



LSMCE

Louis Stokes Midwest
CENTER OF EXCELLENCE

IMPACT REPORT

2012-2018

Supported by the National Science Foundation award HRD 1202563 (2012-2018)





The Louis Stokes Midwest Center of Excellence (LSMCE) is supported by the National Science Foundation award #1202563.

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TABLE OF CONTENTS

Executive Summary.....	2-3
Project Overview.....	4-5
Partner Schools.....	6-7
Partner Spotlights.....	8-13
Annual Conference.....	14-17
Information Dissemination.....	18-19
Outcomes.....	20-21

Special Thank You

Thank you to Dr. Sukey Blanc and her evaluation team at Creative Research & Evaluation (CR&E). Much of the information provided in this report is a direct contribution of CRE's assessment and evaluation of the LSMCE pilot project. To read the complete report and recommendations, download the [Final Pilot Project Evaluation Report](#).

Thank you to the NSF HRD Directorates for your constant guidance and support of our project and project activities.

Thank you to the dedicated and passionate LSMCE Partner Faculty Champions for the generosity of your time and effort, as well as, for your continued engagement in the Center activities and mentorship of our future STEM leaders.

Thank you to the LSAMP Alliance leaders and program administrators for your contributions of knowledge and expertise to the LSMCE conferences, webinars and workshops, as well as, those individuals and alliances who have directly provided support and resources for the LSMCE partner schools. al Conference and providing guidance to the LSMCE partner schools.

EXECUTIVE SUMMARY

Louis Stokes Midwest Center of Excellence

The Louis Stokes Midwest Center of Excellence (LSMCE) was created in 2012 to communicate evidence-based program effectiveness garnered from the Louis Stokes Alliances for Minority Participation (LSAMP) consortium to a broader audience.

GOAL

The goal of LSMCE is to serve as a national hub of information for scholars to access data, models, and funding opportunities in broadening the participation of underrepresented minority (URM) students in Science, Technology, Engineering, and Mathematics (STEM). The Center is comprised of two lead institutions: Chicago State University, Indiana University-Purdue University Indianapolis and Argonne National Laboratory.

OUR PARTNERS

LSMCE has recruited twenty-eight institutional partners that are located in six states of the Midwest and shared commitment to increase diversity in STEM. Each partner signed a Memo of Understanding (MOU) which outlined the overall goals of the partnership. The selected institutions have a high percentage of enrolled minority students with a lower graduation rate relative to the non-minority population.

PROJECT LEADERSHIP

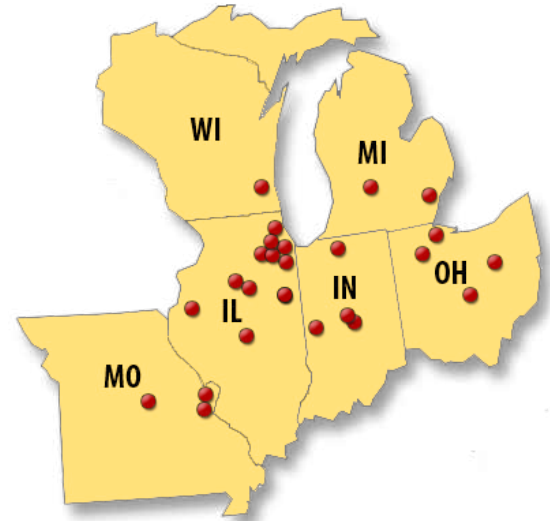
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28 Non-LSAMP Partner Schools



School	Location
Benedictine University	Lisle, Illinois
Bowling Green State University	Bowling Green, Ohio
Bradley University	Peoria, Illinois
Denison University	Granville, Ohio
Dominican University	River Forest, Illinois
Eastern Illinois University	Charleston, Illinois
Eastern Michigan University	Ypsilanti, Michigan
Harris-Stowe State University	St. Louis, Missouri
Illinois Wesleyan University	Bloomington, Illinois
Indiana State University	Terre Haute, Indiana
Lincoln University	Jefferson City, Missouri
Loyola University Chicago	Chicago, Illinois
Marian University	Indianapolis, Indiana
Marquette University	Milwaukee, Wisconsin
Northern Illinois University	DeKalb, Illinois
Ohio Dominican University	Columbus, Ohio
Roosevelt University	Chicago, Illinois
Rose-Hulman Institute of Technology	Terre Haute, Indiana
Triton College	River Grove, Illinois
University of Akron	Akron, Ohio
University of Detroit Mercy	Detroit, Michigan
University of Illinois - Springfield	Springfield, Illinois
University of Indianapolis	Indianapolis, Indiana
University of Missouri - St. Louis	St. Louis, Missouri
University of Toledo	Toledo, Ohio
Valparaiso University	Valparaiso, Indiana
Waubonsee Community College	Sugar Grove, Illinois
Western Illinois University	Macomb, Illinois

CONNECT!

<http://lsmce.org>

@LSMCEConference



CONTACT!

