



DATA DIGEST

September 2022 – August 2023



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Overview

WISCIENCE provides cross-campus programs, services, and courses to undergraduate students, graduate students, postdoctoral trainees, staff members, and faculty members to support the University's strategic goal of excellence in STEM education. All WISCIENCE programs, services, and courses promote diversity, educational innovation, engaged scholarship, outreach, and collaboration.

Mission

Enhance engagement and strengthen success in STEM through equitable and inclusive initiatives, collaborations, service, and scholarship.

Goals

WISCIENCE will...

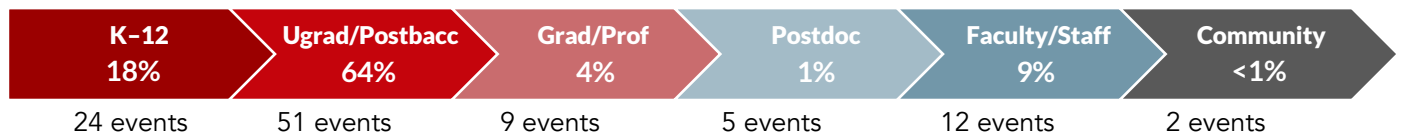
- I. Build and support communities of STEM learners, leaders, and practitioners.
- II. Deliver courses and programs that:
 - a. Develop knowledge and skills for success in STEM.
 - b. Build STEM identities and confidence.
 - c. Provide professional development in teaching, public service, leadership, and research in STEM.
 - d. Provide opportunities to engage in teaching, public service, leadership, and research in STEM.
- III. Foster equity and inclusion in STEM through initiatives and programs that support diverse populations.
- IV. Lead and collaborate on local and national efforts to improve STEM education by developing and disseminating evidence-based programs, curricula, resources, and other scholarly products.

WISCIENCE's Impact

WISCIENCE engages learners at all stages of training and levels of exposure to STEM, from K–12 students to graduate students to STEM faculty and citizen scientists.

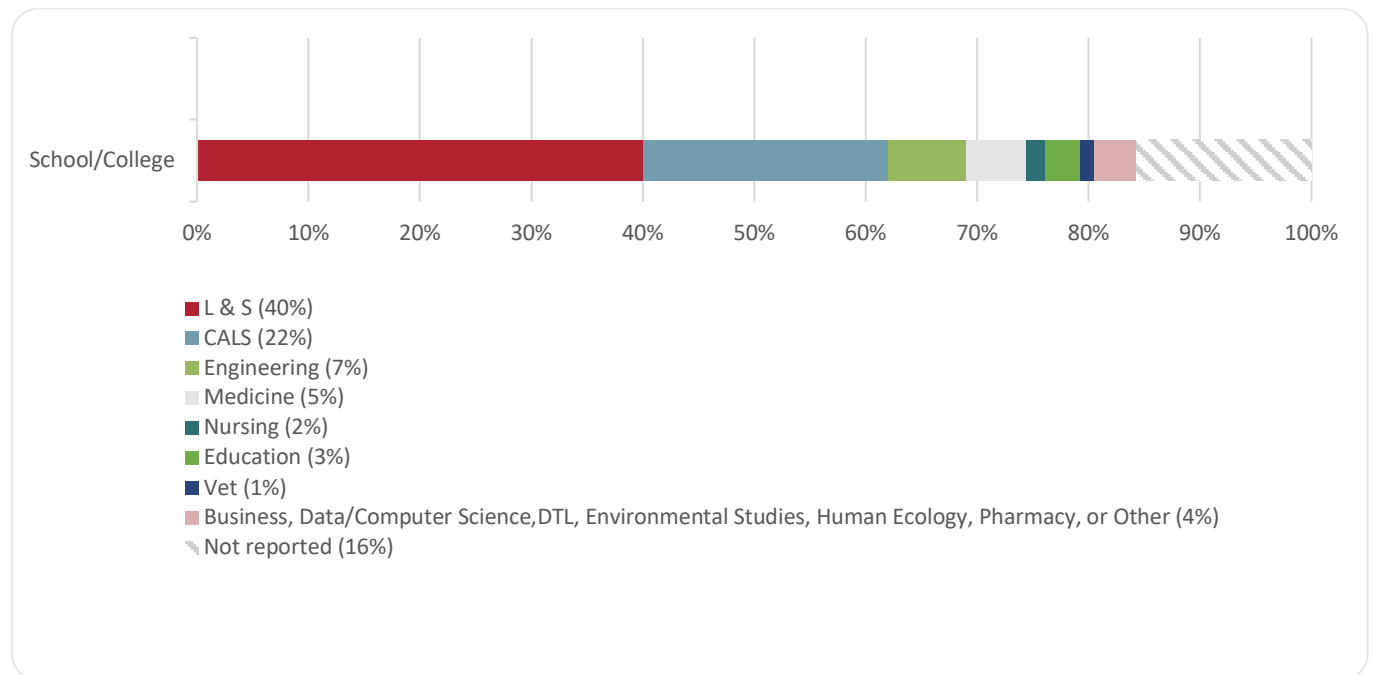
In 2022–23, we reached 1,618 participants. *Note: Data includes registered and estimated participation data.*

