



2018 MIDWEST ANNUAL ROBERT NOYCE CONFERENCE
Leveraging Best Practices for Community-Based STEM Education in High Need Schools
Marriott St Louis Airport
St Louis, Mo

Program Agenda

Friday, October 12:

5:00 PM Onsite Registration until 9:00 PM

7:00 PM NETWORKING EVENING - Poster Session / Introductory Session with hors d'oeuvre

- Dr. Jessica Krim, Southern Illinois University at Edwardsville

Author Name	Presentation Title	Institution Name
Andrew Morgan	NGSS in a High School Chemistry Class: Using Tardigrades to Enhance Engagement	Southern Illinois University at Carbondale
Cindy Hepp	Informal Partnerships in Rural Schools	Southern Illinois University at Carbondale
Deb Sachs	Urban Clinical Residency and Induction Support for Preparing Secondary STEM Teachers: Year One Program Overview and Lessons Learned	University of Indianapolis
Gillian Roehrig	Teacher Retention and Network Formation in Noyce Communities of Practice Becoming a teacher: Reflective practice as a way of exploring secondary science teacher beliefs and practices	University of Minnesota-Twin Cities
Helen Meyer*	Closing the Pre-service School to University Preparation Gap	University of Cincinnati
Joshua Darr	Skill Building in Noyce Scholars through Teaching in Course-based Undergraduate Research Experiences	University of Nebraska at Omaha
Kedmon Hungwe	Middle School Science Teachers' Pre-conceptions of the Next Generation Science Standards--A Baseline Study	Michigan Technological University
Rebecca Byrne*	Results of 2017 Conference Grant for Aeroponics Garden Project	University of Missouri - St Louis
Karen Renzaglia*	Noyce teachers use tardigrades to conduct scientific research and teach inquiry science Southern Illinois University Inter-institutional Noyce Partnership in Research-based Pedagogy	Southern Illinois University Carbondale

Holly Dunderdale*	Scientific Research in the Classroom: A Study of Tardigrade Habitats in Southern Illinois	Southern Illinois University Carbondale
Ted Neal	An Overview of the University of Iowa Noyce Program – Challenges and Opportunities	University of Iowa
Aaron Trautwein	Overview of the Carthage Noyce Scholarship Program (CNS)	Carthage College
Rachael Duden	Family STEAM Night - An Evolving Service Learning Project	Kansas State University
Nina Hike and Stephanie Matteson*	Midwest Food Deserts	University of IL at Chicago and University of MO at Saint Louis

* Indicates Sub-Grant awardees from 2017.

Saturday, October 13:

8:30 AM Registration and Breakfast - *available in the Grand Foyer, eat in Grand Ballroom*

9:00 AM Opening Plenary Session – *Grand Ballroom*

- **Craig Willey, Ph.D. – Mathematics Educator at IUPUI** <https://education.iupui.edu/faculty-research/directory/willey-craig.html>

10:00 AM 2nd Session Instructions – *Grand Ballroom*

- Dr. Jessica Krim, Southern Illinois University at Edwardsville

10:05 AM Break

10:15 AM *Individuals who have chosen Strand 2 “Community-inspired Best Practices for STEM Teaching” will be leaving for Site Visits*

Time at Site	Group 1 - Red (30 max)
10:30 - 11:45	National Weather Service; St. Louis, MO Weather Forecast Office
11:45 - 12:45	Lunch
12:45 - 2:00	Humane Wildlife Solutions, LLC
	Group 2 - Orange (30 max)
10:30 - 11:45	Lambert Art & Culture Program; local artists inspired by math, science, and community
11:45 - 12:45	Lunch
12:45 - 2:00	Boone Bridge and Fee Fee Greenway Extension (civil engineering, erosion control)
	Group 3 - Yellow (30 max)
10:30 - 11:45	Contemporary Art Museum St. Louis - Sanford Biggers Exhibit
11:45 - 12:45	Lunch
12:45 - 2:00	Harvest Fest at Mathews-Dickey Boys & Girls Club
	Group 4 - Blue (25 max)
10:30 - 11:45	Earthdance Organic Farm

11:45 - 12:45	Lunch
12:45 - 2:00	Harvest Fest at Mathews-Dickey Boys & Girls Club
Group 5 - Violet (25 max)	
10:30 - 11:45	Seeds of Hope Farm (Community Action Agency of St. Louis County)
11:45 - 12:45	Lunch
12:45 - 2:00	Harvest Fest at Mathews-Dickey Boys & Girls Club

10:15 AM Strand 1 and 3 Workshops - in small breakout rooms (See Schedule Below)

Strand 1 "Curriculum Enhancement and Skill Building Workshop" - Morning Session				
Time	Title of the Presentation	Presenter(s)	Affiliation	Room Name
10:15 - 12:00	"Using Engineering Challenges to Teach Secondary Math and Science Content"	Amy Jameson	Cincinnati Public Schools/University of Cincinnati	Salons IV&V
10:15 - 12:00	Do Dogs Know Calculus?	Timothy Pennings	Davenport University	Salon C
10:15 - 12:00	"Teaching with Toys"	Brad Christensen	Illinois State University	Salons F&G
Strand 3 "Project Management, Research, and Teacher Education" - Morning Session				
Time	Title of the Presentation	Presenter(s)	Affiliation	Room Name
Research Findings				
10:15 – 10:35	"Fostering STEM Teacher Agency in Closing Opportunity and Achievement Gaps"	Rebekka Darner, Kara E. Baldwin and Sandrine G. Clairardin	Illinois State University and Romeoville High School	Salon H
10:35 – 10:55	"Examining a Close-knit Noyce Community"	Amanda Jensen	South Dakota State University	Salon H
Best Practice				
10:55 – 11:15	"Recruiting Undergraduate STEM Majors for a Future Teaching Force"	Kimberly Baker	University of Indianapolis	Salon H
11:15 – 11:35	"Redesign of a Mathematics Course for Elementary Teachers: Developing Knowledge of Mathematics"	Christopher Nazelli	Wayne State University	Salon H
Curriculum Enhancement				
11:35 – 11:55	"The Role of Online Induction Environments in Supporting Early-Career Teachers"	Gillian Roehrig	University of Minnesota-Twin Cities	Salon H

