



STEM Education + Workplace Partnerships

Governor's 2019 Future Ready Iowa Summit



APRIL 30, 2019

**IOWA EVENTS CENTER
730 THIRD STREET
DES MOINES, IA 50309**

BROUGHT TO YOU BY:



SUMMIT INFORMATION

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Kim Reynolds
GOVERNOR

OFFICE OF THE GOVERNOR

Adam Gregg
LT. GOVERNOR

April 30, 2019

Dear Summit Participants,

Welcome to the Governor's 2019 Future Ready Iowa Summit, which focuses on expanding STEM education and workplace partnerships. Iowans together are creating a roadmap for offering engaging, real-world learning experiences to students in high schools, middle schools and elementary schools through dynamic school-business partnerships. Now, our challenge is building on this momentum.

Increasing access to work-based learning will help more students prepare for the careers of today and tomorrow. It also will foster deeper connections to their communities and their state. This must include reaching more students in rural areas with fewer employers and underrepresented minority students.

Today's summit is intended to share what works, learn about what gets in the way and inspire next steps. We are thrilled that speakers include Pallavi Verma of Accenture, former NASA astronaut Peggy A. Whitson, Iowa leaders from business, labor and education, and students from across the state. We appreciate our contributors' generous financial support and the volunteers helping with the summit.

Thank you for making time to attend today's summit and for considering what else you can do in your community to expand preK-12 STEM education and workplace partnerships. Meeting this challenge promises to be life-changing for many more students.

Sincerely,

Handwritten signature of Kim Reynolds in black ink.

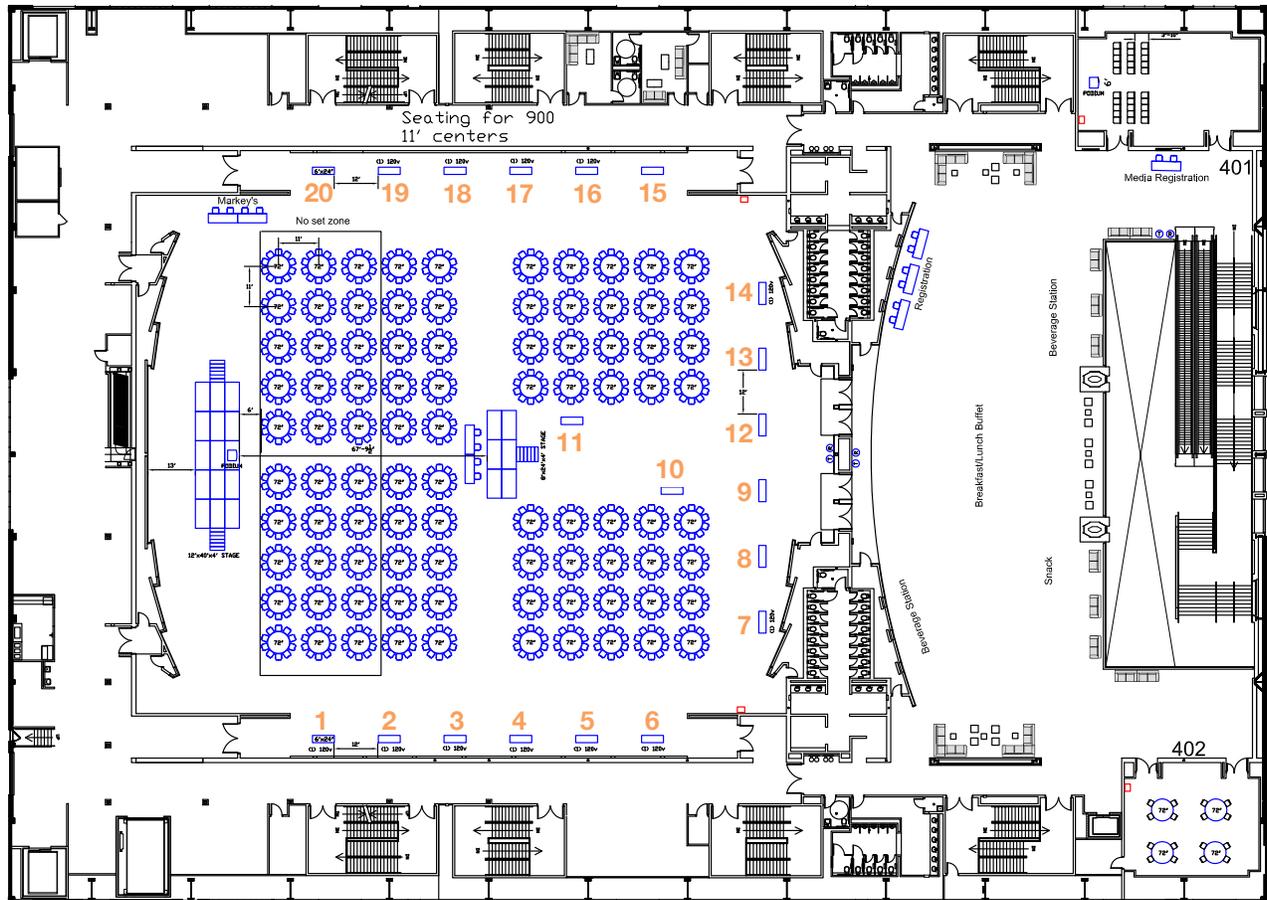
Kim Reynolds
Governor of Iowa

Handwritten signature of Adam Gregg in black ink.