Total Number of Participants: **1,618**



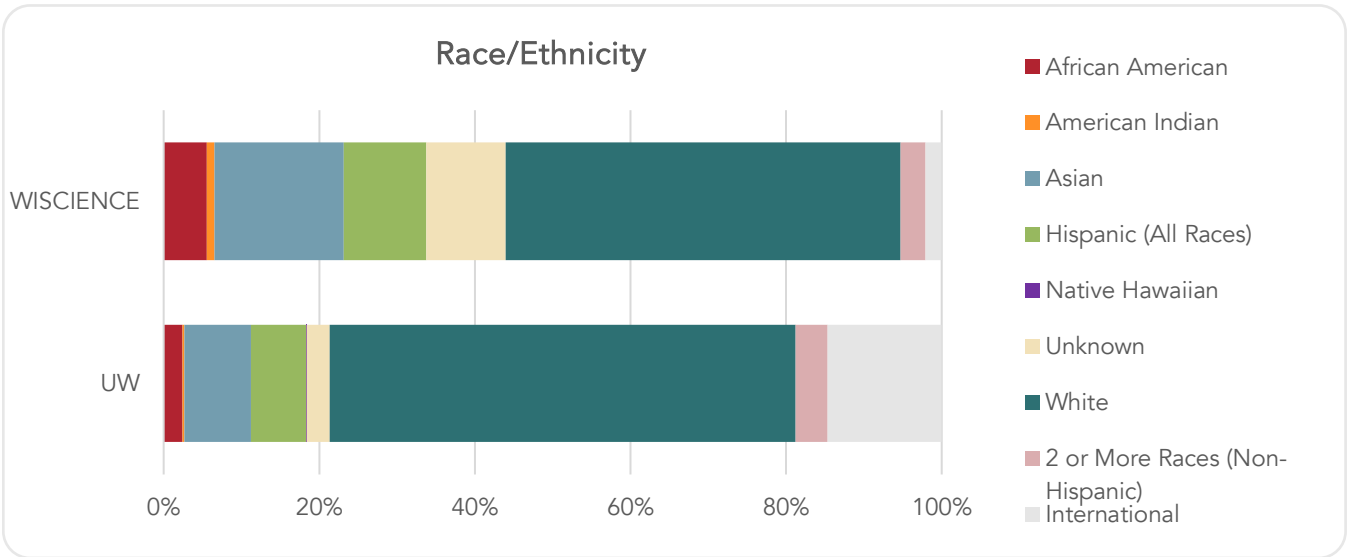
NOTE: Career stage information was not available for 71 participants (4% of total).

Participant School/College Affiliation

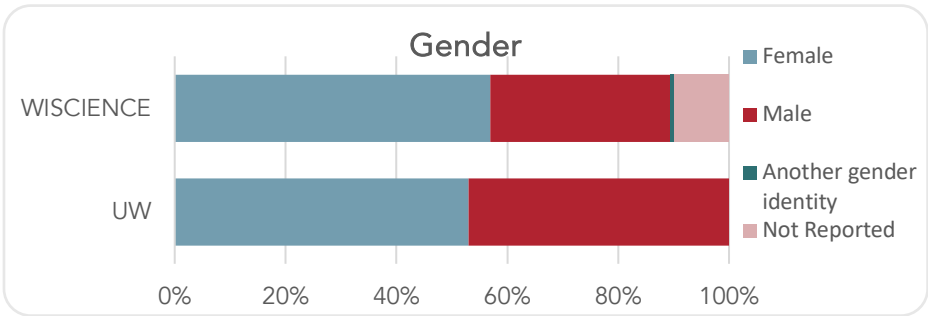


N= 807. Schools and Colleges with 1% or less of participants reporting them are shown as pink near the end of the bar. 130 (16%) participants did not report their college.

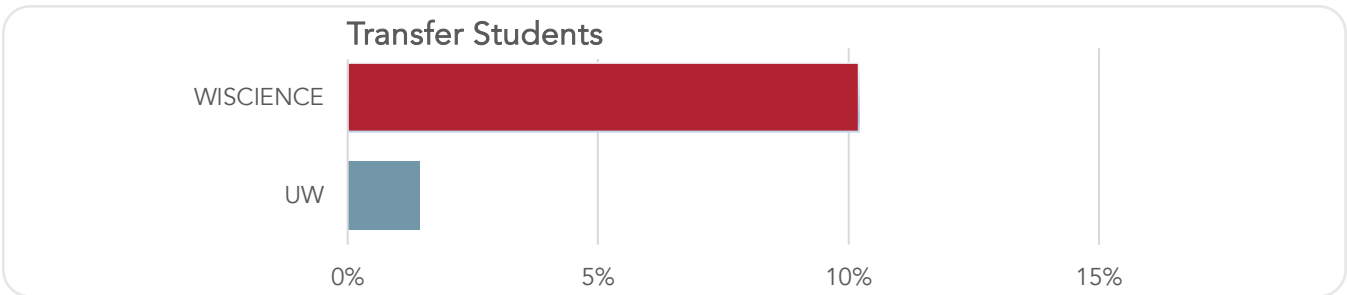
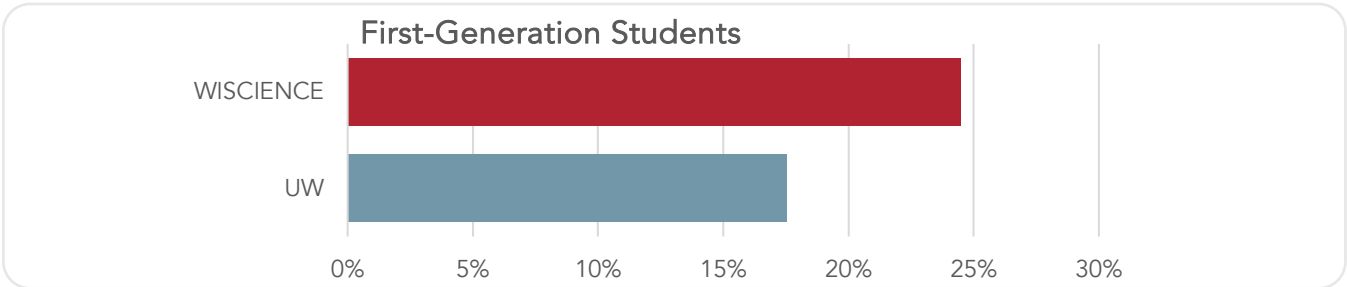
Participant Demographics



Note: UW–Madison data comes from Fall 2022 Semester in 2022–23 Data Digest (<https://data.wisc.edu/data-digest/>). Race and Ethnicity categories represent all domestic (non-international) students. Non-domestic students are categorized as “International” for reporting purposes at UW–Madison. WISCIENCE data represent only 51% of all participants (N= 830).



Note: UW–Madison data comes from Fall 2022 Semester in 2022–23 Data Digest (<https://data.wisc.edu/data-digest/>). WISCIENCE data represent only 52% of all participants (836). UW data reports gender with male and female categories only.



Note: UW–Madison data comes from Fall Semester Undergraduate Enrollment, First Generation and New Transfer Students, and Fall Semester FTE Enrollment in 2022–23 Data Digest (<https://apir.wisc.edu/data-digest/>). Transfer student data for UW is a calculation of the percentage of students enrolled in STEM majors who were admitted to UW–Madison as transfer students. WISCIENCE data comes from participants in courses and programs for undergraduates where this information was collected.

