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Illinois New Teacher Collaborative Beginning Teacher STEM Conference

Tuesday, July 30, 2013

11:00 – 11:30	Conference Check-in	Chancellor Ballroom Hall
11:30 – 12:30	Welcome Lunch	Chancellor Ballroom
12:30 – 1:40	Hot Topics Breakout Session A	See Booklet Page 10
1:40 – 1:50	Break	
1:50 – 3:00	Hot Topics Breakout Session B	See Booklet Page 12
3:00 – 3:20	Dessert Break	Chancellor Ballroom Hall
3:20 – 4:30	Hot Topics Breakout Session C	See Booklet Page 14
4:30 – 5:00	Networking and Reflection Session	Chancellor Ballroom
5:30-7:00	Reception	UIUC Research Park

Wednesday, July 31, 2013

7:30 – 8:30	Conference Check-in and Breakfast	Chancellor Ballroom Hall
8:30 – 8:40	Welcome and Networking	Chancellor Ballroom
8:40 – 9:40	Keynote Speaker	Chancellor Ballroom
9:40 – 9:50	Break	
9:50 – 11:00	Hot Topics Breakout Session D	See Booklet Page 16
11:00 – 11:10	Break	
11:10 – 12:20	Hot Topics Breakout Session E	See Booklet Page 18
12:30 – 1:30	Lunch, Networking, and Reflection Session	Chancellor Ballroom
1:30 – 2:00	Closing Ceremonies and Raffle <i>Must be present to win</i>	Chancellor Ballroom

Message from the Dean

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Office of the Dean
College of Education
110 Education Building, MC-708
1310 South Sixth Street
Champaign, IL 61820-6990



July 30, 2013

Dear Colleague:

The College of Education is deeply honored to support the first INTC Beginning Teacher STEM Conference at the University of Illinois at Urbana-Champaign. This conference brings together science, technology, engineering, and mathematics beginning teachers and mentors from across the state in one place to learn from some of the area's brightest minds.

Your experience tells you, and research supports, that the first four years of a teacher's professional career are the most significant in building the foundations for success. This conference offers participants important opportunities for networking, self-reflection, and content-specific instruction.

The presenters you will hear from over the next two days include professors and university-based researchers who combine deep subject-matter knowledge and a commitment to K-12 education. Other presenters are teachers who will share strategies from their best practices.

I hope you enjoy this conference. When you return to your school, your district, and your community, know that the College of Education and the University of Illinois are committed to your continued success in teaching.

Sincerely,



Mary Kalantzis, Dean
College of Education

Message from Governors State University



Dear Professional Colleagues:

Welcome to this exciting event! We are so proud that Governors State University has had the opportunity to be a major sponsor of The Illinois New Teacher Collaborative Beginning Teacher STEM Conference through our Teacher Quality Partnership grant.

Educators from across the state of Illinois have come together to learn more about STEM initiatives and to share ideas and information. We are thankful to the Illinois New Teacher Collaborative for their vision in planning this conference, which we hope will become an annual event.

We offer a special thanks to our partner districts for their participation. We know our new teachers and their mentors as well as others from throughout Illinois will gain tremendous insight through the keynote address, the breakout sessions, and the time for networking and reflection. The reception at the University of Illinois Research Park provides a great backdrop for networking on “big ideas” and future plans related to STEM instruction to touch the lives of the children we teach. Enjoy!

Dr. Karen Peterson and Dr. Pam Guimond
Co-Directors, Governors State University
Teacher Quality Partnership Grant

Message from the INTC Director



Illinois New Teacher Collaborative
Children's Research Center, MC-672
Room 196, 51 Gerty Drive
Champaign, Illinois 61

Dear Colleagues,

Welcome to the Illinois New Teacher Collaborative's first annual Beginning Teacher STEM Conference! This conference is expressly designed to give you the chance to learn, network with new teacher colleagues, and plan for your next year in the classroom. It is also an opportunity for you to hear cutting edge presentations in science, technology, engineering, and mathematics.

This conference would not be possible without the generous support of Governors State University and the University of Illinois Research Park. We also thank the College of Education at the University of Illinois at Urbana-Champaign and the State Farm Companies Foundation. Their continued support of teaching and new teacher induction impacts many teachers and their students throughout Illinois.

It is my sincere hope that this conference challenges and inspires you, helps prepare you for the coming school year, and strengthens your resolve to impact students positively through a STEM curriculum.

All the best!

Dr. Patricia Brady
Director, Illinois New Teacher Collaborative

Conference Center Map



Evening Reception

EnterpriseWorks at the University of Illinois Research Park



Schedule

- 5:15 – 5:30 Arrival at EnterpriseWorks
- 5:30 – 7:00 Complimentary hors d'oeuvres and soft drinks; cash bar available
- 5:45 – 6:00 Official welcome by Laura Frerichs, Research Park Director
- 6:00- 7:00 Demonstrations and tours of technology start-ups

Directions to EnterpriseWorks are provided on the next page.

The distance is .25 mile; attendees can walk, drive, or take the free shuttle.

At 5:15 the first shuttle leaves from the I Hotel main (west) entrance and continues as needed.

At 6:30 return trips on the shuttle will be available at the EnterpriseWorks main (north) entrance.

Map to EnterpriseWorks the Research Park

The reception begins promptly at 5:30 PM at 60 Hazelwood Drive, IL 61820. Parking is available on the north of the building off Oak Street. The distance between the Research Park and the Hotel is about .25 of a mile.

A shuttle will be provided for those who would like assistance traveling to the reception. The shuttle will begin leaving the I Hotel at 5:15 from the I Hotel main (west) entrance just outside the lobby.