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SUBSCRIBE

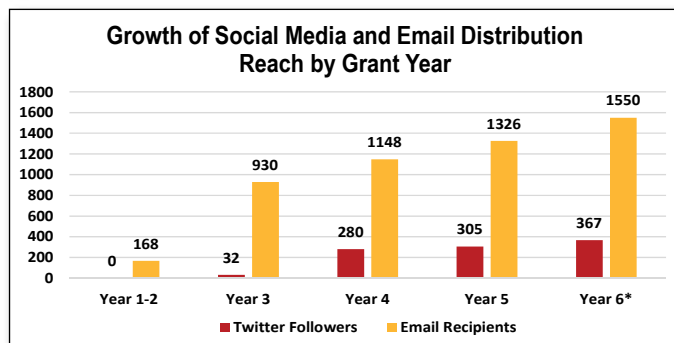
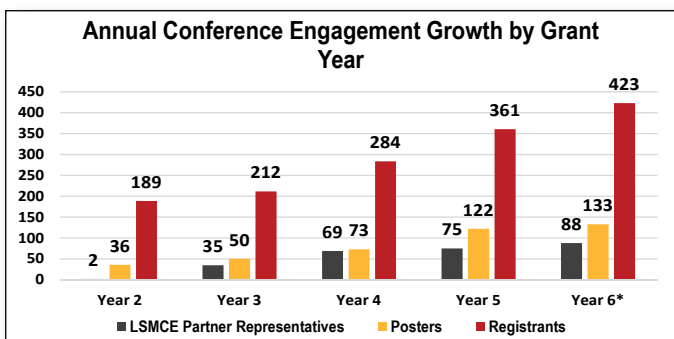


CENTER OUTCOMES

1. Annual conferences provide LSMCE partners and the LSAMP communities an opportunity to network, share program operational models, celebrate students, and be a platform for student researchers to present current research in a supportive environment.
2. LSMCE information hub disseminates best practices in broadening participation, STEM teaching, program development and networked resources for the LSMCE and LSAMP community.
3. Faculty engagement in broadening participation efforts by seeking financial support for creating high impact programs that aim to promote STEM student success across institutions.
4. Online webinars and student workshops focus on developing and supporting the growth of student professional skills.
5. Key industry partnerships provide student internship opportunities and support LSMCE initiatives and student awards.

OUTREACH & ENGAGEMENT GROWTH

The LSMCE annual conference grew in attendance, engagement and impact with increases in the number of presenters, student poster presenters, and distribution of LSAMP and non-LSAMP attendees.



Images top right to bottom left: 1) Faculty Workshops; 2) Student Poster Session; 3) Bridge to the Doctorate Fellows (Drs. Geovannie Ojeda Torres and Shalina Taylor) present at the LSMCE Conference; 4) LSMCE Website; 5) Annual Conference Engagement Graph; 6) Growth of Social Media and Outreach

94% of non-student attendees rate the conference as Excellent or Good ***

*** Year 6 No-cost Extension**

Networking is rated as the highest valued conference activity by both faculty and students ***

EVALUATION FINDINGS**

“LSMCE provides a viable dissemination strategy to address a widespread demand for information, resources, and networks to ameliorate the drastic underrepresentation of URM students in the STEM fields in higher education.”

“The LSMCE Annual Conferences have successfully promoted collaboration and information sharing among faculty, staff, administrators and students for LSAMP alliances and numerous institutions that are new to the LSAMP network.”

** Excerpts from the 2016 LSMCE Center Evaluation Report prepared by Creative Research & Evaluation
 *** 2017 Conference Evaluation Report prepared by Creative Research & Evaluation

“Pilot Regional Louis Stokes Center: Midwest Center of Excellence,” is funded by the National Science Foundation grant number HRD-1202563 (BD 2012-2018)



PROJECT OVERVIEW

The Louis Stokes Midwest Center of Excellence (LSMCE) was created in 2012 to communicate best practices, tools, and information garnered from the Louis Stokes Alliances for Minority Participation (LSAMP) consortium to a broader audience.

LSMCE serves as a national hub of information for scholars to access data, models, and funding opportunities in broadening participation of underrepresented minority (URM) students in Science, Technology, Engineering, and Math (STEM).

Additionally, the Center assists 28 Midwestern non-LSAMP schools with developing strategies to improve their URM students' performance, persistence and success in STEM degree programs and provide opportunities for their faculty and students to participate in STEM scholarly activities including workshops/conferences, webinars and research internships.

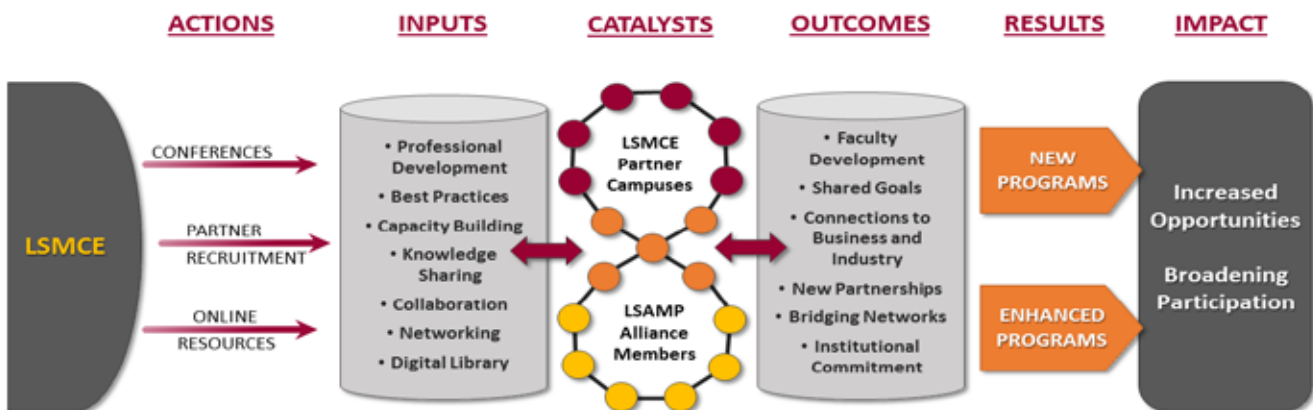
What Is The Purpose Of The LSMCE?