WISCIENCE Courses and Programs

K-12

Ugrad

Grad/Prof

Postdoc

Faculty/Staff

Community

STEM Student Support: courses and programs designed to build community and benefit diverse populations of STEM undergraduate students.

Course/Program Name	WISCIENCE Goals (p.3)	Semesters Offered	Instructor(s)	Target Audience	Total Participants
BioHouse Seminar (INTEGSCI 110; INTEGSCI 375)	I, IIa, IIb, III	Fa, Sp	Jonathan Pauli & MaryRuth Kotelnicki		52
Exploring Biology (INTEGSCI 100)	I, IIa, IIb, III	Fa, Su	Cara Theisen with Teaching Fellows		185
STEM Immersion Orientation Program	I, IIa, III	Fa	Keegan Buscaino		53
Transfer STEM Immersion Orientation Program	I, IIa, III	Fa	Tiaira Porter		16
BioCommons Events co-sponsored by WISCIENCE	I, IIa, IIb, IIc, IIId, III, IV	Fa, Sp, Su	Keegan Buscaino		814*
BioCommons Events not co-sponsored by WISCIENCE	I, IIa, IIb, IIc, IIId, III, IV	Fa, Sp, Su	Keegan Buscaino		1891*

Note: participant information for BioCommons Events includes estimated participation for some events.

Research Mentor & Mentee Professional Development: courses and programs offered by WISCIENCE and in response to community requests to support research mentor and mentee training in STEM.

Course/Program Name	WISCIENCE Goals (p.3)	Semesters offered	Instructor(s)	Target Audience	Total Participants
Exploring Research in STEM (INTEGSCI 150)	I, IIa, IIb, IIc, III	Fa, Sp, Su	Amber Smith		57
Entering Research, Part I (INTEGSCI 260)	I, IIa, IIb, IIc, IIId, III, IV	N/A	Amber Smith		Not offered
Entering Research, Part II (INTEGSCI 261)	I, IIa, IIb, IIc, IIId, III, IV	N/A	Amber Smith		Not offered
Biological Interactions Summer Research Program	I, IIa, IIb, IIc, IIId, III, IV	Su	Amber Smith		32
Research Mentee Training Workshops	I, IIa, IIb, IIc, IIId, III, IV	Fa, Sp	Amber Smith		93
Advancing Research Mentoring Practice/Research Mentor Training Workshops	I, IIa, IIb, IIc, IIId, III, IV	Fa, Sp	Amber Smith		101
Entering Mentoring Facilitator Training	I, IIc, III, IV	Sp	Amber Smith, Jess Maher		15
Entering Research Curriculum Development Institute	I, IIc, III, IV	Sp	Amber Smith, Janet Branchaw		22

Leadership Professional Development: courses and programs to develop participants' leadership knowledge and skills through personal and professional development.

Course/Program Name	WISCIENCE Goals (p.3)	Semesters offered	Instructor(s)	Target Audience	Total Participants
Exploring Discipline-Based Leadership and Mentoring (INTEGSCI 230)	I, IIc, III	Sp	Cara Theisen		16
WISCIENCE Peer Leader Program	I, IIb, IIc, IId, III	Fa, Sp, Su	Amber Smith, Keegan Buscaino		32

Undergraduate Peer Leaders: 32 placements in 2022–23

- Exploring Biology Peer Leaders (18)
- Exploring Discipline-Based Leadership and Mentoring Peer Leaders (2)
- Research Peer Leaders (6)
- Exploring Service in STEM Peer Leaders (1)
- Service with Youth in STEM Peer Leaders (1)
- STEM Immersion Peer Leaders (4)

Teaching Professional Development: courses and programs for graduate students and postdocs designed to improve teaching and mentoring in STEM.

Course/Program Name	WISCIENCE Goals (p.3)	Semesters offered	Instructor(s)	Target Audience	Total Participants
Scientific Teaching for TAs (INTEGSCI 605)	I, IIa, IIb, IIc, III	N/A	Cara Theisen		Not offered
Scientific Teaching Fellows Program			Cara Theisen		
Mentored Practicum in College Science Teaching (INTEGSCI 850)	I, IIa, IIb, IIc, IId, III	Fa	Cara Theisen		8
College Science Teaching (INTEGSCI 650)	I, IIa, IIb, IIc, III	Sp	Cara Theisen		8
Instructional Materials Design for College Science Teaching (INTEGSCI 750)	I, IIa, IIb, IIc, IId, III	Su	Cara Theisen		8

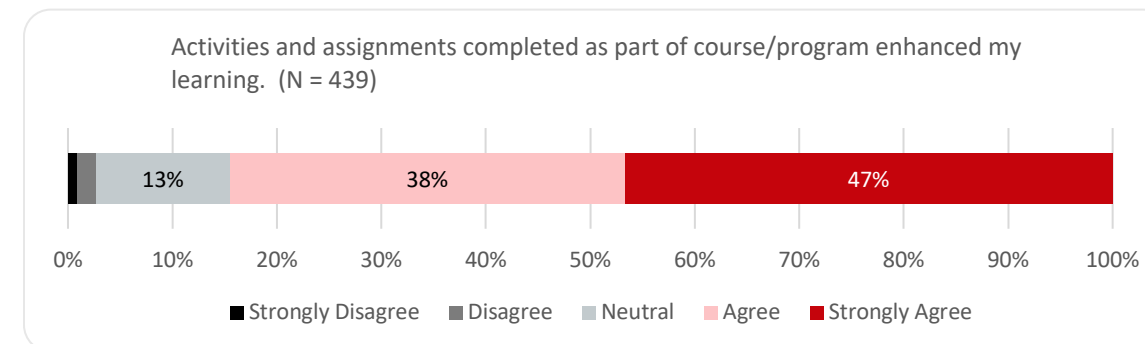
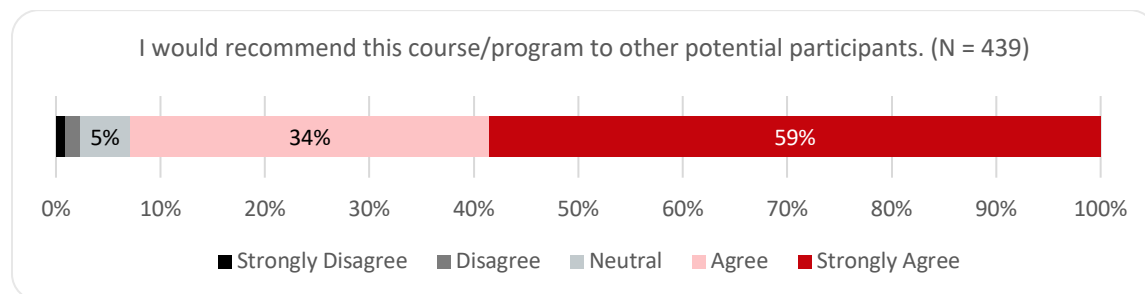
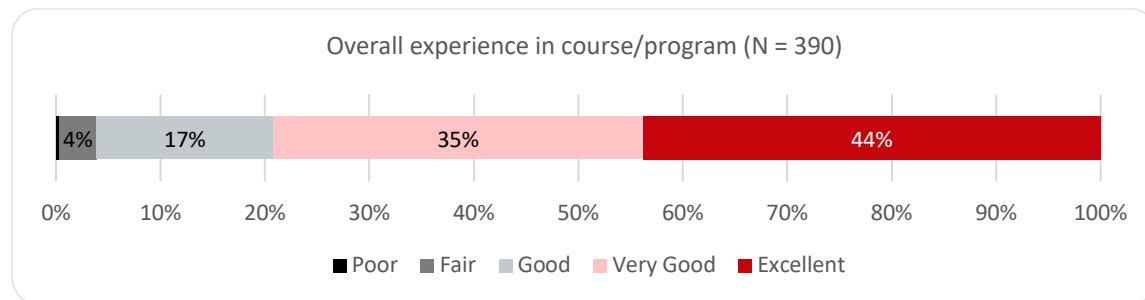
Community Engagement Professional Development: courses and programs that provide public service-learning experiences that build science literacy.