About the Research Park

The Research Park at the University of Illinois was created by the University of Illinois to advance its economic development mission. The University allocated 200 acres adjacent to central campus for development of the technology park. A private developer was selected as a partner to help advance the development. Within 10 years the Research Park transformed agricultural green field land into a vibrant technology park with 13 buildings housing 90 companies and 1400 employees. The Research Park includes a mix of large corporations and startup companies. At any given time over 400 student interns are working in these companies gaining valuable work experience while making real contributions to internal corporate R&D and product development programs. The Research Park offers free weekly events to educate entrepreneurs, create a social environment among the technology companies, and build a community.

Corporate Partnerships in Innovation with the University of Illinois: Corporations in the Research Park have research relationships with the University, recruit students, make curriculum and teaching contributions, and contribute philanthropically to the University. Publicly-traded firms in the Research Park include:

- ADM Bioenergy Modeling Center
- Abbott Laboratories
- Caterpillar Simulation Center
- Citrix, Bytemobile operation
- John Deere Technology Innovation Center
- Dow Innovation Center
- Neustar Innovation Center
- Pearson, Novanet operation
- Raytheon, Trusted Computer Solutions operation
- Riverbed, Quality Assurance (QA) software team
- Sony Biotechnology
- State Farm Research and Development Center
- Yahoo, Hadoop Center of Excellence

EnterpriseWorks Incubator

EnterpriseWorks is a 43,000 square-foot start-up incubator operated by the University for research and technology startups. EnterpriseWorks also offers many support services for its clients including an Entrepreneur-in-Residence program, I-Start professional launch services, free SBIR grant application assistance, entrepreneur education, student and faculty startup support, and laboratory and office space for small businesses. The expected time for a client to remain in incubation is 3-5 years.

The incubator has been successful in retaining 78% of firms in the State of Illinois after graduation.

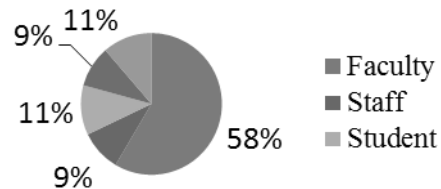
EnterpriseWorks sponsors six Entrepreneurs in Residence, experienced tech entrepreneurs that have commercialized technology, to help startups access free consulting services. EnterpriseWorks welcomed 19 new Startups into the EnterpriseWorks Incubator in 2012.

The Research Park opened the Rantoul Business Incubator in June of 2012 at the former Chanute Air Force Base, with Intelliwheels as its first resident. Intelliwheels is expanding manufacturing of its innovative EasyPush wheels for wheelchairs and ensuring that all the manufacturing for its wheelchairs takes place within a 30 mile radius. The Incubator provides free space for entrepreneurs with onsite business consulting from the SBDC, a FastTrac entrepreneur course through Parkland College, manufacturing/lab space, and use of EnterpriseWorks services.

Accolades

- In June 2013, EnterpriseWorks was named by Inc. magazine as one of three “college-town incubators worth watching.”
- The University of Illinois Research Park was named 2011 Outstanding Research Park of the year by the Association of University Research Park, an organization representing 400 research parks internationally.
- EnterpriseWorks was named by Inc. as one of “10 Start-up Incubators to Watch” in July 2011.
- The Research Park was named by Forbes.com as one of “10 Technology Incubators That are Changing the World” in 2010.

Incubator Company Founders



Hot Topics Breakout Sessions July 30 & 31

Room	Session A Tuesday, 12:30-1:40	Session B Tuesday, 1:50-3:00	Session C Tuesday, 3:20-4:30	Session D Wednesday, 9:50-11:00	Session E Wednesday, 11:10-12:20
Loyalty	A1. What Do Sugar Cubes Have To Do with the Nature of Science? (Grades 3-8) Gretchen Adams & Don DeCoste	B1. The Scientific Method and How Great Ideas Come from Observation (Grades 6-12) Joaquin Rodriguez-Lopez	C1. Bringing the Heavens Down to Earth: Astronomy in the Classroom (Grades 3-8) Tony Wong	D1. Tackling Astronomical Misconceptions (Grades EC-8) David Leake	E1. Math Discussions: Helpful Tools, Strategies, and Approaches (Grades 3-8) Amos Lee
Excellence	A2. Solar Energy (Grades 6-12) Prashant Jain	B2. Engaging MS/HS Science and Engineering Labs: An Emerging Technology Focus (Grades 6-12) Carrie Kouadio & Joe Muskin	C2. Engaging Elementary Science and Engineering Labs: An Emerging Technology Focus (Grades EC-5) Carrie Kouadio & Joe Muskin	D2. Creating Collaborative STEM Partnerships (Grades EC-12) Tina Lehr & Tara Bell	E2. Hosting a School-Wide STEM Event: Lessons Learned & Tips for Success (Grades EC-12) Tina Lehr & Tara Bell
Innovation	A3. Leverage Learning with Video (Grades EC-12) Erin Lodes	B3. Literacy as a Shared Responsibility: An Integrated Approach to STEM (Grades EC-12) Lisa Fink	C3. Scientific Argumentation in Elementary and Middle Grades (Grades 3-8) Susanne Hokkanen	D3. Myths, Blockbuster Movies, and YouTube vs. Next Generation Science Standards (Grades 6-12) Eric Snodgrass	E3. Mendelian and Molecular Genetics (Grades 6-12) Amanda Brock
Knowledge	A4. Teacher Stress and Classroom Management (Grades EC-12) Erica Thieman	B4. Applied and Agricultural Science in the Elementary Classroom (Grades EC-5) Erica Thieman	C4. Lyme Disease in Illinois: A Lesson in Ecology and Human Health (Grades 6-12) Brian Allan	D4. Lazos y Nudos (Grades 6-12) Juan Manuel Gerardo	E4. Why Buildings Don't Fall Down (Grades 3-12) Daniel Kuchma
Chancellor Ballroom		B5. ICE21 Coaching Cycle Tune-Up (MENTORS ONLY) Jodi Bouris	C5. Analysis of Student Work (MENTORS ONLY) Maria Owens		