Adam Gregg
Lt. Governor of Iowa

GENERAL SESSION MAP

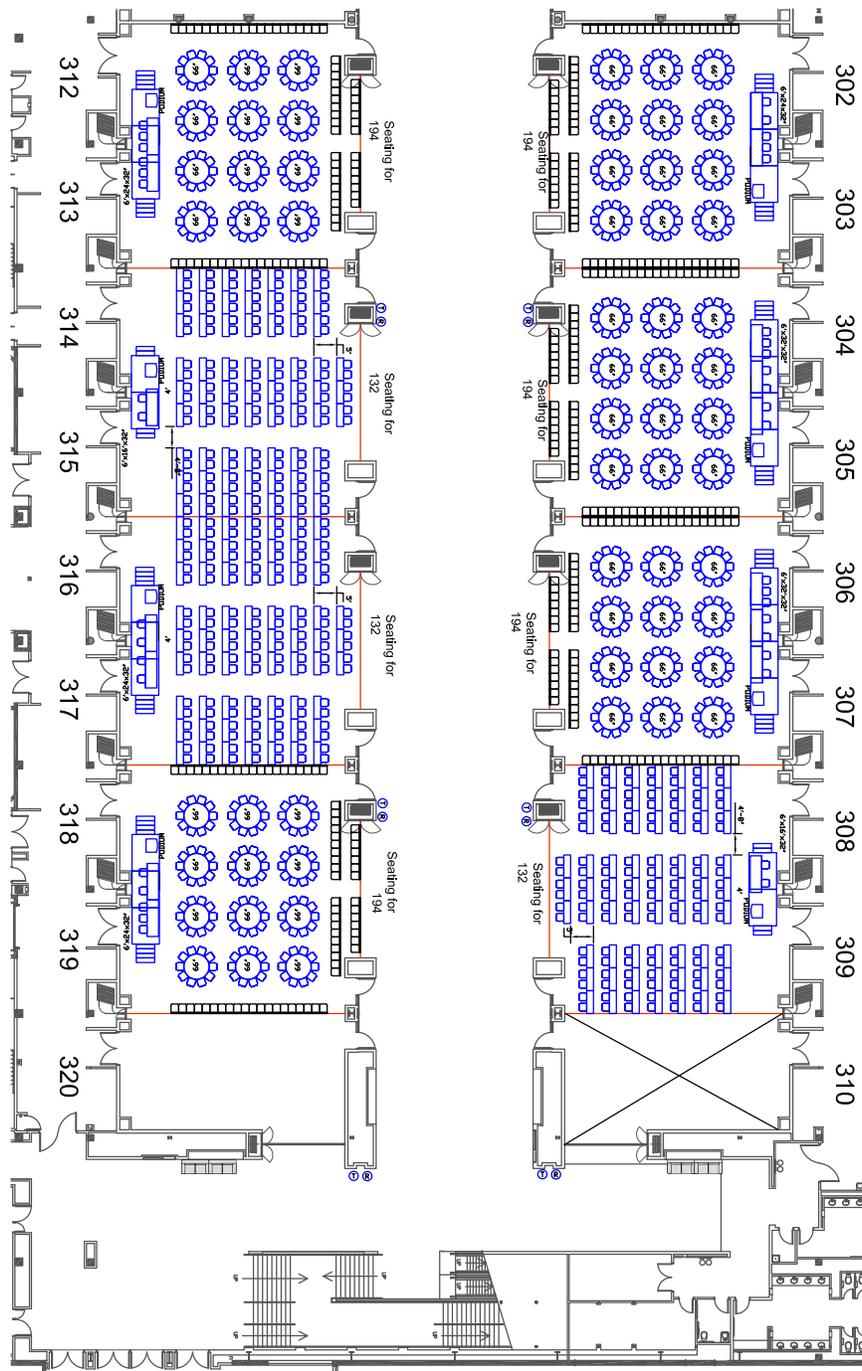
Ballroom A and Speed Showcases



- | | | |
|---|---|---|
| <p>1 Teaching Kids to be Thinkers Starting in Preschool with PLTW</p> <p>2 Growing STEM in the Community: Planning a STEM Festival</p> <p>3 Work-Based Learning Survey</p> <p>4 First Year of a Manufacturing Sector Partnership Startup</p> <p>5 Utilizing Industry Partnerships to Grow STEM Programs</p> <p>6 Quad City Engineering and Science Council</p> <p>7 Loess Hills Computer Programming Specialty School</p> <p>8 Nevada Central Elementary MakerSpace</p> | <p>9 Grow Lee—Bringing Together a Divided County Through Workforce</p> <p>10 iJAG: Relationships Build a Brighter Workforce</p> <p>11 Connecting Today's Students to Tomorrow's Careers</p> <p>12 IKM Manning Gala Committee</p> <p>13 Work-Based Learning in the Elementary School—St. Mary's Parish and School</p> <p>14 No Boundaries Middle School</p> <p>15 Jefferson Rural Forge</p> <p>16 IKM-Manning F.I.R.E. — Finding Innovative Reasons to Excel</p> | <p>17 Collaboration is the New Competition</p> <p>18 Computer Science: Coding Today for Future Success—Bringing Coding to Rural Northeast Iowa</p> <p>19 Bridging the Gap Between Science and Start-Up! NeuroSMART: A Neuroscience Student Mentoring and Research Training Program</p> <p>20 The Waterloo Career Center</p> |
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Breakout Sessions and Room Assignments



SESSION 1 // ROOMS 302–303

STEM BEST®—Businesses Engaging Students and Teachers

SESSION 2 // ROOMS 304–305

Registered High School Apprenticeships

SESSION 3 // ROOMS 306–307

STEM Teacher Externships—A Win-Win for Business and Education

SESSION 4 // ROOMS 308–309

The Future Ready Iowa Clearinghouse for Work-Based Learning: Connecting Schools and Business Partners Around Authentic Learning Projects

SESSION 5 // ROOMS 312–313

Who Can Connect You? Meet the People Who Facilitate Education-Workplace Partnerships

SESSION 6 // ROOMS 314–315

Did You Know? Licensure, Crediting and Other Rules Governing Work-Based Learning

SESSION 7 // ROOMS 316–317

How to Prepare to Operate Work-Based Learning Partnerships for Students: Hear from Experts

SESSION 8 // ROOMS 318–319

Quality Pre-Apprenticeships at the High School Level: Early Implementation Successes

Descriptions p. 13

SUMMIT AGENDA

APRIL 30, 2019 (Tuesday)

8:00–9:00 A.M.