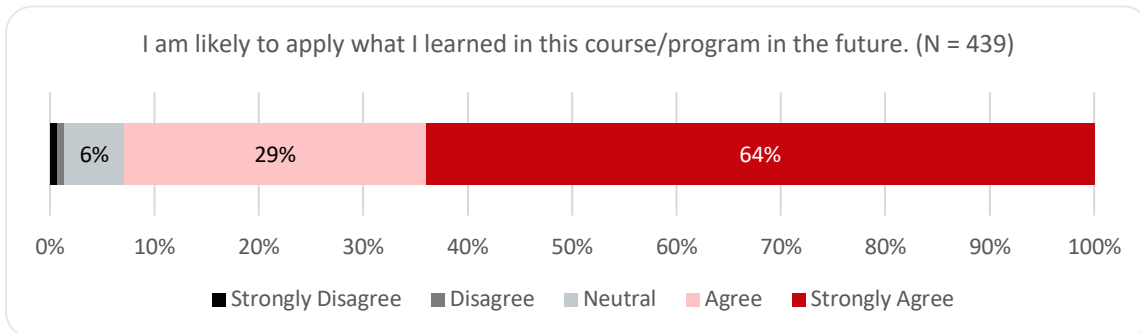
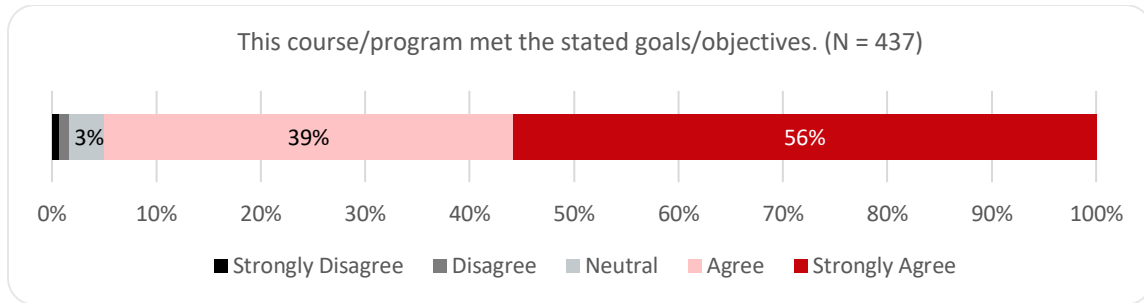
Course/Program Name	WISCIENCE Goals (p.3)	Semesters offered	Instructor(s)	Target Audience	Total Participants
Exploring Service in STEM (INTEGSCI 140)	I, IIa, IIb, IIc, III	Fa	Anna Courtier		15
Service with Youth in STEM (INTEGSCI 240)	I, IIa, IIb, IIc, III, IV	Fa, Sp	Anna Courtier		23
Service with Youth in STEM Practicum (INTEGSCI 341)	I, IIa, IIb, IIc, III, IV	Fa	Anna Courtier		1
After School Science Clubs	I, IIa, IIb, IIc, IIc, III, IV	Fa, Sp	Anna Courtier		291
STEM Public Service Fellows Program			Anna Courtier		
Mentored Practicum in STEM Public Service (INTEGSCI 840)	I, IIa, IIb, IIc, IIc, III	Fa	Anna Courtier		11
Public Service in STEM (INTEGSCI 640)	I, IIa, IIb, IIc, IIc, III	Sp	Anna Courtier		8
Community Relationship and Materials Development in STEM Public Service (INTEGSCI 740)	I, IIa, IIb, IIc, IIc, III	Su	Anna Courtier		7

WISCIENCE Evaluation Summary

WISCIENCE examines the extent to which participants are satisfied with their experiences in courses and programs and the extent to which courses and programs meet the mission and goals of the institute. Multiple sources of data are used in these evaluations.