The Center activities are concentrated in the areas of partnership building, information dissemination and outreach. Its goal is to strengthen the recruitment and retention of underrepresented minorities (URM) students through mentoring and providing support to ease the transitional challenges at critical educational junctures.

It also aims to help URM students move forward to degree completion and career advancement in science, technology, engineering and mathematics (STEM)

LSMCE Schema

The figure below illustrates how LSMCE produces outcomes through the Center activities.



Supported by the National Science Foundation award HRD 1202563 (2012-2018)

fields. This is done in three ways.

Center Objectives

1. LSMCE takes a leadership role to articulate the national critical need for broadening minority participation and success in STEM undergraduate programs.
2. LSMCE develops an information hub that provides consistent on-line resources and sustained opportunities to show case best practices in STEM teaching/learning and to support URM students' persistence and engagement through research and internship experiences.
3. LSMCE establishes a cyber portal, cLSMCE hub, to disseminate information and create networks of support for non-LSAMP students on the 28 partner campuses in the Midwest.

Key Center Activities

Partner Support

The Center partners with twenty-eight higher education institutions in the Midwest with a shared priority to broaden the participation of underrepresented minority (URM) students in STEM. LSMCE works with institutional leaders and STEM faculty in develop-

ing strategies tailored to their individual institutional needs and goals. The Center also serves as a resource and support entity for our partners by connecting the partners with experts to address specific problems, providing guidance and review of funding proposals, and providing professional development opportunities through workshops, webinars and travel to the annual conference.

Conferences and Workshops

The Center hosts an annual conference that brings together faculty, administrators and students from higher education institutions.

Online Information Hub and Dissemination

The Center uses several strategies to disseminate information, resources, and opportunities to the LSMCE community. These strategies include the LSMCE.org website, the on-demand online learning library, social media, and the bi-weekly e-newsletter.

LSMCE Leadership Team

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Who Are The Lead Institutions In The LSMCE?

Chicago State University (CSU). CSU has served as the lead institution for the Illinois LSAMP program since 1993. The Alliance is currently composed of eight comprehensive universities, one senior institution, five community colleges and one federal laboratory.

Indiana University - Purdue University Indianapolis (IUPUI). IUPUI has been an active partner institution of LSAMP Indiana since 2002. LSAMP Indiana is an alliance of eight Indiana universities that are well situated in the state's chief population centers.

Argonne National Laboratory (ANL). ANL is one of the U.S. Department of Energy's oldest and largest national laboratories for science and engineering research, and has hosted 165 Illinois LSAMP faculty and students at its facility in Argonne, IL, over the past 10 years.

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OUR PARTNER SCHOOLS

One of the three main objectives of the Center is to create networks of support for non-Isamp students at schools in the Midwest. To achieve this, the Louis Stokes Midwest Center of Excellence (LSMCE) has partnered with twenty-eight higher education college and universities in a joint mission to broaden the participation of underrepresented minority (URM) students.

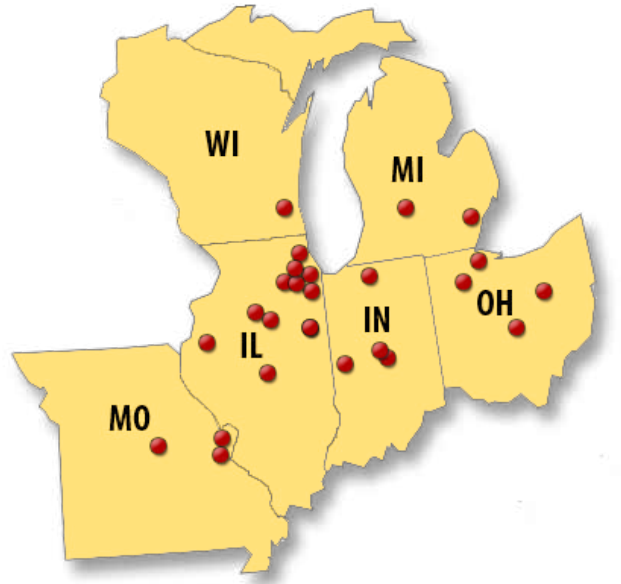
Goal of the Partnerships

The Center serves as a resource and support entity that works with partner schools to identify strategies to broaden the participation of URM students in STEM on their campus. The Center matches the partner school's needs for STEM programming with resources, networks, and expertise. These connections are what make the LSMCE network so powerful and impactful.

Partnership Development

In 2013, Marian University in Indianapolis, Indiana, joined as the first partner institution. By year three of the project, the LSMCE partner community grew to fifteen partners across four states. Today, the LSMCE partner community has grown to twenty-eight members strong.