REGISTRATION—Continental Breakfast and Networking

MC: Jeff Weld, Executive Director of the Governor's STEM Advisory Council and STEM Consultant for the White House Office of Science and Technology Policy

9:00–9:05 A.M.

WELCOME—The Honorable Adam Gregg, Lieutenant Governor of Iowa

9:05–9:15 A.M.

FUTURE READY IOWA AND STEM: NEXT STEPS—
The Honorable Kim Reynolds, Governor of Iowa

9:15–9:45 A.M.

EMERGING TECHNOLOGIES ARE CHANGING HOW WE GROW AND PREPARE TOMORROW'S WORKFORCE—Pallavi Verma, Senior Managing Director, U.S.—Midwest for Accenture

Followed by Questions from Jefferson, Iowa, Greene County High School Students in Computer Science

- Aidan Johnson (Junior)
- Linsey Kitt (Senior)
- Cody Maston (Sophomore)
- Mitchell Stevens (Junior)

9:45–9:50 A.M. **BREAK**

9:50–10:30 A.M.

WORK-BASED LEARNING CHANGES EVERYTHING: A PANEL OF BUSINESS LEADERS, TEACHERS AND STUDENTS Followed by Questions from the Audience

Moderators:

- Debi Durham // Director of the Iowa Economic Development Authority and Executive Director of the Iowa Finance Authority
- Jeff Weld // Executive Director of the Governor's STEM Advisory Council

Panelists:

- Rob Cunningham // Mathematics Educator, Spirit Lake High School
- Raquel Faulkner // Senior Engineer, Commercial Avionics-System, Collins Aerospace
- Kristen Rickey // Superintendent, West Delaware County Community School District
- Andy Roberts // Business Manager, Plumbers & Steamfitters Local Union 33, Des Moines
- Michael Thomas // Junior, Albia High School
- Teri Vos // Outreach and Community Relations Manager, Vermeer Corporation

10:30 A.M.–12:15 P.M.

20 SPEED SHOWCASES: Interactive Work-Based Learning Exhibits

Moderator:

- Carrie Rankin // Managing Director of the Governor's STEM Advisory Council

12:15–1:00 P.M. **LUNCH**

1:00–1:30 P.M.

STEM TO THE STARS—Peggy A. Whitson, Ph.D.,
Space and Science Consultant, Former NASA Astronaut,
Followed by Questions from the Audience

1:30–1:40 P.M.

AMERICA'S STRATEGY FOR STEM EDUCATION—
Jeff Weld, Executive Director of the Governor's STEM
Advisory Council and STEM Consultant for the White
House Office of Science and Technology Policy

1:40–1:45 P.M.

PARTNERSHIPS LIFT EVERYONE—Roger Hargens,
STEM Council Co-Chair and President and CEO,
Accumold

1:45–1:50 P.M.

TRANSITION TO BREAKOUT SESSIONS

1:50–2:40 P.M.

BREAKOUT SESSIONS

1. STEM BEST®—Businesses Engaging Students and Teachers
2. Registered High School Apprenticeships
3. STEM Teacher Externships—A Win-Win for Business and Education
4. The Future Ready Iowa Clearinghouse for Work-Based Learning: Connecting Schools and Business Partners Around Authentic Learning Projects
5. Who Can Connect You? Meet the People Who Facilitate Education-Workplace Partnerships
6. Did You Know? Licensure, Crediting and Other Rules Governing Work-Based Learning
7. How to Prepare to Operate Work-Based Learning Partnerships for Students: Hear from Experts
8. Quality Pre-Apprenticeships at the High School Level: Early Implementation Successes

2:40–2:45 P.M.

TRANSITION TO MAIN BALLROOM

2:45–3:30 P.M.

MYTH BUSTING: OVERCOMING OBSTACLES TO EDUCATION-WORKPLACE PARTNERSHIPS—

A Panel Discussion, Followed by Questions from the Audience

Moderators:

- Beth Townsend // Director of Iowa Workforce Development
- Ryan Wise // Director of the Iowa Department of Education

Panelists:

- Kris Byam // Principal, Boone High School, Boone Community School District
- Rebecca Cole, Senior // West Delaware High School
- Dan Cox // Chief Administrator, Northwest Area Education Agency
- Ann Lebo // Executive Director, Iowa Board of Educational Examiners
- David Ottavianelli // Director, Special Projects, Labor Relations, John Deere
- Greer Sisson // Director, Iowa Office of Apprenticeship, U.S. Department of Labor

3:30–3:40 P.M.

CLOSING REMARKS, INCLUDING ANNOUNCEMENT OF THE SIX IOWA COMPUTER SCIENCE IS ELEMENTARY AWARDEES—

The Honorable Kim Reynolds, Governor of Iowa

A special **THANK YOU** to Logan Shine, the Governor's Economic Development Policy Advisor, for serving as the "Voice of the Summit" and to all of the dedicated volunteers who helped make the **STEM Education + Workplace Partnerships: Governor's 2019 Future Ready Iowa Summit** an inspiration for growing education-workplace partnerships across Iowa!

SPEED SHOWCASES

SHOWCASE 1

TEACHING KIDS TO BE THINKERS STARTING AT THE PRESCHOOL LEVEL, THROUGH PLTW LAUNCH

Clear Creek Elementary is the lone school in Iowa participating in the PreK Beta this school year. With the help of two instructional coaches and an “all hands on deck” approach, Project Lead The Way (PLTW) has been implemented across the board, preschool through fifth grade. Experience the excitement as instructional coaches along with classroom teachers share both their struggles and successes throughout their first two years of implementation.

