
Hernandez, Jesus	UW-LAX	Environmental Sci	Undergrad	WiscAMP Small Grant
Burkhart, Christina	UW-LAX	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Greenup, Julian	UW-LAX	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Lee, Chai	UW-LAX	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Lee, Kevin	UW-LAX	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Yee, Yang	UW-LAX	Life/Bio Sciences	Undergrad	WiscAMP Small Grant
Bowers, Nezhiah	UW-Milwaukee	Chemistry	Undergrad	WiscAMP Subaward
Girgis, Shady	UW-Milwaukee	Chemistry	Undergrad	WiscAMP Subaward
Ngwa, Anye	UW-Milwaukee	Chemistry	Undergrad	WiscAMP Subaward
Ostrowski, Leanna	UW-Milwaukee	Chemistry	Undergrad	WiscAMP Subaward
Taylor, Brittany	UW-Milwaukee	Chemistry	Undergrad	WiscAMP Subaward
Ortega, David	UW-Milwaukee	Computer Sci	Undergrad	WiscAMP Subaward
Velasco, Favian	UW-Milwaukee	Computer Sci	Undergrad	WiscAMP Subaward
Becker, Cody	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Cooksey, Teona	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Flores-Rodriguez, Jarincy	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Hill, Brandon	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Intsiful, Kobina	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Jean-Pierre, Garry	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Jimenez, Mariela	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Jimenez-Rico, Victor	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Lee, Mao	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Lewis, Diamond	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Lloyd, Tommy	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Lor, Sue	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward

Student Name	Campus	Department/Major	Year	Program
Maurtua, Alessandra	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Mealey, Jason	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Medina, Nicholas	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Quintero, Hector	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Reed, Kalin	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Yang, Tommy	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Yusuf, Ali	UW-Milwaukee	Engineering	Undergrad	WiscAMP Subaward
Anglin, Taylor	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Ford, Brandon	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Gayfield, Brian	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Grant, Keaunis	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Grant, Shavonte	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Harleston, Stephanie	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Horman, Kelsey	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Huamani, Joannie	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Huynh, Michael	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Nwosu, Uchechi	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Orjuela, Juan	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Rissling, Samantha	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Sheriff, Mawata	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Vang, Shoua	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Xiong, Ame	UW-Milwaukee	Life/Bio Sciences	Undergrad	WiscAMP Subaward
Hiscocks, Andrea	UW-Milwaukee	Math	Undergrad	WiscAMP Subaward
Tenorio, Cuauhtemoc	UW-Milwaukee	Physics-Astronomy	Undergrad	WiscAMP Subaward
Reid, Daysia	UW-Milwaukee	Undeclared/Other	Undergrad	WiscAMP Subaward
Kifle, Berket	UW-PARK	Computer Sci	Undergrad	WiscAMP Small Grant
Mateo, Francisco	UW-PARK	Computer Sci	Undergrad	WiscAMP Small Grant
Sobol, David	UW-PARK	Computer Sci	Undergrad	WiscAMP Small Grant
Villalobos, Jesus	UW-PARK	Computer Sci	Undergrad	WiscAMP Small Grant
Martalock, Alana	UW-PLATT	Engineering	Undergrad	WiscAMP Small Grant
Ortiz, Christian	UW-PLATT	Engineering	Undergrad	WiscAMP Small Grant
Rodrigues, Noreen	UW-PLATT	Engineering	Undergrad	WiscAMP Small Grant
Salazar, Riccardo	UW-PLATT	Engineering	Undergrad	WiscAMP Small Grant
Phat, Ricky	UW-Rock	Chemistry	Undergrad	WiscAMP Subaward
Dulce, Amador	UW-Rock	Life/Bio Sciences	Undergrad	WiscAMP Subaward

**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 at the beginning stages of a negotiation with the Howard Hughes Medical Institute (HHMI) to scale-up our bias literacy workshops and develop a new bias literacy workshop based on racial/ethnic implicit bias.