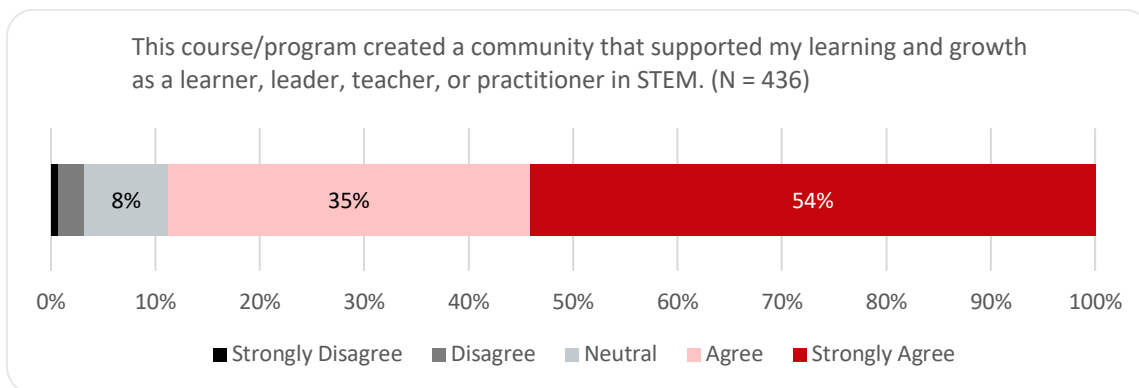
Course & Program Satisfaction, Learning, and Application





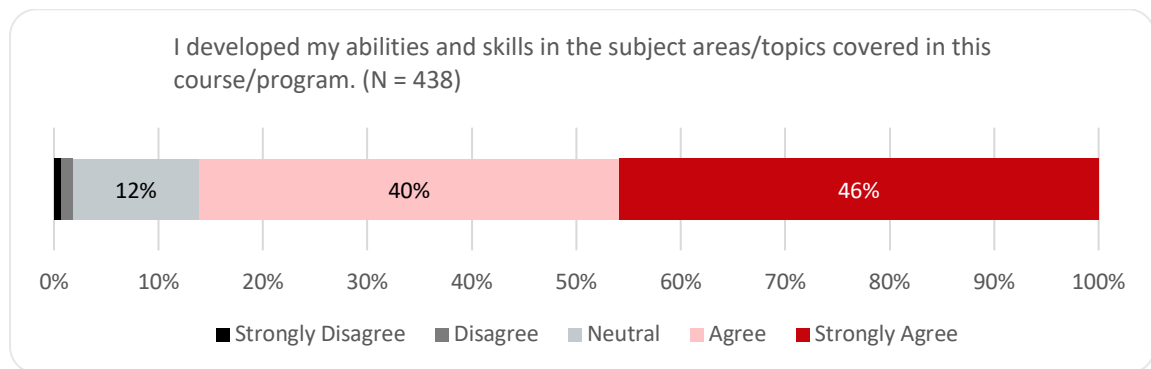
Course & Program WISCIENCE Goal Achievement

Goal I: Build and support communities of STEM learners, leaders, and practitioners.

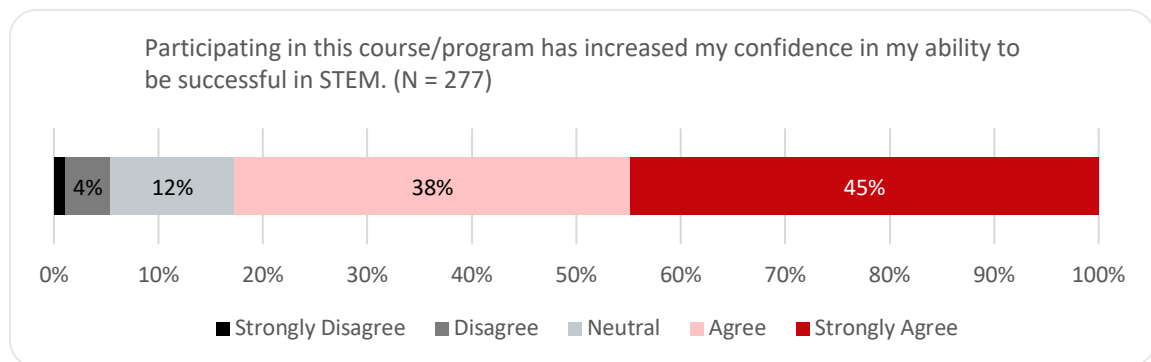
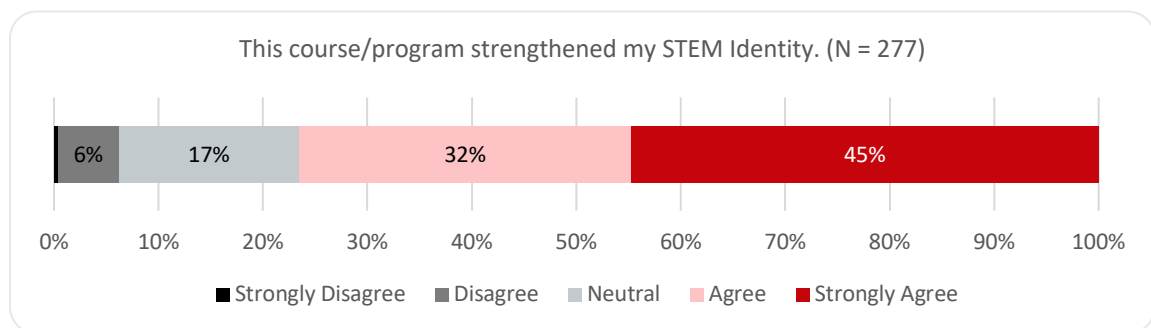


Goal II: Deliver courses and programs that:

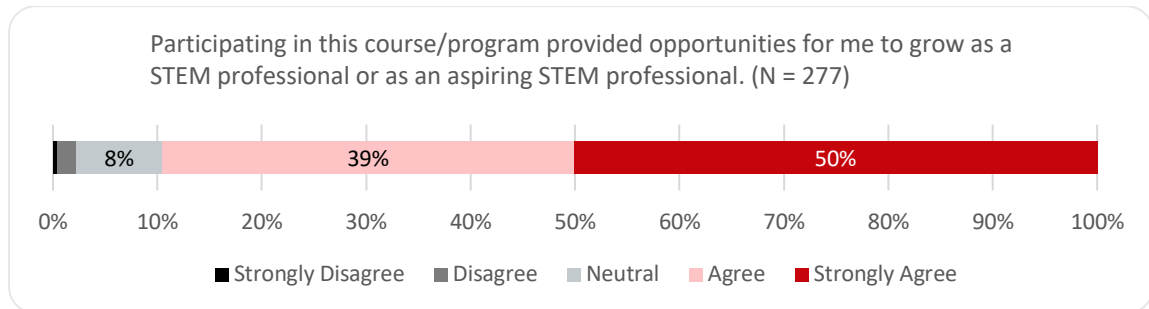
A. Develop knowledge and skills for success in STEM.