Presenters:

- **KRISTIN EBELING** // TLC Instructional Coach, Email: kebeling@clearlakeschools.org
- **DOUG GEE** // Superintendent, Email: dgee@clearlakeschools.org, Tel: (641) 357-2181
- **JANESE HAND** // Preschool Teacher, Email: jhand@clearlakeschools.org
- **EMILY HILL** // TLC Instructional Coach and Innovations Coordinator, Email: ehill@clearlakeschools.org

SHOWCASE 2

GROWING STEM IN THE COMMUNITY: PLANNING A STEM FESTIVAL

STEM Festivals are unique experiences in the sense they bring together teachers, community members and families to engage in STEM activities and discussions. This session will discuss how to effectively set up a STEM Festival so children get the most out of the experience.

Presenters:

- **JESSE WILCOX, PH.D.** // Assistant Professor of STEM Education, Simpson College, Email: jesse.wilcox@simpson.edu
- **KATIE WILSON** // Executive Director, Chariton Chamber/Mainstreet, Email: director@cacmsia.com
- **RONDA MORRETT** // Youth Outreach Educator, ISU Extension Lucas County, Email: rmorrett@iastate.edu

SHOWCASE 3

IOWA WORK-BASED LEARNING CLEARINGHOUSE

In January 2019, Iowa Workforce Development, in coordination with the Iowa Department of Education and Iowa’s Area Education Agencies (AEA) Online, conducted a survey of 40,000 Iowa employers gauging their interest in participating in work-based learning activities. The results of the survey will assist in populating the Iowa Work-Based Learning Clearinghouse. Employers from nearly all areas of the state are interested in providing students and/or teachers with opportunities ranging from classroom speakers to real-world work projects.

Presenters:

- **RYAN MURPHY** // Bureau Chief, Labor Market Information Division, Iowa Workforce Development, Email: ryan.murphy@iwd.iowa.gov
- **JAKE WELCHANS** // Project Manager, Work-Based Learning Clearinghouse, Iowa Department of Education, Email: jake.welchans@iowa.gov

SHOWCASE 4

FIRST YEAR OF A MANUFACTURING SECTOR PARTNERSHIP START-UP

Why our sector partnership was needed, who were the early-stage drivers, a unique element to our sector group, first-year goals and activities, struggles, successes, supporting resources and partners discovered, and future plans.

Presenter:

- **KRISTI HEISINGER** // Facilitator & Career Coach, Northwest Iowa Manufacturers Sector Partnership, Email: kheisinger@nwicc.edu, Tel: (712) 324-5061

SHOWCASE 5

UTILIZING INDUSTRY PARTNERSHIPS TO GROW STEM PROGRAMS

In this presentation, you will learn about how high schools are utilizing strong industry partnerships to offer new educational opportunities to students utilizing modern technology. The presentation will cover creating industry advisory boards and developing real-world learning activities for industrial technology educators.

Presenter:

- **MATT HANSEN** // 9th–12th Industrial Trades Instructor, Marcus-Meriden-Cleghorn-Remsen Union Community Schools,
Email: matt.hansen@mmcruroyals.org,
Tel: (712) 376-4171

SHOWCASE 6

QUAD CITY ENGINEERING & SCIENCE COUNCIL (QCESC)

QCESC's mission is to promote and support engineering, science and technical professionals and associated societies in the Quad City Region, and to encourage and support students to study in STEM-related fields. Partnering is done through Promotion, Volunteerism and Funding. Website: qcesc.org

Presenter:

- **DAN D'ALESSANDRO** // President QCESC,
Email: dandales99@gmail.com,
Tel: (319) 404-5993

SHOWCASE 7

LOESS HILLS COMPUTER PROGRAMMING SPECIALTY SCHOOL

Loess Hills Computer Programming Specialty School has been the inspiration for the "Computer Science Is Elementary" grant program. Chat with the school principal, a teacher, a student and a business partner to learn what has been successful and the challenges faced along the way. Interact with the resources they have been using and become a "coder" yourself.

Presenters:

- **JOHN BEECK** // Principal,
Email: beeckj@live.siouxcityschools.com,
Tel: (712) 279-6843

- **RENEE BEAULIEU** // Treasurer/CFO, Thompson Innovation/Thompson Electric Co.,
Email: rbeaulieu@tec-corp.com,
Tel: (712) 251-4513
- **JEFF GACKE** // Second Grade Teacher,
Email: gackej1@live.siouxcityschools.com
- **LANGSTON SAINT** // Student

SHOWCASE 8

NEVADA CENTRAL ELEMENTARY MAKERSPACE

Students will share their own journey of creating a MakerSpace for the school from brainstorming, to creating a budget, to helping other students know how to use the space! Students will also share how elementary-age students can learn more about science, technology, engineering and mathematics through different activities and projects.

Presenters:

- **MISS DAVIS AND THE DAVIS KIDS** //
Email: mdavis@nevadacubs.org

SHOWCASE 9

GROW LEE – BRINGING TOGETHER A DIVIDED COUNTY THROUGH WORKFORCE

Of Iowa's 99 counties, Lee County is the only one with two county seats. It's also consistently in the top 5 in unemployment; however, our industries can't find enough workers to meet their needs. Dana Millard, with Lee County EDG, will talk about how the county was brought together and is developing a talent pipeline. Website: www.LeeCountyEDG.com

Presenter:

- **DANA MILLARD** // Economic Development Project Director, Lee County EDG,
Email: dmillard@leecountyedg.com,
Tel: (319) 931-7182

SPEED SHOWCASES

SHOWCASE 10

iJAG: RELATIONSHIPS BUILD A BRIGHTER WORKFORCE!

Iowa Jobs for America's Graduates' (iJAG) cutting-edge approach to connecting students from underrepresented communities to STEM careers starts and ends with strong relationship ties to employers. By having high expectations paired with support, iJAG students are finding their "fit" in some of Iowa's most in-demand fields like Health Care, Advanced Manufacturing, IT and Skilled Trades. Stop by our showcase to learn more about iJAG and hear why relationships matter from students and employers!