The LSMCE leadership team recruited the partners by identifying and vetting target institutions based on their high rates of minority enrollment and low rates of minority graduation. Leadership from LSMCE met with provosts, presidents, deans, chairs, and directors of key departments such as diversity/inclusion and student affairs. These meetings provide an opportunity for the leadership team to meet staff, students, and faculty at each partner site; learn about the strengths and programming in STEM and



School	Location
Benedictine University	Lisle, Illinois
Bowling Green State University	Bowling Green, Ohio
Bradley University	Peoria, Illinois
Denison University	Granville, Ohio
Dominican University	River Forest, Illinois
Eastern Illinois University	Charleston, Illinois
Eastern Michigan University	Ypsilanti, Michigan
Harris-Stowe State University	St. Louis, Missouri
Illinois Wesleyan University	Bloomington, Illinois
Indiana State University	Terre Haute, Indiana
Lincoln University	Jefferson City, Missouri
Loyola University Chicago	Chicago, Illinois
Marian University	Indianapolis, Indiana
Marquette University	Milwaukee, Wisconsin
Northern Illinois University	DeKalb, Illinois
Ohio Dominican University	Columbus, Ohio
Roosevelt University	Chicago, Illinois
Rose-Hulman Institute of Technology	Terre Haute, Indiana
Triton College	River Grove, Illinois
University of Akron	Akron, Ohio
University of Detroit Mercy	Detroit, Michigan
University of Illinois - Springfield	Springfield, Illinois
University of Indianapolis	Indianapolis, Indiana
University of Missouri - St. Louis	St. Louis, Missouri
University of Toledo	Toledo, Ohio
Valparaiso University	Valparaiso, Indiana
Waubonsee Community College	Sugar Grove, Illinois
Western Illinois University	Macomb, Illinois



2016 LSMCE Partner Meeting



2015 LSMCE Partner Meeting

“At the university, the conversation is kept alive about minority participation. We have a lot of faculty on campus who have really good intentions. But something else always takes priority. For me personally and for the university, it’s the contacts and the ideas of LSMCE that are worthwhile.

We’re part of a group talking about a new LSAMP proposal that wouldn’t be happening without LSMCE.” - LSMCE Partner Faculty response in final evaluation interview

diversity efforts; explore the needs and goals of the partner; and begin identifying how Center resources, networks, and expertise might be relevant to a new partnership. In many instances, the initial meeting with LSMCE is the first time that representatives from different academic departments, STEM schools, student support services, and diversity initiatives were in the same room together.

Each partner institution signs a Memo of Understanding which outlines the shared goals of the partnership. Within the agreement, partners institutions identify one or two faculty champions to serve as the point person and responsible individual for disseminating opportunities and information on the campus.



Eastern Illinois University provost Dr. Blair Lord signing the MOU with LSMCE co-PI Dr. Kim Nguyen

Partnership Benefits

The Center connects faculty and administrators with professionals who have expertise that they can learn from. The Center acts as a connector between 4-year institutions and 2-year institutions and cultivates proposal collaborations among partners for external funding.

The Center provides our partners information on available external funding that match their institution’s goals and readiness. The leadership provides one-on-one support during proposal development in the form of guidance, proposal review, and letters of support.

The Center offers students at our partner schools professional development opportunities in the form of webinars and in-person workshops. Students also receive information on internship, scholarship, and job opportunities.

Partners also receive travel assistance for professional training by way of attending our annual conferences.

Impacts

As reported in the LSMCE external project evaluation, 17 out of 28 partners report new programs, increased capacity, plans for new programs or collaboration, and/or past programs and collaborations that grew out of LSMCE involvement. Examples of these impacts are included in the Partner Spotlight pages that follow.

17 out of 28 partner schools report new programs, increased capacity, plans for new programs or collaborations that grew out of LSMCE involvement.



PARTNER SPOTLIGHT: The University of Toledo

In 2015, the University of Toledo started a multicultural summer bridge program for 25 students in STEM and social sciences. This bridge program has demonstrated positive academic impact and still remains in place. This program had been on the drawing board for a number of years, but the two African-American faculty members proposing it felt that the administration had been lagging about implementing its stated goals around diversity.

After attending the first LSMCE conference, Dr. Anthony Quinn returned to his campus with new energy and commitment.

“Things moved rather quickly, as far as putting this program together. But I can step back and say in reality, this is a program that has been coming together in some form or shape for the last three years, as a grassroots effort. ... Attending the conference allowed me to come back to my home institution to say: ‘These are the things that we need to do; other institutions are doing it and if we don’t do it, we’re going to be behind.’” - Tony Quinn, Ph.D., the late, great LSMCE faculty champion at The University of Toledo



THE UNIVERSITY OF
TOLEDO
1872

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The late Anthony Quinn, Ph.D.,
LSMCE faculty champion at
The University of Toledo

Dr. Quinn was also exploring a number of other collaborations with LSMCE partners, such as pipeline programs for University of Toledo’s graduate schools and developing a math center similar to the one at IUPUI. Tragically, Dr. Quinn passed away before these were realized.

Pictured left: LSMCE Leaders Drs. **Chris Botanga, Kim Nguyen, and LeRoy Jones** pose with fourth place poster winner in 2016, **La’Neese Lovings**.

PARTNER SPOTLIGHT: Lincoln University

Ms. Donna Stallings is the force behind the STEM program initiatives at Lincoln University. She actively seeks opportunities for her students and mentors them through the process, whether it be an internship application, a GEM fellowship application, or preparing for a research presentation. The Lincoln program is thriving and has produced student poster presentations at national conferences, student research internships, and partnership with corporations for private funding of STEM internships. Other impacts of the program have included a Woodrow Wilson Fellow, as well as, the collaboration with Harris-Stowe State University and the University of Missouri - St. Louis to form the Missouri LSAMP Alliance (MoLSAMP).