12:00 PM Lunch Buffet

Strand 1 "Curriculum Enhancement and Skill Building Workshop" - Afternoon Session				
Time	Title of the Presentation	Presenter(s)	Affiliation	Room Name
1:00 – 1:40	Strand 1 Discussion	Monica Medina	Indiana University	Grand Ballroom
1:40 – 2:00	Girls STEM Institute: Transforming the lives of Black girls through STEM	Crystal Morton and Winterbourne Harrison-Jones	Indiana University	Grand Ballroom
2:00 - 3:30	"STEM in the Urban Community"	Valecia Kelly and Kristy Moss*	University of Missouri - St Louis	Salon C

2:00 - 3:30	<i>"Using tardigrades in the classroom to teach inquiry science"</i> *	Karen Renzalia, Laxmi Sagwan, Siri Radha Kaur LeBaron, Holly Dunderdale and Andrew Morgan	Southern Illinois University at Carbondale	Salons F & G
2:00 - 3:30	<i>"Integrating Inquiry-Based Learning in High-Need STEM Classrooms"</i>	Paige Evans, Mrs. Mariam Manuel and Leah McAlister-Shields	University of Houston	Salons II
Strand 3 "Project Management, Research, and Teacher Education" - Afternoon Session				
Time	Title of the Presentation	Presenter(s)	Affiliation	Room Name
1:00 – 2:00	<i>"A Mindset for Learning STEM"</i>	Valorie Zonnefeld	Dordt College	Salons IV&V
2:00 – 2:40	<i>"How Students Learn: Rationale, content, and presentation of a Noyce Add-on Course"</i>	Paul Heideman	College of William and Mary	Salons IV&V
2:40 – 3:00	<i>"Integrating Computer Science Principles into STEM Education"</i>	Anu Gokhale	Illinois State University	Salon H
2:40 – 3:00	<i>"A Study of Underrepresented Minority Students' Interests in STEM Teaching Careers"</i>	Jomo Mutegi	Indiana University	Salons IV&V
3:00 – 3:30	<i>"Changes in the Demographics, Qualifications, and Turnover of American STEM Teachers, 1988-2012"</i>	Tuan Nguyen	Kansas State University	Salon III
3:00 – 3:30	<i>"Undergraduate Noyce Scholars as Community Outreach Leaders"</i>	Michael Matthews	University of Nebraska at Omaha	Salons A&B

* Indicates Sub-Grant awardees from 2017.

2:30 PM Strand 2 - Site Visits Return – *Grand Ballroom*
 • Work on reflection and writing ideas

3:30 PM Coffee and Snack Break – *Grand Ballroom*

3:45 PM Panel of students from High Need Schools – *Grand Ballroom*

5:00 PM DINNER / Keynote Speaker – *Grand Ballroom*
 • **Dr. Tiffany Anderson**, Superintendent of Topeka Public School District, Topeka, KS
<https://www.topekapublicschools.net/Page/125>

6:30 PM Break/Freshen Up

7:00 PM Everyone is transported to the City Museum for fun, networking, and an optional Scavenger Hunt

9:30 PM Return to Hotel

Sunday, October 14:

8:00 AM Breakfast Buffet - *available in Grand Foyer, eat in Grand Ballroom*

8:45 AM Plenary Session – 1 hour - *in Grand Ballroom*

- **Dr. Sandra Richardson, Program Director for the Robert Noyce Teacher Scholarship Program**
- Voices in the Field
 - Arthur Funk from American Museum of Natural History, New York
 - Maisha Smith from AECC Charter High School, Bronx, NY
 - Shirley Weng from Fairfax County Public Schools, Sterling, VA

10:15 AM Break

10:30 AM **Sub-Grants Program / Noyce PI's session** (these sessions will be happening at the same time)

Time	Title of the Presentation	Presenter(s)	Affiliation	Room Name
10:30 -11:30	Discussion about Sub-Grants Program	Willy Hunter	Illinois State University	Grand Ballroom
10:30 -11:30	“Teaching Tips: Small Things with Large Effects (experts from a Noyce Add-on Course)”	Paul Heideman	College of William and Mary	Salons II&III
10:30 -11:30	Discussion with PI's	Dr. Sandra Richardson	Program Director at the National Science Foundation (NSF) in the Division of Undergraduate Education in the Directorate of Education and Human Resources	Salons IV&V

11:30 AM Closing Plenary Session – *in Grand Ballroom*

- Dr. Jessica Krim, Southern Illinois University at Edwardsville
 - Moving forward
 - Using resources and upcoming workshops/webinars
 - New Sub-Grantee awards announced.

12:00 PM Adjourn