Session A: Tuesday, July 30, 12:30 – 1:40

Room	Topic
Loyalty	A1. What Do Sugar Cubes Have To Do with the Nature of Science? (Grades 3-8)
Excellence	A2. Solar Energy (Grades 6-12)
Innovation	A3. Leverage Learning with Video (Grades EC-12)
Knowledge	A4. Teacher Stress and Classroom Management (Grades EC-12)

A1. What Do Sugar Cubes Have to Do with the Nature of Science? (3-8)

Loyalty Room

Gretchen Adams and Don DeCoste, University of Illinois at Urbana-Champaign

It is important for students to understand how to apply scientific methodology. For example, students should understand how to design their own experiments (with a control), how to graph their results, how to predict future results, and how to interpret their findings. It can be difficult to develop experiments to allow students to grow in this area, especially in this age group. We will show you a fun and engaging way to do this using materials you can find at the store. The experiments we will show (and you will do) can be part of a large project or can be used separately depending on time and student abilities. The specific topic involves sugar solutions, but the overall goal is to help the students better understand the nature of science.

A2. Solar Energy (6-12)

Excellence Room

Prashant Jain, University of Illinois at Urbana-Champaign

This talk will discuss some basic concepts of solar energy and nanoscience and go on to describe how nanoscience can be employed to capture and harvest solar energy. The focus will be on one or two hands-on activities that can be used in a classroom setting to teach students about these concepts and their relevance to the problem of renewable energy.

A3. Leverage Learning with Video (EC-12)

Innovation Room

Erin Lodes, Urbana Middle School

Today's youth spend record amounts of time interacting with media. They do most of their personal learning through video media, whether or not that learning is intentional or supervised. As teachers, we can use this natural learning as leverage to enhance the intentional learning in our classrooms; we can use small exposure to video and media to help our students learn. This session will introduce web-based tools that you can use to find and capture existing video resources, create and share your own video instruction, and design lessons that incorporate

student video production. Bring your laptop or mobile device for hands-on practice and exploration.

A4. Teacher Stress and Classroom Management (EC-12)

Knowledge Room

Erica Thieman, University of Illinois at Urbana-Champaign

What does stress have to do with it? Learn how a teacher's personal stress can impact the classroom environment and student behavior. Personal stress awareness and management to decrease stress while in the classroom and outside of the school day will also be addressed.

Session B: Tuesday, July 30, 1:50 – 3:00

Room	Topic
Loyalty	B1. The Scientific Method and How Great Ideas Come from Observation (Grades 6-12)
Excellence	B2. Engaging MS/HS Science and Engineering Labs: An Emerging Technology Focus (Grades 6-12)
Innovation	B3. Literacy as a Shared Responsibility: An Integrated Approach to STEM (Grades EC-12)
Knowledge	B4. Applied and Agricultural Science in the Elementary Classroom (Grades EC-5)
Chancellor Ballroom	B5. ICE 21 Coaching Cycle Tune-up (MENTORS)

B1. The Scientific Method and How Great Ideas Come from Observation (6-12)

Loyalty Room

Joquin Rodriguez-Lopez, University of Illinois at Urbana-Champaign

The scientific method gives us the thought tools to understand nature. As scientists, we then communicate our findings in such a way that society can benefit from it. In my talk, I will discuss how to unravel our inner scientist and how great ideas often start from playful and naive thoughts. Based on simple analogies and examples in chemistry, we can teach students to develop the skills necessary to satisfy our very human “Why? How? What?”

B2. Engaging MS/HS Science and Engineering Labs: An Emerging Technology Focus (6-12)

Excellence Room

Carrie Kouadio and Joe Muskin, University of Illinois at Urbana-Champaign

Learn how to lead engaging hands-on labs for K-5 students that integrate emerging technologies concepts and skills. You will discover how to get students excited about doing science and engineering, while addressing important Next Generation Science Standards and Common Core standards.

B3. Literacy as Shared Responsibility: An Integrated Approach to STEM (EC-12)

Innovation Room

Lisa Fink, National Council of Teachers of English

The Common Core Standards make it clear that teachers from all content areas must share responsibility for students’ successful use of literacy as a tool for learning. Learn ways to help students successfully use literacy skills (reading, writing, speaking, thinking, and listening) in order to learn the complex content of curriculum disciplines with these resources from ReadWriteThink.org, the National Council of Teachers of English (www.ncte.org) and the National Center for Literacy Education (<http://www.ncte.org/nclce>).

B4. Applied and Agricultural Science in the Elementary Classroom (EC-5)

Knowledge Room

Erica Thieman, University of Illinois at Urbana-Champaign

Could your elementary science curriculum use some spicing up? Learn how to integrate application of scientific principles and theories in the elementary classroom to make the content more engaging and increase interest levels of students.

B5. ICE 21 Coaching Cycle Tune-Up (MENTORS ONLY)

Chancellor Ballroom

Jodi Bouris, Illinois New Teacher Collaborative

This session will give participants a glimpse at the four steps of the Coaching Cycle: the planning conference, observation, data analysis and interpretation, and the reflecting conference. Helpful resources such as planning guides, data gathering tools for use during new teacher observations, and coaching stems will be shared. If you are new to mentoring or just need a little review, this session will be beneficial.