<http://lincolnu.edu>
820 Chestnut Street
Jefferson City, MO 65101

"As excited as I already was about STEM, there was a point where I started to get discouraged. I wondered if there was anyone else out there who was as passionate... wants to do more...and coming to that first conference...that was invaluable." - Donna Stalling, LSMCE faculty champion at Lincoln University and co-PI of the MoLSAMP



Pictured above: Students from Lincoln University at the 2017 Emerging Researchers National Conference in STEM in Washington, DC. **Mr. Therrick Anderson** (pictured second to right) earned top honors. He was awarded first place in the undergraduate computer science category for his post on "Musical Instrument Classification Utilizing a Neutral Network."

Pictured left: Students from Lincoln visit the Jefferson City Scholastic Inc. facility to learn about different STEM careers.

PARTNER SPOTLIGHT:

Western Illinois University

For Dr. Andrea Porrás-Alfaro, the campus coordinator for Western Illinois University, the most important contributions of LSMCE is the wealth of ideas that it provides. Dr. Porrás-Alfaro shared that directly following her first LSMCE Conference in 2013, she began sketching out a new undergraduate research and mentoring program for her campus, based on the key elements of academic, social, and professional integration that characterize the LSAMP model.

Every year Western Illinois University brings a large contingent of faculty and students, and by 2018, the undergraduate science research program has become well-established. In addition to supporting student success, she said this initiative catalyzes other campus changes:



**Andrea Porrás-Alfaro, Ph.D.,
LSMCE faculty champion at
Western Illinois University**

The most important thing was that the undergrad research program created a community on campus. Before, we didn't talk to each other. Now, physics, chemistry, biology – we are all doing RISE, and we work together.

Major Outcomes as Result of LSMCE Partnership

- Major financial contributions by alumni to support undergraduate student research
- WIU's first Natural Science Research Symposium, with the participation of four science departments and the presentation of more than 100 posters and oral presentations
- A new initiative to open opportunities for high school students to do research with faculty
- A new class in Biology to allow them to earn college credit and we received additional funding (\$15,000 grant supplement) from the National Science Foundation to support three high school female students from rural areas
- The purchase of a new electron microscope for WIU. The new state-of-the-art equipment of more than \$300,000 will support a larger number of students with unique research experiences
- At least 12 students continuing from undergraduate research into Ph.D. graduate programs in biology, chemistry, physics, and environmental science
- Multiple publications coauthored and awards received by undergraduate student researchers

Supported by the National Science Foundation award HRD 1202563 (2012-2018)



**WESTERN
ILLINOIS
UNIVERSITY**

**<http://wiu.edu>
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Macomb, IL 61455**



**Pictured above: Sylvester
Amoah and Dr. Janet Antwi.**

Sylvester Amoah from Western Illinois University won first place in the 2017 poster session, Master's division. **Dr. Janet Antwi** is the LSMCE faculty champion at Ohio Dominican University.

PARTNER SPOTLIGHT: Dominican University

Dr. Christopher Anderson from Dominican University highlighted how members of the LSMCE leadership team assisted him with grant development and networking. He explained,

My university doesn't have a strong history of external grant involvement. Since joining and getting involved with LSMCE, this has really changed. We brought together a lot of different institutions for [an LSAMP alliance] planning grant, and it's been great to have LSMCE serving as a resource for that. I've gained a lot from seeing how NSF works and meeting the leadership team. The whole leadership team is great.



<http://dominican.edu>
7900 West Division Street
River Forest, IL 60305



**Chris Anderson, Ph.D.,
LSMCE faculty champion at
Dominican University**

PARTNER SPOTLIGHT: Benedictine University

Dean Robin Rylaarsdam, Ph.D., (pictured right) from Benedictine University will be spending her sabbatical at Argonne National Lab, located outside Chicago. Argonne will be her base institution to help develop a strategy around supporting underrepresented minorities in STEM.

She will spend half a year in Argonne learning about available resources, connecting with experts, and studying what it looks like to systematically support URM students in STEM. This collaboration arose from an initial recruitment meeting that Argonne and Chicago State University had with Benedictine.



**Benedictine
University**

<http://ben.edu>
5700 College Road
Lisle, IL 60532



PARTNER COLLABORATION SPOTLIGHT: MoLSAMP Alliance

Harris-Stowe State University facilitated a partnership with two other LSMCE Partners, Lincoln University and the University of Missouri-St. Louis, to form the Missouri LSAMP Alliance (MoLSAMP). LSMCE coordinators from Lincoln and UMSL report that the statewide network of LSAMP provides their students with new opportunities. In addition, this is a needed infusion of resources that occurred at the same time that state funding for higher education was cut.



LSMCE Partner Schools

Thank you to all the individuals at our partner schools. We deeply appreciate your passion, dedication and mentorship of the future leaders in STEM.





ANNUAL CONFERENCE

The Center has hosted five annual conferences in years 2013-2017. The conference activities are designed to underscore NSF's commitment to broadening participation (BP) and increasing institutional programming effectiveness.

The LSMCE multi-track conference includes presentations and discussions of evidence-based research and best practices addressing the need to increase retention, graduation, and career pathways in the STEM disciplines for underrepresented minority (URM) groups.

In addition, the conference provides URM graduate and undergraduate STEM students a complement of activities to select from including professional development workshops, a competitive poster session, and a resource fair.