B. Build STEM identities and confidence.



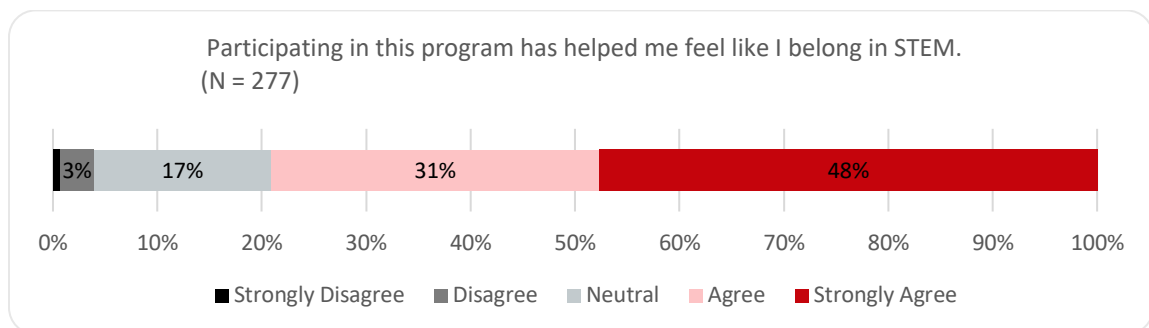
C. Provide professional development in teaching, public service, leadership, and research in STEM.



D. Provide opportunities to engage in teaching, public service, leadership & research in STEM.

- **30** undergraduate students served as Peer Leaders across 6 WISCIENCE courses and programs.
- **8** graduate students completed the Scientific Teaching Fellows Program in Fall 2022, teaching 2 sections of Exploring Biology with 153 undergraduate students.
- **9** graduate students completed the Public Service Fellows Program in Fall 2022, completing practicum projects that engaged 5 community partners. 2 fellows taught 2 WISCIENCE courses, serving 27 undergraduate students.

Goal III: Foster equity and inclusion in STEM through initiatives and programs that support diverse populations.



Goal IV: Lead and collaborate on local and national efforts to improve STEM education by developing and disseminating evidence-based programs, curricula, resources, and other scholarly products.

Publications



5 scholarly products published or in press

1. Byars-Winston, A., Griebel Rogers, J., Thayer-Hart, N., Black, S., Branchaw, J.L., and Pfund, C., A randomized controlled trial of an intervention to increase cultural diversity awareness of research mentors of undergraduate students. *Sci. Adv.* 9, eadf9705(2023). DOI:10.1126/sciadv.adf9705
2. Holzhausen, E. A., Fitz-Henley, J., and Theisen, C. H. (2022). Online Information Literacy: Applying the CRAAP Test to Vaccine (Mis) information. CourseSource 9. <https://doi.org/10.24918/cs.2022.44>
3. Riley A Hess, Olivia A Erickson, Rebecca B Cole, Jared M Isaacs, Silvia Alvarez-Clare, Jonathan Arnold, Allison C Augustus-Wallace, Joseph C Ayoob, Alan Berkowitz, Janet L. Branchaw, Kevin R Burgio, Charles H Cannon, Ruben Michael Ceballos, C. Sarah Cohen, Hilary Collier, Jane Disney, Van A Doze, Margaret J Eggers, Edwin L Ferguson, Jeffrey J. Gray, Jean T Greenberg, Alexander Hoffmann, Danielle Jensen-Ryan, Robert M Kao, Alex C Keene, Johanna Kowalko, Steven A Lopez, Camille Mathis, Mona Minkara, Courtney J Murren, Mary Jo Ondrechen, Patricia Ordoñez, Anne Osano, Elizabeth Padilla-Crespo, Soubantika Palchoudhury, Hong Qin, Juan Ramírez-Lugo, Jennifer Reithel, Colin A Shaw, Amber Smith, Rosemary J Smith, Fern Tsien, and Erin L Dolan (2023) Virtually the same? Evaluating the effectiveness of remote undergraduate research experiences. *Life Sciences Education*. <https://doi.org/10.1187/cbe.22-01-0001>
4. Sancheznieto F, Lucas L, Theisen CH. 2023. Discovery and Invention: A Reflection on Representation in Science. CourseSource 10. <https://doi.org/10.24918/cs.2023.13>
5. Usher, E. L., Butz, A. R., Chen, X.-Y., Ford, C. J., Han, J., Mamaril, N. A., Morris, D. B., Peura, P., & Piercey, R. R. (2023). Supporting self-efficacy development from primary school to the professions: A guide for educators. *Theory Into Practice*, 62(3), 266-278. <https://doi.org/10.1080/00405841.2023.2226559>



14 WISCIENCE staff-led workshops or presentations

Workshops

1. Martínez-Hernández, K. and Branchaw, J.L. Presenter: Optimizing Mentoring Relationships Training Workshop for University of Minnesota – Twin Cities Neuroscience Training Program. Center for the Improvement of Mentored Experiences in Research (CIMER), July 11-12, 2023.
2. Butz, A. R. & Branchaw, J.L. (2023, July). Evaluating Research Training Programs, Courses, and Workshops. Workshop presented at University of Wisconsin Madison for Center for the Improvement of Mentored Experiences in Research, Madison, WI
3. Branchaw, J.L. Presenter: Entering Research for the Humanities and a Curriculum Development Institute for Program Directors. The National Council on Undergraduate Research Conference. Faculty-Administrator Network talk. April 2023.
4. Branchaw, J.L. Facilitator: Research Mentoring Workshop: Trinity University – Johns Hopkins Summer Undergraduate Research Excellence (SURE) Program, August 17, 2022.