Presenters:

- **JENNIFER MEIER** // Manager, Strategic Partnerships, iJAG, Email: Jennifer.Meier@iJAG.org
- **CARLY VOLTZ** // Director, Strategic Advancement, iJAG, Email: Carly.Voltz@iJAG.org

SHOWCASE 11

CONNECTING TODAY'S STUDENTS TO TOMORROW'S CAREERS

Come learn how to utilize your Iowa Intermediary Network to build bridges between classrooms and businesses. Hear how you can partner with a regional intermediary to compliment your existing MOC/STEM program. Our goal is to support educators in preparing students for the modern workforce. Intermediaries establish connections with local employers to provide relevant, work-based learning activities, create career exploration opportunities, and improve workplace readiness skills for students to assist them in making informed post-secondary education and career decisions.

Presenters:

- **JULIE ANDERSON** // Career and Work-Based Learning Coordinator, Northeast Iowa Community College, Email: andersonju@nicc.edu
- **STACY ASCHER** // Cedar Valley West Work-Based Learning Coordinator, Hawkeye Community College, Email: cvwascoordinator@gmail.com
- **ANN SCHLAPIA** // Workplace Learning Network Coordinator, Southwestern Community College, Email: schlapia@swcciaowa.edu
- **AMY STEENHOEK** // Work-Based Learning Coordinator, Des Moines Area Community College Career Discovery Network, Email: absteenhoek@dmacc.edu

- **ERIN SWANCUIT** // Work-Based Learning Program Coordinator, Cedar Valley Career Connections-Hawkeye Community College, Email: erin.swancutt@hawkeyecollege.edu

SHOWCASE 12

IKM-MANNING GALA COMMITTEE

The Gala Committee is a fund-raising committee that raises monies specifically for STEM education and 21st Century Learning Skills for K-12. We recruit donations and sponsorships of the STEM projects at IKM-Manning, and then once a year we have the Gala Celebration, which features many live and silent auction items as well as food and entertainment. This past year we raised more than \$105,000 that will go to the IKM-Manning Foundation to be used on STEM projects.

Presenters:

- **JEREMY PUCK** // IKM-Manning Gala Committee Member, Email: jpuck@puck.com
- **JEAN STADTLANDER** // IKM-Manning Gala Committee Chair, Email: tjksstadt@mmctsu.com
- **TODD STADTLANDER** // IKM Manning Gala Committee Chair, Email: tstadtlander@manninins.net
- **BETH WILLIAMS** // IKM Manning Gala Committee Chair, Email: rbtm07@yahoo.com

SHOWCASE 13

WORK-BASED LEARNING IN THE ELEMENTARY SCHOOL – ST. MARY'S PARISH & SCHOOL

As a 2018 STEM BEST® model, St. Mary's School (Humboldt) will showcase how they 1) prepare students in grades 1-6 with the foundational interests, skills and competencies for matriculation to middle school STEM coursework; 2) develop a STEM Learning Intermediary Network that will facilitate students and teachers networking with local industrial scientists skilled technicians in various learning environments; and, 3) coordinate technician-in-residency opportunities for educators to learn about local STEM careers and jobs to better guide students in their STEM studies.

Presenters:

- **DIANE DIX** // St. Mary School, Humboldt, Email: ddix@stmaryhumboldt.org

SHOWCASE 14

NO BOUNDARIES MIDDLE SCHOOL (NOBO MS)

No Boundaries Middle School is a student-centered program that promotes learning in a passions-based, real-world setting by connecting curriculum with community. Students will share how their experiences working outside of the classroom in the community have helped them become “future ready.” Modeled after Iowa Big in Cedar Rapids, this program CAN work for 8th graders too!

Presenters:

- **BECKY RIENTS** // 7th Grade Language Arts, Okoboji Middle School, Email: brients@okobojischools.org
- **CARRY MILLER** // ELL K–12 and TAG 5–12, Okoboji Community Schools, Email: cmiller@okobojischools.org
- **STUDENT PRESENTERS** // Ellie Albertoni, Carly Carstens, Paul Conover, Grace Downing, Makenna Helmers, Caden Jostand and Olivia Lorenzen

SHOWCASE 15

JEFFERSON RURAL FORGE

What if the nation’s greatest technologists and innovators could be homegrown right in rural America? We’re taking the charge by bringing epicenters of collaboration, creativity and tech—we call them “Forges”—to rural communities. Training, education and creating careers that keep next-generation skills local and reskilling the existing workforce.

Presenters:

- **LINC KROEGER** // Rural Revitalization Lead, Email: lkroeger@pillartechnology.com
- **DAVID KESSLER** // Principal Software Artisan

SHOWCASE 16

IKM-MANNING F.I.R.E.—FINDING INNOVATIVE REASONS TO EXCEL

Learn how a small district is partnering with business community members. From marketing events to supporting technology needs, this program makes real-world connections to learn soft-skills needed in today’s workforce. The next venture is a student-led business.

Presenters:

- **LUANN LANGE** // Technology Coordinator/STEM BEST® Program Facilitator, IKM-Manning Schools, Email: llange@ikm-manning.k12.ia.us
- **KEVIN LAHNDORF** // Business and CTE Instructor, IKM-Manning High School, Email: klahndorf@ikm-manning.k12.ia.us
- **ASSOCIATE SAM SWEARINGEN**
- **ASSOCIATE CASSIDY WEEKS**
- **ASSOCIATE MACKENZIE WEEKS**

SHOWCASE 17

COLLABORATION IS THE NEW COMPETITION

Leaders with Workplace Learning Connection/Kirkwood Community College (KCC), an Iowa Intermediary, and Iowa City-Cedar Rapids (ICR) Iowa, an eastern Iowa regional economic development organization, will share some lessons learned, successful tips and how to’s in building community coalitions, collaborative goals, and support for work-based and career-connected learning programs.