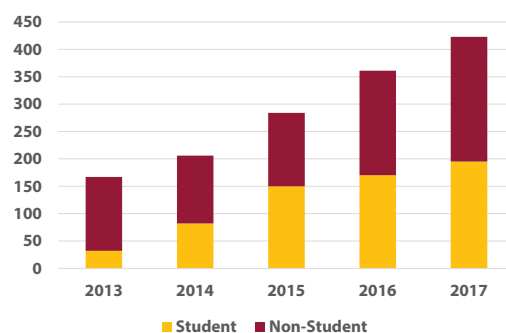
The LSMCE annual conference has continued to grow in attendance, engagement, and impacts. Attendee data indicates a steady growth in participation by LSMCE site representatives, administrators and faculty from LSAMP and non-LSAMP institutions, and individuals from businesses and industries.

Broaden Participation

The LSMCE conference provides an effective and supportive environment for students to learn about opportunities and pathways in STEM and

Building a Community of Scholars

LSMCE Conference Attendance by Year and Attendee Type



gain exposure to professional development.

Student conference survey responses indicate that for up to 88% of student attendees, the LSMCE conference serves as their first exposure to a professional research conference in STEM. The conference offers students a series of workshops designed to broaden student participation in STEM disciplines.

2017 LSMCE Conference NSF Meeting Attendees

At the 2017 LSMCE Conference, leaders from the Louis Stokes Alliances for Minority Participation (LSAMP) gathered to learn about program opportunities and priorities, as well as, discuss effective program assessment and evaluation.



Networking and Community Building

The conference offers a platform for students, staff, faculty, and administrators from the LSMCE and LSAMP communities to network with other students, peers, and mentors from higher education institutions.

Based on LSMCE outside evaluation reports, conference attendees indicate that the most valuable outcome of the conference is that it provides a platform necessary for the LSAMP and non-LSAMP communities to share ideas and expertise in managing programs that support the success of URM students in STEM disciplines.

“I think meetings like this are critical – they call you an underrepresented minority because you’re one of a few and it’s easy to feel isolated. They build community. . . . They also help faculty understand that experience of being an underrepresented minority.”

- Juan Gilbert, Ph.D., IDEaS Professor and Chair of Human-Centered Computing, Clemson University, and 2011 PAESMEM

Mentoring

The conference provides a unique opportunity for LSAMP graduates and B2D Fellows to develop peer-mentoring skills by participating in panel discussions about their academic journey, and presenting oral presentations of their research.

Professional Development

Undergraduate students participate in an interactive professional development session on conference attending behaviors and the art of networking with peers and faculty mentors.

Broader Impact

Throughout the year, students have the opportunity to attend LSMCE virtual learning sessions with Brian Thomas of KIPNspire. The live lessons feature invited speakers from the Bridge-to-the-Doctorate (B2D) Fellows program among others. Each session is recorded and placed on the LSMCE website and LSMCE YouTube channel for on-demand access.



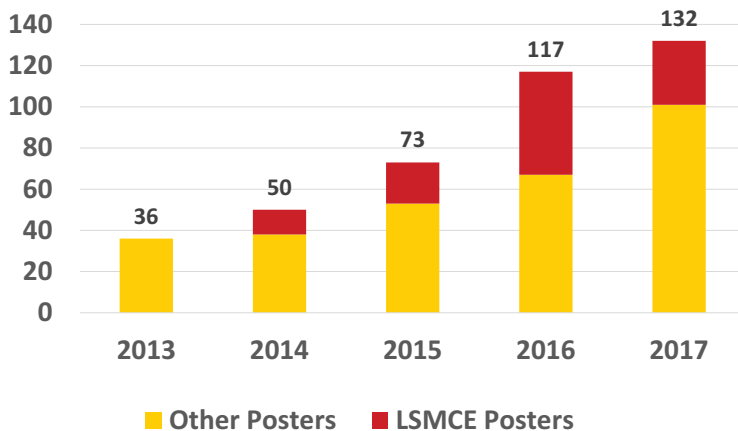
ANNUAL CONFERENCE

IMPACTS

As reported by LSMCE external program evaluator, faculty networking is an encouraging outcome of the conference. The evidence can be seen in number of participants who report that they plan to submit grants, exchange programmatic best practices, and develop cross-institutional collaborations to leverage external resources for program enhancement in URM BP activities on their campuses.

One of the most significant outcomes of faculty networking during a LSMCE Conference resulted in the creation of the Missouri LSAMP. Planning efforts for the Missouri Alliance was initiated at the 2014 LSMCE Conference in Chicago where the Alliance team met and was encouraged by Dr. Art Hicks to form a partnership. LSMCE leadership team, Drs. Jones, Nguyen and Shaw assisted them with the proposal development and submission in 2015.