Session C: Tuesday, July 30, 3:20 – 4:30

Room	Topic
Loyalty	C1. Bringing the Heavens Down to Earth: Astronomy in the Classroom (Grades 3-8)
Excellence	C2. Engaging Elementary Science and Engineering Labs: An Emerging Technology Focus (Grades EC-5)
Innovation	C3. Scientific Argumentation in the Elementary and Middle Grades (Grades 3-8)
Knowledge	C4. Lyme Disease in Illinois: A Lesson in Ecology and Human Health (Grades 6-12)
Chancellor Ballroom	C5. Analysis of Student Work (MENTORS)

C1. Bringing the Heavens Down to Earth: Astronomy in the Classroom (3-8)

Loyalty Room

Tony Wong, University of Illinois at Urbana-Champaign

The goal of the presentation is to share ideas for how to convey the scale and spatial relationships of celestial objects in a classroom setting. We will model a few demonstrations and review some useful online resources. Of particular importance is confronting students' own misconceptions about how the universe works.

C2. Engaging Elementary Science and Engineering Labs: An Emerging Technology Focus (EC-5)

Excellence Room

Carrie Kouadio and Joe Muskin, University of Illinois at Urbana-Champaign

Learn how to lead engaging hands-on labs for K-5 students that integrate emerging technologies concepts and skills. You will discover how to get students excited about doing science and engineering while addressing important Next Generation Science Standards and Common Core standards.

C3. Scientific Argumentation in Elementary and Middle Grades (3-8)

Innovation Room

Susanne Hokkanen, Colin Powell Middle School

The development of 21st century skills demands strong scientific argumentative writing skills. To help my students develop this skill, I use a method called CER - Claims, Evidence, and Reasoning. In this hands-on workshop, participants will have an opportunity to learn how to write scientifically using CER while they also learn how to teach the technique to their students. Participants will use real-time investigations and other pedagogical strategies to explore CER. The focus of this workshop will be on developing argumentative writing skills in the late

elementary and middle grades, with information shared with participants on how to differentiate for higher achieving and older students.

C4. Lyme Disease in Illinois: A Lesson in Ecology and Human Health (6-12)

Knowledge Room

Brian Allan, University of Illinois at Urbana-Champaign

I will use the ecology of Lyme disease in Illinois to demonstrate a lesson in the relevance of the environment and human impacts on the environment to human health. This topic would be useful to biology teachers conducting a unit in ecology for a high school biology class.

C5. Analysis of Student Work (MENTORS ONLY)

Chancellor Ballroom

Maria Owens, Illinois New Teacher Collaborative

You've given the test and graded it: Now what? This session will take you through the protocol of analyzing student work to inform future instruction and differentiation. You'll be taken through the process as you observe a mentor and mentee sort, analyze, and plan. Then, in grade-level groups and armed with a template, you'll be given an opportunity to try it yourself.

Session D: Wednesday, July 31, 9:50 – 11:00

Room	Topic
Loyalty	D1. Tackling Astronomical Misconceptions (Grades EC-8)
Excellence	D2. Creating Collaborative STEM Partnerships (Grades EC-12)
Innovation	D3. Myths, Blockbuster Movies, and YouTube vs. Next Generation Science Standards (Grades 6-12)
Knowledge	D4. Lazos y Nudos (Grades 6-12)

D1. Tackling Astronomical Misconceptions (EC-8)

Loyalty Room

Dave Leake, Parkland College Planetarium

What causes the phases of the Moon? Why the change in seasons? Why is the North Star so special? Focus on the “wrong answers” and why they came to be and then see how to best tackle these common astronomical misconceptions with a few classroom demonstrations.

D2. Creating Collaborative STEM Partnerships (EC-12)

Excellence Room

Tina Lehr, Urbana School District #116 and Tara Bell, Champaign Unit 4 School District

In this session we will focus on collaborative partnerships created between classroom teachers and local resources including scientist and engineers. We will share some of our K-12 projects and lesson plans. You will participate in hands-on STEM activities and be provided copies of classroom ready curriculum.

D3. Myths, Blockbuster Movies, and YouTube vs. Next Generation Science Standards (6-12)

Innovation Room

Eric Snodgrass, University of Illinois at Urbana-Champaign

In this presentation, I will provide some of my favorite techniques for teaching Earth Science at the 6-12 grade level. My goal is to effectively demonstrate how to incorporate the often bad science in blockbuster films (i.e., Twister, Day After Tomorrow, Back to the Future, etc.) as a teaching tool. I will also show you a great way to utilize YouTube in the classroom, even if the site is blocked at your school! Finally, debunking myths in science is a great way to introduce new science to your students, and I will show you some of my best myth or fact questions. I hope that the time we spend together not only provides you with practical, ready-made examples that you can use in class, but also leaves you inspired to teach science to these young minds.

D4. Lazos y Nudos (6-12)

Knowledge Room

Juan Manuel Gerardo, University of Illinois at Urbana-Champaign

Experience algebra as a language learner. This is an exploration lesson of an inverse linear relationship. I will be presenting ESL adaptations/techniques that any teacher can use in his/her classroom. It is not unusual in this day and age to have second-language students in our classrooms; even rural districts are experiencing this phenomenon. What is a teacher to do?

Session E: Wednesday, July 31, 11:10 – 12:20

Room	Topic
Loyalty	E1. Math Discussion: Helpful Tools, Strategies, and Approaches (Grades 3-8)
Excellence	E2. Hosting a School-wide STEM Event: Lessons Learned and Tips for Success (Grades EC-12)
Innovation	E3. Mendelian and Molecular Genetics (Grades 6-12)
Knowledge	E4. Why Buildings Don't Fall Down (Grades 3-12)

E1. Math Discussion: Helpful Tools, Strategies, and Approaches (3-8)

Loyalty Room

Amos Lee, Stratton Elementary School

How do our students understand and make sense of different math topics in their minds? What are some approaches that can help a student along with their understanding of a math topic? Come find out more about the importance of talking in mathematics and how questioning and group activities can help students better understand the concepts you are trying to teach them. Also, come and learn some strategies that may help students overcome their mental roadblocks. Practical strategies and ideas will be presented that can be used in your classroom this fall.