Presenters:

- **KATE MORELAND** // Director of Career Development, ICR Iowa, Email: kmoreland@iciowa.org
- **LAURIE WORDEN** // Director at Workplace Learning Connection, Kirkwood Community College, Email: laurie.worden@kirkwood.edu

SPEED SHOWCASES

SHOWCASE 18

COMPUTER SCIENCE: CODING TODAY FOR FUTURE SUCCESS: BRINGING CODING TO RURAL NORTHEAST IOWA

Learn how Keystone Area Education Agency (AEA) established the Northeast Iowa Computer Science Collaborative. The collaborative provides coding to students across rural Northeast Iowa, including public and parochial schools. Professional development will be provided for teachers from Code.org and NewBoCo. The professional learning includes specific implementation strategies to recruit and retain diverse classroom rosters in K–12.

Presenters:

- **SAMANTHA DAHLBY** // K–12 Education Coordinator, NewBoCo, Email: samantha@newbo.co
- **TESHA RULEY** // Associate Administrator/Director of Educational Services, Keystone Area Education Agency, Email: truley@aea1.k12.ia.us

SHOWCASE 19

BRIDGING THE GAP BETWEEN SCIENCE AND START-UP! NeuroSMART: A NEUROSCIENCE STUDENT MENTORING AND RESEARCH TRAINING PROGRAM

Most science graduates are poorly equipped to think of their scientific knowledge as the first step toward the production of products/services/technologies that could directly help with discovery and innovation. One way in which to remedy this would be to focus efforts on workforce development through the development of bioscience-business collaboratives. Here we report on a collaborative undertaking between the public school system (Des Moines Public Schools, Central Campus), a major health sciences university (Des Moines University) and a key regional business employer (Kemin Industries), aimed at developing a unique training opportunity for high school students in the combined areas of neuroscience and business. Through the use of a mixed instructional approach, this piloted program provides a one-of-a-kind, quality-over-quantity mentorship design, allowing students to progressively build their knowledge and research skills through working with experts in the fields of neuroscience and business in a semester-long research class. Students receive the unique opportunity to study at a medical school all while obtaining college credit through Des

Moines Area Community College, and also learn to apply their knowledge in project-based learning environments using advanced medical technology. NeuroSMART has had a tremendous impact on female, minority and low-income students: 80% of participants are female, 80% are minorities and 72% are low-income.

Presenters:

- **KACIA CAIN** // College Genetics & Microbiology/ College Anatomy & Physiology/Health Sciences Cluster, Des Moines Public Schools Central Campus/DMACC adjunct professor, Email: kacia.cain@dmschools.org
- **BRENDA FONSECA** // Senior Global Technical Services Manager, Kemin Human Nutrition and Health, Email: Brenda.Fonseca@kemin.com
- **JULIE MEACHEN** // Assistant Professor, Anatomy, Des Moines University, Email: Julie.Meachen@dmu.edu
- **MUHAMMAD SPOCTER** // Director and Associate Professor, Master of Science in Anatomy Program, Des Moines University, Email: Muhammad.Spocster@dmu.edu

SHOWCASE 20

THE WATERLOO CAREER CENTER

The Waterloo Career Center opened on the campus of Central Middle School at the beginning of the 2016–17 school year. That first year there were two programs, initially—Nursing and Digital Graphics. For the 2017–18 school year, three new programs were added—Advanced Manufacturing, Early Childhood Education and Information Technology-Networking. This year we added four new programs—Digital Interactive Media, Information Technology-Web & Mobile, Marketing and Sustainable Construction. Next year, we are adding five new programs—Culinary, Electrical, Finance, Hospitality and Plumbing. We hope to add four or five new programs for the 2020–21 school year, hosting approximately 20 programs at the Waterloo Career Center.

Presenters:

- **AMY MIEHE** // Career Coordinator, Email: miehea2@waterlooschools.org
- **MEGHAN SULLIVAN** // Specialist, Email: sullivanm@waterlooschools.org



BREAKOUT SESSIONS

SESSION 1 ROOMS 302-303

STEM BEST®—BUSINESSES ENGAGING STUDENTS AND TEACHERS

Hear from two STEM BEST® models for “How-to Insights” for engaging businesses and education partners in your community. Representatives from Woodbine and Ankeny will share their experiences regarding developing business partnerships and will discuss how they overcame challenges to implement work-based learning experiences for students in their communities.

Facilitator:

- **TANYA HUNT** // Project Coordinator, Governor’s STEM Advisory Council, Email: Hunt@IowaSTEM.gov

Panelists:

- **SHAWNA HARRIS** // TLC Technology Integrationist, Woodbine Community School District, Email: sharris@woodbine.k12.ia.us
- **TRACY KELLEY** // PK-4 Instructional Interventionist/Curriculum & Professional Development, Woodbine Community School District, Email: tkelley@woodbine.k12.ia.us

- **ERIC MOORES** // Building and Construction Trades Teacher, Woodbine Community School District, Email: emoores@woodbine.k12.ia.us
- **JOEL FOX** // Orbis Project Mentor, Ankeny Orbis, Email: Joel.fox@ankenyschools.org
- **CARLOS ROJAS** // Blue Bean, Email: carlos@bluebean.studio

SESSION 2 ROOMS 304-305

REGISTERED HIGH SCHOOL APPRENTICESHIPS

Registered High School Apprenticeships help fast-track students into high-demand STEM careers. In this session, enjoy Q and A with school and business administrators and mentor/student teams from West Delaware High School and Central Campus. Session includes small group “office hours” work time with pairings of school/business admin and mentor/student teams.