Number of Student Poster Presenters by Year



The annual LSMCE conference has proven itself to be a flexible, dynamic, and growing venue for support of broadening participation in STEM. Conferences provide valuable learning and networking opportunities for students, faculty, staff, and other STEM professionals. - LSMCE Final Pilot Evaluation Report by Creative Research & Evaluation

Quick Stats

TOTAL IMPACT

1,441 participants

134 institutions

42 LSAMP Alliances

DISSEMINATED INFORMATION

14 keynote presenters informed and motivated

105 breakout sessions and workshops were held for faculty and administrators

PROFESSIONAL DEVELOPMENT

629 students attended workshops with Brian Thomas

408 students presented their scholarly work at a competitive poster session

NETWORKING & CONNECTING

86% of faculty attendees rated the opportunity to connect and network with others as the most valuable conference outcome

2013 - First Annual Conference

A Call to Action: LSAMP Model for Broadening Participation in STEM

October 20-22, 2013, Indianapolis, Indiana

KEYNOTES:

Herb Ilisaurri Schroeder, University of Alaska Anchorage
 A. James Hicks, National Science Foundation
 Ben Flores, University of Texas El Paso
 Shaun Harper, University of Pennsylvania



[Download Program](#)

2014 - Second Annual Conference

Roadmap to Action: LSAMP Principles for Broadening the Participation in STEM

October 24-26, 2014, Chicago, Illinois

INVITED KEYNOTES:

Clemencia Cosentino, Mathematica Policy Research
 Joan Ferrini-Mundy, National Science Foundation (*furloughed*)
 A. James Hicks, National Science Foundation (*furloughed*)



[Download Program](#)

2015 - Third Annual Conference

Accelerating Diverse Talent along the STEM Pipeline

October 23-25, 2015, Indianapolis, Indiana

KEYNOTES:

Mary F. Howard-Hamilton, Indiana State University
 Jamaal Abdul-Alim, Diverse: Issues in Higher Education
 Tasha Inniss, National Science Foundation



[Download Program](#)

2016 - Fourth Annual Conference

Prism of Possibilities: Focus on the Future

October 28-29, 2016, Chicago, Illinois

KEYNOTES:

Terrell L. Strayhorn, The Ohio State University
 Sylvia James, National Science Foundation



[Download Program](#)

2017 - Fifth Annual Conference

Take Action: Reaching Deeper into the Nation's Diverse Pool of STEM Talent

October 6-8, 2017, Indianapolis, Indiana

KEYNOTES:

Juan E. Gilbert, University of Florida, PAESMEM 2012
 Ben Flores, University of Texas El Paso, PAESMEM 2008



[Download Program](#)

INFORMATION DISSEMINATION

The Center uses several strategies to disseminate information, opportunities and resources to the broadening participation community. The initial intent of the Center was to focus on dissemination of opportunities and best practices to the twenty-eight partner institutions.

Within the first two years of the project, the Center's dissemination effort grew to accommodate the needs of the entire Louis Stokes Alliances for Minority Participation community. Today, our communications reach more than 1,500 subscribers and 500 Twitter followers.



LSMCE.org Website

Launched in 2013 as a tool to provide the 28 non-LSAMP partner schools with resources and information to support URM students, the website scope and purpose has grown to address the needs from the LSAMP community.



Today, one of the most utilized features of the website is the LSAMP Alliance maps. The maps communicate where the alliances are located and the alliance contact information. Also included is a map of the institutions with open Bridge to the Doctorate cohorts. In addition, the website still fulfills its original intent by providing all visitors a list of current internship, employment, and professional development opportunities.



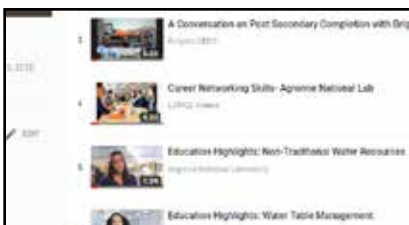
Career Pathways

Another notable resource available on the LSMCE website is the Career Pathways stories which feature STEM researchers at Argonne National Laboratory and the journey they took to get where they are today. Through these stories, readers learn more about the different career pathways available to STEM majors.



On Demand Virtual Learning Sessions

The Center hosted more than 30 virtual learning sessions for mentors and for students. The Center develops professional development videos, webinars and workshop for faculty and students. For faculty, the topics range from student transition, to mentoring, to best practices in program evaluation. The student series focus on developing soft and hard skills needed to thrive in the academic and industry environments. Topics include networking, the anatomy of a research poster, presenting research data, to how to dress for an interview, and the importance of branding oneself professionally through LinkedIn and developing a living resume.



These learning opportunities are all captured via video and posted to our website for on-demand, 24/7 access, as well as, promoted via the e-newsletter and on Twitter.

Quick Stats

TOTAL REACH

1,500+ newsletter subscribers

500+ Twitter followers

500+ shared undergraduate research internships

30+ recorded webinars available on demand

Resources

RECORDED WEBINARS

<http://lsmce.org/library>

LSMCE YOUTUBE CHANNEL

[Visit the LSMCE YouTube playlist page](#)

KALTURA VIDEO REPOSITORY

The Center has leveraged an enterprise video library service called Kaltura that serves as shared repository for higher education institutions to exchange knowledge and information.

[Visit the LSMCE Kaltura Channel](#)

LSMCE e-NEWSLETTER

The Center publishes a bi-weekly e-Newsletter during the academic year that disseminates professional development, internship and funding opportunities to the community via MailChimp.

[Visit the Newsletter Archive](#)

e-Newsletter: LSMCE Community Opportunities & Social Media

The Center is committed to sharing the latest and most relevant opportunities with the LSMCE community. First initiated in 2014 with approximately 300 subscribers, the newsletter now reaches more than 1,500 persons per email, and through twitter our impact broadens to another 500 persons. Since inception, the newsletter has shared more than 500 undergraduate internship opportunities with the LSMCE and LSAMP community.