E2. Hosting a School-wide STEM Event: Lessons Learned and Tips for Success (EC-12)

Excellence Room

Tina Lehr, Urbana School District #116 and Tara Bell, Champaign Unit 4 School District

As a new teacher, you may be wondering how to engage your students, their families, and the community on a larger scale both inside and outside of your classroom. In this session, we will focus on how to plan and host successful events such as a Science Fair or STEM Night. Example events will be highlighted, and resources will be shared.

E3. Mendelian and Molecular Genetics (6-12)

Innovation Room

Amanda Brock, University of Illinois at Urbana-Champaign

We will discuss genetics, from Mendelian genetics to molecular biology, and present experiments you can do in the classroom to illustrate these concepts.

E4. Why Buildings Don't Fall Down (3-12)

Knowledge Room

Daniel Kuchma, University of Illinois at Urbana-Champaign

This presentation explores how all tangible objects (buildings, bridges, trees, and everything else) support forces from gravity, wind, and earthquakes without breaking or falling over.

Students, teachers, and everyone else already know a lot about this as we live in a physical world where we are constantly observing how objects respond to our actions and the forces of nature. This presentation will cover how to go from conceptual understanding to engineering knowledge of the phenomena that govern how things are designed to not break or fall over.

Biography of Keynote Lawrence Angrave

Lawrence Angrave is from England and is an award-winning computer science senior lecturer. At the University of Illinois at Urbana-Champaign he teaches the very popular but demanding course CS125, “Introduction to Computer Science.” Approximately 10% of all incoming freshmen (800 students per year) take Lawrence’s CS125 course.

At Illinois, Lawrence has won the Illinois Student Senate Award for Teaching Excellence (2012), the Campus Award for Excellence in Undergraduate Teaching (2012), the College of Engineering Everitt Teaching Award (2011), the Collins Award for Innovative Teaching (2011), and the Rose Award for Teaching Excellence (2009).

Lawrence came to the University of Illinois in 2006. He also has founded or led software startups in the UK, Canada, and the US. His computer science research interests include computer science security, development of mobile apps, computer science education, and development of open source tools for scientific visualization of geological oil reserves and carbon sequestration. Lawrence has a Ph.D. in condensed matter physics from Oxford University.

Biographies of Hot Topics Breakout Sessions Presenters

Gretchen Adams received her undergraduate degree in the Teaching of Chemistry from the University of Illinois at Urbana-Champaign (UIUC) in 1998. She earned her Masters of Science in the Teaching of Chemistry from UIUC in 1999. She joined the Chemistry Department in January 2003. Prior to this, Adams taught high school science in Iowa for four years. In addition to teaching chemistry courses with the General Chemistry division, she directs the Chemistry Merit Program for Emerging Scholars and serves as the Director of Undergraduate Studies. Adams does several large demonstration shows, small-group presentations, and hands-on activities every year for the state of Illinois community and schools at large. She is most known for her demonstration shows and presentations to prospective and incoming freshman on how to be a successful science student in college (often co-presented with colleague Don DeCoste).

Brian Allan's research focuses on the consequences of human-mediated global change, such as climate change and human land-use, on the risk of exposure to parasites and pathogens carried by wildlife. Research in the Allan lab focuses on the ecology of infectious diseases, particularly those transmitted from wildlife to humans via the bite of an infected arthropod (e.g., ticks, mosquitoes). He and his colleagues study many aspects of infectious disease biology, including: 1) the effects of global change on disease dynamics, 2) benefits of wildlife conservation for human health, and 3) the use and development of molecular tools that illuminate the biology of pathogen transmission.

Tara Bell works with teachers to provide professional development in STEM as a specialist at Booker T. Washington STEM Academy (BTW), a public magnet school in Champaign Unit #4 School District. She cultivates partnerships with University of Illinois at Urbana-Champaign resources and the community to enhance STEM instruction at the school and runs a state-of-the art STEM lab. Bell is a full-time doctoral student in Curriculum and Instruction at UIUC. She is also President-Elect of the Illinois Science Teachers Association and is a regular presenter at both state and national conferences for science educators.

Jodi Bouris has served as a professional development consultant, both privately and for the Peoria Regional Office of Education at Two Rivers Professional Development Center. She also spent 30 years as a classroom teacher, mentoring new teachers, student teachers, and interns.

Amanda Brock is a postdoctoral researcher in the cell and developmental biology department. She recently completed her doctorate at the University of Texas M.D. Anderson Cancer Center in Houston, TX.

Don DeCoste received his undergraduate degree in 1988 and his Ph.D. in 1996 from the University of Illinois at Urbana-Champaign. He joined the General Chemistry teaching faculty in 1996. Prior to this, DeCoste taught high school chemistry and mathematics for four years in Bakersfield, California. In addition to teaching with General Chemistry, DeCoste developed and teaches Chemistry 495, a course designed for undergraduate and graduate students interested in teaching high school chemistry. He also serves as an academic advisor for students interested in teaching (including those in the MSTC Program), and is the co-author of three chemistry textbooks.

Lisa Storm Fink is the Project Manager for ReadWriteThink at the National Council of Teachers of English. After teaching grades K-4 for almost 9 years, she brought her varied experiences fulltime to the ReadWriteThink site: multi-age classrooms, looping, cooperating teacher for preservice teachers, plus a specialization in Remedial Reading. She enjoys sharing the site with others during professional development opportunities as well as with her preservice students at the University of Illinois at Urbana-Champaign.

Juan Manuel Gerardo is a doctoral student at the University of Illinois at Urbana-Champaign. He has been teaching mathematics methods courses for several years and has worked with Dr. Rochelle Gutierrez to develop professional development opportunities for teachers around issues of social justice.