## **WISELI**

101 Funding. WISELI receives 101 funding from several sources, totaling around \$182,000. The Office of the Provost (~\$85,000), the School of Medicine and Public Health (~\$70,000), 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 (which will be depleted by the end of this year), 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:



<http://wiseli.engr.wisc.edu/indicators.php>. 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 2014/15, we published such reports on three of WISELI's main programs:

Vilas Life Cycle Professorships: Sheridan, Jennifer; Christine Maidl Pribbenow; Molly Carnes; Jo Handelsman; and Amy Wendt. Forthcoming. "Life Happens: The Vilas Life Cycle Professorship Program at the University of Wisconsin-Madison." *In Family Friendly Policies and Practices in Academe* (Catherine R. Solomon and Erin K. Anderson, Eds.) Washington DC: Lexington Books.

Breaking the Bias Habit workshops: Carnes, Molly; Patricia G. Devine; Linda Baier Manwell; Angela Byars-Winston; Eve Fine; Cecilia E. Ford; Patrick Forscher; Carol Isaac; Anna Kaatz; Wairimu Magua; Mari Palta; and Jennifer Sheridan. 2015. "Effect of an Intervention to Break the Gender Bias Habit: A Cluster Randomized, Controlled Trial." *Academic Medicine*. 90(2): 221-230.

Searching for Excellence & Diversity workshops: Fine, Eve; Jennifer Sheridan; Molly Carnes; Jo Handelsman; Christine Pribbenow; Julia Savoy; and Amy Wendt. 2014. "Minimizing the Influence of Gender Bias on the Faculty Search Process." *In Advances in Gender Research: Gender Transformations in the Academy* (Vasilikie Demos, Catherine White Berheide, and Marcia Texler Segal, Eds.) Bingley, United Kingdom: Emerald Group Publishing.

**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 368 URM STEM graduates across the Alliance in 2014/15.

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 2014-15 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 2015-16:**

In addition to maintaining the workshop and grant programs currently operating through WISELI, in 2015/16 WISELI's main projects include:

1. Implement a faculty climate survey. We are working with other campus units to determine the breadth and timing of fielding a 5<sup>th</sup> faculty climate survey, and hope to go into the field in February 2016. This survey will primarily be funded with WISELI's 136 funds, although some other campus units may also contribute.
2. Develop and pilot a race-based implicit bias workshop. 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. We hope to pilot the new material by the end of spring semester 2016.

In 2015-16 WiscAMP will begin to scale up its partnership with the *Fair Play* program so that all STEM departments across all alliance institutions will have access to the training. The logistics of implementing the training in collaboration with the research and evaluation needs of this NIH-funded effort will involve careful planning and clear communication with alliance partners.

WiscAMP's other major challenge for 2015/16 is implementing the new 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 and SciMed GRS programs. The program allows for the expansion of incoming cohorts for GERS and SciMed GRS. However because WiscAMP-BD students have guaranteed funding independent of their advisor's research projects for the first 2 years of their doctoral programs:

1. The advisor arguably may not invest as much time or effort in developing the student because the student's support is independent of the advisor's funded research.
2. They may be less connected to the graduate student community within their department or their advisor's lab.

For these reasons faculty advisors for GERS and SciMed GRS first year students will be invited to participate in the WiscAMP-BD faculty meetings. These meetings, to be held once each semester, will provide faculty advisors with an opportunity to identify their students' relative progress in their programs and share strategies for supporting students' success.

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## **Federal Research Highlight (if applicable)**

1. Title and brief description of project:

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.

2. What is the funding agency and overall funding amount?

National Science Foundation, \$3,000,000

3. What is the impact on the state or significance to the nation?

Between 2009 and 2013, WiscAMP successfully DOUBLED the numbers of underrepresented minority students receiving Bachelors degrees in STEM fields across the state of Wisconsin. This achievement helps the state and the nation successfully utilize more of its talent, broadening participation in STEM fields.

4. Are there external partners involved in the program?

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.