Presentations & Invited Talks

1. Santillan, K.A., Branchaw, J.L., and Olimpo, J.T. Presenter: Fostering a Culture of Inclusive and Equitable Mentoring in Course-based Undergraduate Research Experiences (CUREs). Society for the Advancement of Biology Education Research Annual Meeting Workshop, July 20, 2023.
2. Branchaw, J.L. Presenter: Integrating and Evaluating Faculty Work Through the Lens of Disciplinary Stewardship. Xavier University, June 23, 2023.
3. Branchaw, J.L., Butz, A., and Mirus, K. Presenter: Using Idea Flow Theory to Understand Levers for Change in 2- to 4-year STEM Transfer Between Wisconsin Public Institutions. Accelerating Systemic Change Network (ASCN) Transforming Institutions Conference, June 13, 2023.
4. Schnoes, A., Nguyen, T., Veguilla, R., Butz, A. R., Behrman, S., Goodwin, S., & Branchaw, J.L. (2023, June). *Building Your Research Community: a New*

- Online Course on Mentoring Relationships that Addresses Hidden Curriculum.* 8-Minute talk presented at 2023 Graduate Career Consortium Annual Conference hosted by the Graduate Career Consortium, Indianapolis, IN.
5. Branchaw, J.L. Presenter: The Art and Science of Welcoming and Establishing Lasting Mentoring Relationships with Summer Research Trainees. Mass General Brigham McLean and Harvard Medical School Teaching Hospital seminar. May 2023.
 6. Theisen, C.H. 2023, Teaching Scientifically: Research, Strategies, Careers. Invited Presentation for the Graduate Seminar of the Kinesiology Department; University of Wisconsin-Madison.
 7. Theisen, C.H. & Saichaie, K. 2023. POD Network Conversation Series: Approaches to Graduate Student Instructor Development and Preparation, Special Issue of New Directions for Teaching and Learning. Online seminar, invited.
 8. Branchaw, J.L. Presenter: A Programmatic Approach to Mentoring Early Career Clinical and Translational Researchers. Advancing the Science of Effective Mentorship Conference. April 2023.
 9. Branchaw, J.L., Mirus, K., Theisen, C., and Butz, A. Innovation Session: Connect, Reflect, Learn: A framework to unite and guide professionals working to advance 2- to 4-year STEM transfer students across public higher education systems in Wisconsin. AAC&U Transforming STEM Higher Education Conference: Back to Broken, November 5, 2022.
 10. Branchaw, J.L. Presenter: The Critical Role of Mentoring in Doctoral Education. AAU Association of Graduate Schools (AGS) Graduate School Deans Annual Meeting Panel on Mentoring, September 19, 2022.

WISCIENCE Funding

1 grant submitted

- National Science Foundation (1 proposal submitted)

1 grant awarded

Funding Agency	Project Title	Principal Investigator	Funding Amount	Funding Period
Genentech	Genentech Foundation Summer Research Scholars	Amber Smith	\$45,113	4/1/2022–3/31/2023

6 continuing grants

Funding Agency	Project Title	Principal Investigator	Funding Amount	Funding Period
Howard Hughes Medical Institute	Beyond Access to Success: Creating Flexible Pathways to STEM Degrees for Transfer Students in the UW-System	Janet Branchaw, PhD	\$1,010,000	09/01/2018–08/31/2023
National Institutes of Health	Collaborative Project with iBiology: Online Courses for Navigating Research Mentoring Relationships	Janet Branchaw, PhD Amanda Butz, PhD (Co-I)	\$932,720	08/01/2020–07/31/2025
National Science Foundation Research Experience for Undergraduates	REU Site: Biological Interactions from Molecules to Ecosystems-Phenotype, Genotype, and Environment	Amber Smith, PhD	\$323,946	02/01/2021–01/30/2023

HHMI Inclusive Excellence Project

WISCIENCE was awarded a 5-year, \$1,000,000 Howard Hughes Medical Institute Inclusive Excellence grant in 2019. The project “Beyond Access to Success in Wisconsin: Creating Flexible Pathways to STEM Degrees for 2- to 4-Year Transfer Students” focused on building a comprehensive 2- to 4-year transfer model program and implementing policy changes to transform the way Wisconsin public institutions support STEM transfer students.

2022–23 marked the end of the initial 5-year funding period for the HHMI Inclusive Excellence grant. Through this project, we sought to increase the number and diversity of students in the state of Wisconsin who graduate with STEM B.S. degrees. The primary strategies we used to achieve our goal of increasing the success of STEM transfer students were to: 1) provide professional development for faculty, staff and

peer leaders across 2- and 4-year institutions to increase their support of transfer students; 2) provide professional development directly to transfer students from the start of their 2-year college experience through to graduation from their 4-year institution; and 3) identify structural barriers to successful transfer and change policies at the state and institutional levels to remove those barriers.

Despite several challenges, including institutional and system level re-organizations, dysfunctional inter-institutional relationships, COVID restrictions, and inconsistent credit transfer between institutions, our work resulted in several significant positive outcomes:

- We established collaborations with the 5 WTCS institutions offering Liberal Arts Transfer programs at the beginning of the grant period. Since then, all 16 WTCS institutions have permission to offer LAT programs, so we have expanded to partner with all of them.
- We developed a framework with shared goals to align and guide work across all the partnerships that articulated shared values to address common biases and misconceptions revealed about transfer students.
- We designed and implemented system-wide transfer pathways identifying the transferable courses needed for 6 STEM majors at each WTCS and UW System institution. The UW System has adopted and branded the STEM course pathways as the “Wisconsin STEM Passport” program and they presented the program to the Board of Regents for review and approval.
- We developed a prototype data dashboard to track metrics of success for students who transfer from WTCS to UW System institutions.
- We created professional development materials for transfer faculty, staff, advisors, and students including case studies and activities to raise awareness of the challenges that transfer students face, as well as just-in-time activities and workshops to support transfer students.
- We collaborated with the UW System and WTCS Administrative Offices to host the first Wisconsin Transfer Conference in May 2023 to bring people from all UW System and WTCS institutions together. The UW System and WTCS are continuing to collaborate on organizing and hosting the WI Transfer Conference moving forward.

List of WISCIENCE Partners, 2022–2023

BioCommons Event Sponsors & Co-Sponsors

Association of Women in Agriculture (AWA)
Bioscience Advising Team (BAT)
CALS Academic Affairs/Career Services
CALS Health & Research Society (CHARS)
CALS Student Association
Center for Educational Opportunity (CeO)
Delta Program
Division for Teaching and Learning (DTL)
Division of Diversity, Equity, and Educational Achievement (DDEEA)
Global Health Undergraduate Programs
Greater University Tutoring Service (GUTS)
L&S Career Services
Landscape Architecture (L&S)
Life Sciences Communication
Madison Metropolitan School District
Minorities in Agriculture, Natural Resources and Related Sciences, UW–Madison Chapter (MANRRS)
National Society of Collegiate Scholars (NSCS)
Precollege Enrichment Opportunity Program for Learning Excellence (PEOPLE)
Physics
Plant Pathology
Science & Medicine Graduate Research Scholars (SciMed GRS)
Undergraduate Chemistry Student Association (UCSA)
Post-Baccalaureate Research Education Program (UW–Madison PREP)
WISCIENCE
Wisconsin Alumni Research Foundation (WARF)