Sue Hokkanen is a 7th grade science teacher at Colin Powell Middle School in Matteson, IL. She is entering her 6th year of teaching science and is an alumnus of the NSTA New Science Teacher Academy and EnLiST at the University of Illinois at Urbana-Champaign. Hokkanen also works part-time for the NSTA as an Online Advisor in the NSTA Learning Center and as an adjunct web-seminar moderator. She is passionate about integrating strong pedagogical practices into science education to help students develop a life-long interest in science and strong scientific literacy skills.

Prashant Jain is an Assistant Professor of Chemistry at the University of Illinois at Urbana-Champaign. He received his B.Tech. from the Institute of Chemical Technology in Mumbai, India in 2003 and his Ph.D. in Physical Chemistry from Georgia Tech in 2008. His group (<http://www.nanogold.org>) works on nano-optics and molecular imaging with the goal of understanding and controlling energy transport, light-matter interactions, and chemical reactions at nanometer length scales.

As Education Coordinator for the University of Illinois at Urbana-Champaign's Nano-CEMMS Center, **Carrie Kouadio** has developed science and engineering educational resources, taught numerous K-12 students, and provided teacher professional development in many conferences and institutes. She has developed Nano-CEMMS' educational kits, including a kit now used in Project Lead the Way's *Gateway to*

Technology curriculum. In addition to her work as Education Coordinator, she has worked in public and private school settings as a science teacher and has experience teaching science to K-16 students. Kouadio currently also works for the Center for Nanoscale Science and Technology supporting nanotechnology research efforts at the University.

Daniel Kuchma has been on the faculty of the department of Civil and Environmental Engineering at the University of Illinois at Urbana-Champaign since 1997. He has worked on a variety of consulting projects involving offshore structures, hydroelectric dams, towers, buildings and specialty structures. Kuchma has taught graduate and undergraduate courses on structural dynamics, statics, reinforced concrete, prestressed concrete, and also on experimental methods. Kuchma is the recipient of a National Science Foundation CAREER Award on “Tools and Research to Advance the Use of Strut-and-Tie Models in Education and Design.” He has also been included on the list of outstanding instructors at the University of Illinois at Urbana-Champaign.

David Leake has been sharing the stars with kids at the William M. Staerke Planetarium at Parkland College for 23 years. Currently the director of the planetarium, Leake also teaches Astronomy and Physics as an associate professor in the Natural Sciences department at Parkland. He is also the current president of the Great Lakes Planetarium Association.

Amos Lee is a 5th grade teacher at Stratton Elementary School. He has taught 7 years for Champaign Unit #4 in 5th, 7th, and 8th grades. He has taught math at all three grade levels and is currently a doctoral student at the University of Illinois at Urbana-Champaign. He is in the Math, Science, and Technology division within the Curriculum and Instruction Department.

Tina Lehr’s role in teacher leadership began when EnLiST, a NSF grant awarded to the University of Illinois at Urbana-Champaign and Urbana School District 116 partnered to fund a STEM Coaching position at the middle school level. Lehr’s role was to build leadership capacity and create sustainable improvements in teachers’ use of hands-on, project-based STEM instruction with students. The district is committed to STEM education, and this year developed a new leadership position, promoting Tina to District STEM Coordinator.

Erin Lodes is currently an instructional coach at Urbana Middle School in Urbana, Illinois, where she previously spent six years in the classroom as an instrumental music and media technology teacher. She has taught workshops and helped develop curriculum throughout the Midwest focusing on educational technology. In 2011, she was designated

as an Apple Distinguished Educator and is an active member of the ADE (Apple Distinguished Educator) community.

Joe Muskin has an extensive background in teaching, research, curriculum development and instructional design. He has taught several years in public and private schools, conducted university research in genetics, and designed curricula for a large company. Muskin is currently the Education Coordinator for the Nano-CEMMS project at the University of Illinois at Urbana-Champaign. He has presented his work at numerous state and national science teacher conferences and written articles for education publications, all based on the innovative labs he designs for students.

Maria Owens earned a BA in Education and an MA in Educational Leadership from Northern Illinois University. Her teaching and school administration career began in Chicago Public Schools and later included Naperville D203, Kaneland D302, and East Maine D63. Most recently, Owens has been with the DuPage County Regional Office of Education where she initiated and supported beginning teacher induction/mentoring programs in school districts throughout the County.

Joaquin Rodriguez-Lopez is an assistant professor of chemistry at the University of Illinois at Urbana-Champaign. In the last two years he has participated in conferences and hands-on training workshops for teachers in the K-12 level in Puerto Rico, where both experimental and conceptual strategies have been introduced to teachers to increase the participation of children in science. His research focuses on the development of new techniques based on electrodes and light for studying materials for alternative energy sources and batteries.

Each year, **Eric Snodgrass** guides over 1,500 students through the wild side weather in ATMS 120: Severe and Hazardous Weather. Snodgrass also teaches ENSU 310: Renewable and Alternative Energy for the Environmental Sustainability Program. He advises all undergraduate majors and minors in atmospheric science (~100 students) and supervises graduate teaching assistants. Snodgrass' research initiatives focus on K-12 science education as well as weather forecasting applications in financial markets. He has recently been awarded the LAS Teaching Excellence award and the Campus Teaching Excellence Award.

Erica Thieman brings experience from both the secondary and post-secondary agriculture classrooms. After working as a high school agriculture educator for five years in both rural and urban communities, she has spent the last four years of her professional career pursuing her Ph.D. at the University of Missouri. Thieman's research interests include studies on the resiliency of agricultural educators as it relates to stress levels,

comparative analyses of stress-related experiences as they apply to male and female educators, and the role of mentors for novice educators.

Tony Wong is an associate professor in the Department of Astronomy at the University of Illinois at Urbana-Champaign. Previously, he held research positions at the Australia Telescope National Facility and the University of New South Wales. He primarily studies the interstellar medium (ISM) in nearby galaxies and its relation to star formation.