Facilitator:

- **SARAH DERRY** // Ph.D., South Central Regional STEM Manager, Governor’s STEM Advisory Council, Email: Sarah.Derry@Drake.edu

Panelists:

Central Campus

- **TASCHA BROWN** // Director, Central Campus, Email: tascha.brown@dmschools.org
- **SAM OPPEL** // Cyber Security/Mobile Apps Instructor, Central Campus, Email: samuel.oppel@dmschools.org

West Delaware High School

- **TIM FELDERMAN** // High School Principal, Email: timfelderman@w-delaware.k12.ia.us
- **SETH HARMS** // Metals/Welding Instructor, Email: sethharms@w-delaware.k12.ia.us
- **BO JURAN** // Student
- **KRISTEN RICKEY** // Superintendent, Email: kristenrickey@w-delaware.k12.ia.us
- **KEVIN SCHUELLER** // Quality Improvement Engineer Manager, Henderson Products, Inc., Email: kschueller@hendersonproducts.com

SESSION 3 ROOMS 306–307

STEM TEACHER EXTERNSHIPS—A WIN-WIN FOR BUSINESS AND EDUCATION

In this session, you will hear from teacher externs and business partners about their STEM Teacher Externships Program experience. Learn more about the how the teacher and the business both benefit from these experiences. You will have the opportunity to ask questions and sign up today!

Facilitators:

- **JASON LANG** // STEM Teacher Externships Program Supervisor/Life Science Teacher, Cedar Falls High School, Email: Lang@IowaSTEM.gov
- **MARY TRENT** // Northwest Regional STEM Manager, Governor's STEM Advisory Council, Email: MTrent@IowaLakes.edu

Panelists:

- **MATT HANSEN** // Industrial Tech Teacher, MMCRU High School, Marcus, Email: matt.hansen@mmcruroyals.org

- **COLLEEN ITES** // Engineering/Life/Physical Science Teacher, Summit Middle School, Johnston, Email: colleen.ites@johnston.k12.ia.us
- **GRACE SWANSON** // Vice President, Human Capital, Accumold, Email: gswanson@accu-mold.com
- **ABBY TIBBETTS** // Life Science Teacher, Van Meter High School, Van Meter. Email: abby.tibbetts@vmbulldogs.com
- **ROSE ZEPEDA** // Director of Human Resources, TDS Automation, A Doerfer Company, Waverly, Email: Rose.Zepeda@Doerfer.com

SESSION 4 ROOMS 308–309

THE FUTURE READY IOWA CLEARINGHOUSE FOR WORK-BASED LEARNING: CONNECTING SCHOOLS AND BUSINESS PARTNERS AROUND AUTHENTIC LEARNING PROJECTS

Educating Iowa students for the knowledge economy requires connecting them to future careers through hands-on projects designed by employers and educators. The Iowa Clearinghouse for Work-Based Learning is a virtual space where business partners will post projects for Iowa K–12 students to gain in-depth work experience, bringing real-world application into the schools. The clearinghouse will make work-based learning opportunities more accessible to more Iowa K–12 students, especially in rural areas, and will focus on high-demand careers, including those in STEM fields (science, technology, engineering and mathematics). The clearinghouse will launch by July 1, so come get a sneak peak, learn how to get involved and hear about the great work already being done in this area!

Facilitator:

- **JEFF BENEKE** // Northeast Regional STEM Manager, Governor's STEM Advisory Council, Email: jeff.beneke@uni.edu

Panelists:

- **EVAN ABBEY** // Program Director, AEA Learning Online, Email: eabbey@aealearningonline.org
- **JAKE WELCHANS** // Project Manager, Work-Based Learning Clearinghouse, Iowa Department of Education, Email: jake.welchans@iowa.gov

BREAKOUT SESSIONS

SESSION 5 ROOMS 312-313

WHO CAN CONNECT YOU? MEET THE PEOPLE WHO FACILITATE EDUCATION-WORKPLACE PARTNERSHIPS

This session will focus on community catalysts who have coordinated conversations around school-business partnerships and helped their communities develop strategic visions. Attendees will hear from large and small communities across Iowa and will learn how to get the right people in the room.

Facilitator:

- **KRISTINE BULLOCK** // Southeast Regional STEM Manager, Governor's STEM Advisory Council, Email: kristine-bullock@uiowa.edu

Panelists:

- **KRISTI HEISINGER** // Sector Facilitator and Career Coach, Northwest Iowa Regional Manufacturing Partnership, Email: kheisinger@nwicc.edu
- **KIM MITCHELL** // STEM Teacher, Howar Middle School, Centerville, Email: kim.mitchell@centervillek12.org

- **KATE MORELAND** // Vice President, Iowa City Area Development, Email: kmoreland@icadgroup.com
- **BEN PULLEN** // Youth Program Specialist, ISU Extension & Outreach, Email: bpullen@iastate.edu
- **DEB SPRECKER** // Executive Director, Woodbine Main Street, Email: woodbinemainstreet@windstream.net
- **LAURIE WORDEN** // Director, Workplace Learning Connection, Email: laurie.worden@kirkwood.edu

SESSION 6 ROOMS 314-315

DID YOU KNOW? LICENSURE, CREDITING AND OTHER RULES GOVERNING WORK-BASED LEARNING

Panelists will provide facts and details about activities and educator licenses designed to prevent potential legal problems that could inhibit designs and restrict implementation of quality work-based programming. Resources will speak to the perspective of the educators involved, the business partners and the overseers whose responsibility it is to prevent problems.

Facilitator:

- **DEB FRAZEE** // Southwest Regional STEM Manager, Governor's STEM Advisory Council, Email: frazee@swcciowa.edu

Panelists:

- **JIM HARRIS** // Wage and Child Labor Investigator, State of Iowa, Email: james.harris@iwd.iowa.gov, Tel: (515) 725-5619
- **DAVE WEMPEN** // Consultant, Iowa Board of Educational Examiners, Email: David.Wempen@iowa.gov

SESSION 7 ROOMS 316–317

HOW TO PREPARE TO OPERATE WORK-BASED LEARNING PARTNERSHIPS FOR STUDENTS: HEAR FROM EXPERTS

Join us in exploring the varied professional development opportunities available to help you build a work-based learning program. Whether you are just beginning to think about work-based learning curricula or looking for help in connecting with business partners, there are options that will assist you in developing your program.