Departments & Units Using Integrated Science Subject Listing

Delta Program
Department of Kinesiology
Adult Career and Special Student Services (299 HS Sections)

Partners in Community-Based Learning

After School Science Club Sites

Allied Learning Center
Allis Elementary School
Anana Elementary School
Bayview Foundation
Boys and Girls Club
East Madison Community Center
East Madison YMCA
Hawthorne Elementary School
Kennedy Heights Community Center
Lake View Elementary School
Leopold Elementary School
Lincoln Elementary School
Lindbergh Elementary School
Lowell Elementary After School

Lussier Community Education Center
Meadowood Neighborhood Center
Neighborhood House Community Center
Orchard Ridge Elementary School
Sandburg Elementary School

Public Service Fellows Practicum Sites

Goodman South Madison Public Library
UW–Madison, WISCIENCE
Wisconsin Department of Natural Resources
Wisconsin's Green Fire
Wisconsin Initiative on Climate Change Impacts (WICCI)
Wisconsin Legislative Council

UW–Madison Partnerships

Ongoing Campus Partnerships

CALS QuickStart
Center for the Improvement of Mentored Experiences in Research (CIMER)
Division of Diversity, Equity and Educational Achievement (DDEEA)
Division for Teaching and Learning (DTL)
First-Year Interest Groups (FIGs) Program
Forest and Wildlife Ecology
Post-Baccalaureate Research Education Program (UW–Madison PREP)
Precollege Enrichment Opportunity Program for Learning Excellence (PEOPLE)
Science Alliance
Steenbock Library
Summer Collegiate Experience (SCE)
Wisconsin Collaboratory for Enhanced Learning (WisCEL)

Department Partners for Research Mentor/Mentee Training Workshops

Botany
Cellular and Molecular Biology
Microbiology Doctoral Training Program
Nutritional Sciences
T32 Training grant programs
KinEqT Mentorship Program

Partners for Externally Funded Initiatives

HHMI: Beyond Access to Success Project

WTCS Collaborations:
WTCS Administration
Chippewa Valley Technical College
Madison College
Milwaukee Area Technical College
Nicolet College
Western Technical College
UW System Collaborations:
UW System Administration
UW–Eau Claire

UW–LaCrosse
UW–Milwaukee
UW–Platteville
UW–Stevens Point
UW–Stout
UW–Whitewater
Transfer Transition Program (UW–Madison)
Office of Academic and Career Success (UW–Madison)
Madison Teaching and Learning Excellence
(MTLE UW–Madison)

NIH: Online Courses for Navigating Research Mentoring Relationships

iBiology

Summer Research Program

Departments Hosting Students

Bacteriology
Biochemistry
Botany
Cell and Regenerative Biology
Dermatology
Entomology
Forest & Wildlife Ecology
Genetics
Horticulture
Medical Genetics
Medical Microbiology
Neurology
Neuroscience
Oncology
Pathobiological Sciences
Pharmacy
Plant Pathology
Tiny Earth

Funding Partners for Summer Research Program

College of Agricultural and Life Sciences (CALS)
Faculty Supplement Funding
 Botany (David Baum)
 Oncology (Nathan Scherer)
Genentech
Genetics (UW–Madison)
Graduate School (UW–Madison)
Great Lakes Bioenergy Research Center (GLBRC)
Horticulture (UW–Madison)
Howard University
National Science Foundation (NSF)
Neuroscience Training Program (UW–Madison)
Plant Pathology (UW–Madison)
Tiny Earth (UW–Madison)
Texas Southern University Summer Undergraduate
 Research Experience (SURE)

WISCIENCE Connections & Collaborations: Sharing expertise & resources to catalyze excellence in STEM education at UW–Madison & beyond

We partner with Steenbock Library to manage the BioCommons, a space where STEM students, departments, and programs can gather and host events.

100 Events at the BioCommons

40 Events co-sponsored by WISCIENCE

34 Campus units and community organizations hosted events

We provide instructors access to the Integrated Science (INTEGSCI) subject listing to offer courses designed for STEM students broadly.

12 Sections of Research Mentor Training (INTEGSCI 660) offered by Delta

28 Sections of Independent Study (INTEGSCI 299) offered for summer high school research credit by various faculty across campus

1 Section of Instructional Methods Design for College Science Teaching (INTEGSCI 750) offered by the Department of Kinesiology

2 Sections of Mentored Practicum in College Science Teaching (INTEGSCI 850) offered by the Department of Kinesiology

We provide expertise, consulting, and resources in STEM education to support UW-Madison departments and units that provide high impact learning experiences, including:

Offering introductory courses and programs for current and prospective STEM students in partnership with:

- Division of Diversity, Equity, and Educational Achievement (DDEEA)
- FIG Program
- Summer Collegiate Experience
- CALS Quickstart
- Precollege Enrichment Opportunity Program of Learning Excellence (PEOPLE)

Sponsoring the BioHouse Learning Community, supporting the program manager and offering two Integrated Science courses to their scholars.

We build partnerships with community organizations and create opportunities for STEM students to engage in community-based learning, especially through Public Service Fellows and Service with Youth in STEM (INTEGSCI 240).

6 Practicum sites served by Public Service Fellows

291 K-6 students served by Service with Youth in STEM undergrads

24 After-school clubs offered at

19 Schools and community centers

We develop and provide evidence-based curricula and resources to STEM educators on and beyond campus.

2 Entering Research Curriculum Development Institutes offered in partnership with CIMER and the Graduate School

38 Facilitators trained in Entering Research

1 Entering Mentoring Facilitator Training offered by WISCIENCE

15 Facilitators trained in Entering Mentoring

1 Evaluating Research Training Programs workshop offered in partnership with CIMER

14 Individuals trained in program evaluation

We secure external funding to improve STEM education at UW–Madison and beyond, including:

- Partnering with Universities of Wisconsin and Wisconsin Technical College Systems to improve transfer experiences and outcomes across the state (HHMI Inclusive Excellence)
- Hosting a summer research opportunity program for students from underserved populations from across the United States (NSF-REU, Genentech, Faculty Supplement Grants, Departmental Funds)
- Partnering with iBiology to offer online courses supporting research trainee development with support from a grant from the National Institutes of Health (NIH-IPERT)