Networking Activities
July 30, 4:30 – 5:00

Please share with the group:

- Your name
- Your teaching assignment
- Where you teach

Please complete the following “3-2-1” activity and share with your group:

3 ideas you learned today from sessions or from each other:

2 questions you still have:

1 item you heard at the conference that you disagree with:

July 31, 1:00 – 1:30

If you haven't already done so, please share with the group:

- Your name
- Your teaching assignment
- Where you teach

Action Plan

What will you take away from the conference? This could be a new lesson plan, a new unit, or even a new approach to a particular content area. Describe your plan of action below, and share your goals with the rest of your group:

Goals:	
Desired Outcomes:	
Timeline:	
Resources Needed: (this may include people)	
Duration:	
Tasks	1. 2. 3. 4. 5. 6.

An Invitation to Join the INTC Partnership Board

Partnership Board membership is open to individuals and institutions who want to help direct and actively participate in INTC activities. Members volunteer to serve as part of temporary task-based groups and are sometimes asked to recruit others or to assist as necessary. If you would like to participate, please complete this form online at:

<http://intc.education.illinois.edu/page/invitation-join-intc-partnership-board>

Name _____ Title/Position _____

Institutional Affiliation _____

Address _____

E-mail _____ Telephone Number _____

Below is a list of our current working groups. Please check those of which you would like to be a part.

____ 2014 5th Annual Beginning Teacher Conference Planning

____ 2014 9th Induction and Mentoring Conference Planning (Conference is in February)

____ Other (Please explain.) _____



Special Thanks to Conference Sponsors

The Illinois New Teacher Collaborative would like to extend special thanks to its sponsors that make this conference possible including Governors State University, the Research Park at the University of Illinois, and the College of Education at the University of Illinois at Urbana-Champaign.



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<http://intc.education.illinois.edu/events/stem2013/archive>



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<https://www.facebook.com/IllinoisNewTeacherCollaborative>



STAY INFORMED: GET INTC UPDATES

Joining our listserv will keep you apprised of INTC's professional development offerings, conferences, and induction and mentoring news, including the INTC Newsletter.

The screenshot shows the homepage of the Illinois New Teacher Collaborative (INTC). At the top, there is a navigation bar with the INTC logo, the text "Illinois New Teacher Collaborative", and a login section with fields for "username or e-mail" and "password", along with links for "Create new account" and "Forgot your password?". Below the navigation bar is a "HOME" menu with links to "About INTC", "INTC Impact", "Online Communities", "ISBE Funded Programs", "Resources", "Events", "Join INTC", "Interest Groups", and "My Unread". The main content area features a "Welcome to INTC" section with a date "Mon, 12/07/2010 - 13:54 -- jahn". The text describes the INTC as the forefront of providing statewide leadership for promoting new teacher induction and mentoring programs. A "New Teaching Professionals" section includes four small images of diverse individuals. On the right, there are sections for "My groups" (not a member of any groups), "Updates" (5th Annual INTC Induction and Mentoring Conference, "Digging Deeper: Using the Induction and Mentoring Continuum for Program Advancement", February 23-24, 2010, Hilton Springfield, Register for the conference at the conference page, Report Available), and "Report Available" (The "State-Funded Induction and Mentoring Programs in Illinois Report (November 2009)" is now available, Click here for more information).

Visit

<http://intc.education.illinois.edu/signup>



Video and/or Audio Recording Policy

The Illinois New Teacher Collaborative does not have University of Illinois Institutional Review Board approval for participants to make video and/or audio recordings or take photographs of conference activities unless said recordings and photographs will not be used for public dissemination.

We regret any inconvenience this may cause. Thank you for your understanding.

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Jeff Kohmstedt*
Outreach Coordinator
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*only full-time staff member

List of Participants

(as of July 22, 2013)

Mike	Alderson	Fairview Elementary School
Elin	Anderson	Belvidere Washington Academy
Amanda	Andres	Pontiac CCSD 429
Phoebe	Balentyne	Sycamore High School
Philip	Bazile	Posen Elem School
Arleta	Bazile	Robbins Kellar School
Mary Kay	Bessler	Dixmoor Rosa L Parks Middle School
Rosalyn	Blaylock	Kankakee John Kennedy Middle Grade School
Haley	Bork	Plainfield Richard Ira Jones Middle School
Allison	Bosslet	Belvidere Washington Academy
Ashley	Bozue	Limestone Middle School
Kate	Burke	Decatur Hope Academy
Amanda	Chang	Chicago Westinghouse High School
Leslie	Chapman	Highland CUSD 5
Michelle	Chavers	Limestone Middle School
Claudia	Chavez-Miranda	Brooks Middle School, Valley View School District 365U
Kara	Cioni	Limestone Middle School
Michelle	Collins	Plainfield Heritage Grove Middle School
Jodi	Conrad	Glen Ellyn Abraham Lincoln Elem School
Dawn	Conroy	Robbins Kellar School
Brendan	Crosby	Richard Ira Jones Plainfield
Michele	Davis	Harvey Washington Elem School
Amanda	Dawson	Chicago Heights Washington-McKinley Elem Sch
Rohail	Dean	Chicago West Ridge Elem School
Curt	Dedic	Algonquin Harry D Jacobs High School
Sarah	Dexter	Herscher Middle School
Alecia	Dixon	Chicago Heights Washington-McKinley Elem Sch
Angela	Dixon	Dolton Franklin Elementary School
Denise	Dodd	Bolingbrook Pioneer Elementary School
Samantha	Douse	Urbana Middle School
Amy	Duhig	Harvey Washington Elem School
Lisa	Dykstra	Washington Academy Belvidere
Jennifer	Edmonds	Herscher CUSD 2
Melinda	Elliott	Governors State University
Laura	Englehart	South Elgin Fox Meadow Elementary School
Carolina	Escudero	Carpentersville Middle School
Ashley	Fleming	Chicago Manley Career Academy High School
Judith	Flodin	Washington Academy, District 100