Professional Development Videos

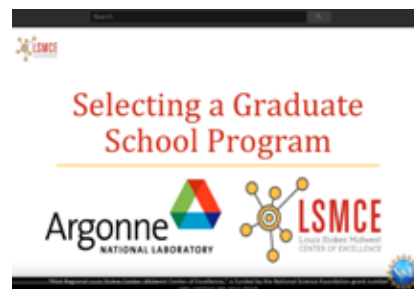
The Center developed six videos to prepare students for internship and conference attendance. These videos are available on-demand in the LSMCE video library and YouTube channel for public use.



[View in YouTube](#)



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PILOT PROJECT OUTCOMES

This report reflects the impacts of the LSMCE Pilot Project HRD-1202563 (2012-2018). The overall findings provide evidence that the Center delivered on the objectives and goals laid out in the project proposal.

Along the way, we learned much about the activities and opportunities that are effective in supporting institutions and faculty mentors in their efforts to broaden the participation of underrepresented minority student majoring in STEM on their campus. These strategies and the impact are discussed in detail throughout the report.

Much of the Impact Report draws upon the outcomes of the outside evaluation report conducted by Creative Research & Evaluation (CR&E). To read the complete report and recommendations, download the [Final Pilot Project Evaluation Report](#).

Summary of Outside Evaluator's Findings

Finding 1: LSMCE successfully recruited 28 partner institutions. The successful recruitment and engagement of 28 partner institutions demonstrates that there is a substantial number of institutions of higher education that have their own institutional needs and commitments to broaden participation in STEM and are looking for technical assistance, professional development, and student opportunities, even in the absence of programmatic funding.

Finding 2: LSMCE successfully provided resources and technical assistance to a majority of LSMCE coordinators. The role that coordinators play on their campuses varies substantially depending on the individual campus, on the individuals involved, and on individuals' relationships with Center leadership or other partners.

Finding 3: LSMCE successfully organized five annual conferences that brought together the national LSAMP community and non-LSAMP partners. The annual LSMCE conference has proven itself to be a flexible, dynamic, and growing venue for support of broadening participation in STEM.

Finding 4: LSMCE successfully developed and shared webinars and online content, with web traffic of approximately 700 user web sessions per month between September 2017 and May 2018. Online strategies such as sharing internship opportunities, highlighting upcoming events, and providing information about STEM careers complement the Center's face-to-face activities.

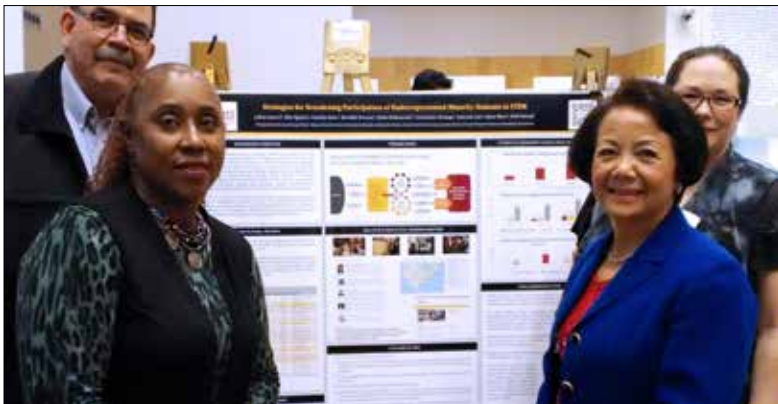
Finding 5: LSMCE helped students at partner campuses enlarge their networks and professional skills. Students and faculty report that LSMCE conferences and resources open up opportunities that would not otherwise be available to students at LSMCE partners.

Finding 6: LSMCE successfully leveraged change and/or increased the potential for change at a majority of partner colleges and universities. Over the course of the Center's six years, 17 out of 28 participating campuses have reported new programs, increased capacity, plans for new programs or collaboration, and/or past programs and collaborations that grew out of LSMCE involvement.

Publications

Blanc, S. and Jones, L. (2017, September). Success in Broadening STEM Participation in Higher Education: The Importance of Understanding the Louis Stokes Alliances for Minority Participation Program. *Fourth International CREA Conference*. Conference conducted at the meeting of Center for Culturally Responsive Evaluation and Assessment, Chicago, Illinois.

Jones, L., Nguyen, K., Shaw, P., Bruozas, M., Bahamonde, R., Botanga, C., Cole, D., Blanc, S., Uwziak, B. (2016, April). *Strategies for Broadening Participation of Underrepresented Minority Students in STEM*. Poster session presented at the IUPUI Research Day, Indianapolis, IN.



LSMCE Leadership team members present a poster at the 2016 IUPUI Research Days. Pictured (l-r): Dr. Rafael Bahamonde, Dr. Pam Shaw, Dr. Kim Nguyen, and Deb Cole

References

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AQuinn [image]. (n.d.). Retrieved on July 10, 2018, from <http://www.utoledo.edu/diversity/mesp/images/A%20Quinn.jpg>

PorrasAlfaro2 [image]. (n.d.). Retrieved on July 10, 2018 from http://www.wiu.edu/cas/biological_sciences/faculty/images/PorrasAlfaro2.png

Rylaarsdam [image]. (n.d.). Retrieved on July 18, 2018, from <https://biologos.org/files/modules/rylaarsdam.jpg>

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<http://lsmce.org>
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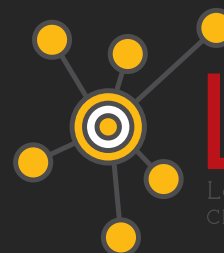


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