Joseph	Frieders	District 148 Washington Elementary
Linda	Frye-Kerr	Calumet Park Calumet Public SD 132
Jennifer	Furst	Belvidere CUSD 100 Washington Academy
Dianna	Galante	Governors State University
Katrina	Garrett	Washington Elementary School District 148
Megan	Garza	Dolton Lincoln Junior High School
Elizabeth	Gibson	Kankakee John Kennedy Middle Grade School
Joyce	Glover	Berwyn South SD 100
Cynthia	Gonzalez	Bloom Trail High School District 206
Carol	Grant	Peotone High School
Pamela	Guimond	Governors State University
Justin	Harrison	Altamont CUSD 10
LeRoy	Haynes	Washington Elementary School
Kelly	Hebert	Dixmoor Rosa L Parks Middle School
Brian	Heuer	Kimball
Alison	Jacob	Plainfield Richard Ira Jones Middle School
Angela	Jevremovic	Rockton Hononegah High School
Shemeca	Johnson	Chicago Heights Bloom Twp HSD 206
Heather	Johnson	Harvey Washington Elem School
Kristin	Kaminski	WheatonCUSD 200
Corey	Kasten	Chicago Canty Elem School
Soo	Kim	Carpentersville Middle School
Daniel	Kim	Maple Park Kaneland Senior High School
Alex	King	Limestone Middle School
Rebecca	Kornack	Emmett Till Math & Science Academy
Christine	Kotarba	Glen Ellyn Abraham Lincoln Elem School
Kristen	Kuntz	Washington Elementary School
Chelsey	Lee	Belvidere Washington Academy
Dave	Linde	Chicago Heights Wilson Elem School
Kristin	Linde	Roosevelt
Paige	Lovejoy	Riverdale Washington Junior High
Cheryl	Lucas	Richard Ira Jones Middle School
Kristan	Manning	Belvidere Washington Academy
Patti	Mapes	Stockton Elem School
Bart	Masellis	Park Ridge Maine Township HSD 207
James	Mccarthy	Washington Junior High District148
James	McCarthy	Riverdale Washington Junior High
Anna	McKenzie	Rosario Castellanos
Meredith	McKnight	Washington Academy, District 100
Sally	Medearis	Belvidere Washington Academy
Johnnetta	Miller	Harvey SD 152
Vincent	Mkhwanazi	Matteson Colin Powell Middle Sch

Kaitlyn	Monbrum	Coal City High School
Tamra	Neal	Decatur Hope Academy
April	Ness	Emmett Till Math & Science Academy
Tiffany	Olson	Peoria Manual Academy
Pablo	Ortega	Wheaton Franklin Middle School
Sabrina	Palmisano	Plainfield Heritage Grove Middle School
Laura	Palukaitis	Plainfield Richard Ira Jones Middle School
Freddie	Parks	Harvey Maya Angelou
Karen	Peterson	Governors State University
Andrew	Pisanko	Carpentersville Middle School
Jason	Pitak	Chicago Belmont-Cragin Elem School
Michelle	Rawleigh	Plainfield Timber Ridge Middle School
Nick	Reicher	Wheaton North High School
Martha	Renteria	Heritage Elementary School
Kim	Repking	Manito Midwest Central CUSD 191
Nicole	Rogers	Dixmoor Rosa L Parks Middle School
Claire	Ruch	Kankakee King Middle Grade School
Renee	Rutherford	Kellar Middle School, Posen-Robbins SD 143.5
Beth	Rychtanek	Highland Elementary School
Gerald	Sala	Momence High School
Ricardo	Saldivar	Calumet Park Burr Oak Academy
Leslie	Sanchez	Chicago Heights Washington-McKinley Elem Sch
Justin	Sanders	Governors State University
Penny	Sandoz	Abraham Lincoln Elementary
Frank	Savaglio	Chicago Heights Bloom High School
Jessica	Schad	Urbana Middle School
Anthony	Schmidt	Chicago Lake View High School
Amy	Schwartz	Wheaton Edison Middle School
Kelly	Sester	Plainfield Richard Ira Jones Middle School
Angela	Severino	Plainfield East High School District 202
Tressa	Sharma	Belvidere High School
Joseph	Slawinski	Kankakee SD 111
Stacy	Sniegowski	City of Chicago SD 299
Debra	Stachovic	Dixmoor Rosa L Parks Middle School
Rebecca	Steckel	Jacksonville High School
Susan	Stratton	Park Forest 21st Century Preparatory Center
Dr. Rosa	Syphers	Kimball Middle School
Mark	Taylor	Limestone Middle School
Kathleen	Troyer	Downers Grove Comm H S Dist 99 - South High School
Alexander	Valencic	Urbana Wiley Elementary School
Amos	Vaughn	Calumet Park Calumet Public SD 132
Danielle	Wall	Wheaton CUSD 200 Wheaton North High School
Carrie	Ward	Orland Hills Victor J Andrew High School

Tiffany	White	Dolton Lincoln Junior High School
Lynn	Wiedelman	Champaign Centennial High School
Chardae	Wiggins	Robbins Kellar Middle School Posen-Robbins ESD 143.5
Frank	Williams III	Harvey Washington Elem School
Sharmett	Wilson	Lincoln CHSD 170
Stacy	Witts	Decatur Thomas Jefferson Middle School
Veronica	Woods	Calumet Park Burr Oak Academy
Valerie	Wright	Chicago Heights Bloom Twp HSD 206
Belinda	York	Chicago Lewis Elem School
Rima	Zachariah	Calumet Park Calumet Public SD 132
Nancy	Zider	Bolingbrook Pioneer Elementary School