Facilitator:

- **KELLY BERGMAN** // Ph.D., North Central Regional STEM Manager, Governor's STEM Advisory Council, Email: kbergman@iastate.edu

Panelists:

- **DAWN BOWLUS** // Director, Jacobson Institute, John Pappajohn Entrepreneurial Center, University of Iowa, Email: dawn-bowlus@uiowa.edu

- **KIM DIDIER** // Executive Director, DMACC Business Resources, Email: kmdidier@dmacc.edu
- **MICHELLE HILL** // Director, Waukee APEX, Email: mhill@waukeeschools.org
- **LAURA WILLIAMS** // 21C Learning Specialist, Great Prairie AEA, Email: Laura.williams@gpaea.org

SESSION 8 ROOMS 318–319

QUALITY PRE-APPRENTICESHIPS AT THE HIGH SCHOOL LEVEL: EARLY IMPLEMENTATION SUCCESSES

Two prototype High School Pre-Apprenticeship models were launched in 2018 with local employers, and continue to expand in scope and participation. Roles of the employer partner, the school administration and students will be detailed for a successful launch. These two models are supported by grants from Iowa Workforce Development through the Governor's STEM Advisory Council.

Panelists:

- **ANDY BROUWER** // Construction Trades Instructor and ECE Supervisor, Spencer High School, Email: abrouwer@spencerschools.org
- **KRIS BYAM** // Principal, Boone High School, Email: kbyam@boone.k12.ia.us
- **JILL JANES** // Director of Innovative Learning, Boone Community Schools, Email: jjanes@boone.k12.ia.us

- **NATE WENDT** // Careers Coordinator and Business Teacher, Spencer High School, Email: nwendt@spencerschools.org
- **ELLI WIEMERS** // Principal, Spencer High School, Email: ewiemers@spencerschools.org

GENERAL SESSION SPEAKER BIOGRAPHIES



KIM REYNOLDS became Iowa's first female governor on May 24, 2017. Previously, she served as Iowa's lieutenant governor, state senator and county treasurer.

Governor Reynolds is deeply committed to educating Iowa's children for the knowledge economy and training Iowans for the jobs of tomorrow.

In 2011, she launched the Governor's Science, Technology, Engineering and Math Advisory Council and has served proudly as its co-chair for the past seven years. The council has delivered high-quality STEM education programs to around 500,000 students, who score higher than peers on state tests in math, science and reading.

In 2013, the governor's office proposed and the legislature passed the most extensive Teacher Leadership and Compensation System in the nation to improve instruction, raise achievement and elevate the teaching profession. The Teacher Leadership System is now in all 330 school districts.

Governor Reynolds also co-chairs the Future Ready Iowa Alliance. This initiative is working to close Iowa's skills gap, so more Iowans can have rewarding careers and businesses can hire enough skilled employees. The goal of the Future Ready Iowa Alliance is 70 percent of Iowa's workforce having education or training beyond high school by the year 2025.



ADAM GREGG serves as lieutenant governor of the State of Iowa. He was appointed to the position by Governor Kim Reynolds on May 25, 2017.

When selected, Adam was serving in the Branstad-Reynolds cabinet as the state public defender, a position he was appointed to in 2014.

From 2013–14, Gregg served in the governor's office as the legislative liaison and policy advisor. Prior to joining the governor's office, he practiced at the BrownWinick law firm in Des Moines. He was the Republican nominee for attorney general in 2014.

Gregg graduated in 2009 with high honors from Drake University Law School, where he received the institution's prestigious Opperman Scholarship.

Gregg earned his B.A. from Central College in 2006, graduating first in his class with degrees in political science and history.

He is a graduate of West Sioux High School, a native of Hawarden, and resides in Johnston with his wife Cari and their two children.



Over the course of her storied career at Accenture, **PALLAVI VERMA** has been a long-standing advocate and steward of innovation, helping clients leverage emerging technologies to transform their businesses.

As Senior Managing Director overseeing Accenture's business in the Midwest, Pallavi leads more than 10,000 people across 13 states. Having been with the firm for 31 years, her goals are pushing innovation to employees and clients, attracting top talent to Accenture, and improving the communities where employees live and work. Pallavi is also responsible for driving Accenture's national apprenticeship program, which by the end of this year will have 450 apprentices trained.

Pallavi moved around a lot as a kid—she estimates she's lived in a dozen cities in her lifetime—thanks to her dad's job. Her global view has helped shape and build a reputation of trust as a strategic client advisor and community advocate. As a member of Accenture's North America Leadership Team, she also serves as Vice President of the board of directors for the Accenture Foundation, and is on the boards for the Illinois Institute of Technology and Chicago Shakespeare Theater. She's also a member of the Commercial Club of Chicago, Economic Club of Chicago, International Women's Forum and the Chicago Network.

Pallavi was most recently named to Crain's Chicago "25 Most Powerful Women in Business" and the Tech 50. In 2017, Pallavi was named the "Corporate Tech Leader of the Year," at the Women Tech Founders' Midwest Women in Tech Awards, and in December 2016, she was named by the *Chicago Tribune* as one of their "10 Business People to Watch in 2017."

GENERAL SESSION SPEAKER BIOGRAPHIES



DEBI DURHAM is a longtime economic and community development professional who serves as Director of the Iowa Economic Development Authority (IEDA) and the Iowa Finance Authority (IFA). Durham was named to the positions by Iowa Governor Kim Reynolds in January 2019.

Durham was first appointed to lead IEDA in 2011 and, during her eight-year tenure, has turned the agency into a successful public-private partnership, landed billion-dollar economic development projects for Iowa, and worked tirelessly on expanding trade and investment opportunities for the state. She prides herself on building coalitions, supporting new ventures, and strengthening the state's industries and communities.

Prior to joining IEDA, Durham served as president of the Siouxland Chamber of Commerce. Her several accolades include being recognized as one of the "Most Influential Business Leaders" in the 2019 *Des Moines Business Record* Book of Lists and receiving the Technology Association of Iowa's "Legislative Advocacy Leader" award in 2017. Durham also was recognized by the *Business Record* as a "Woman of Influence" in 2016.

Durham holds a bachelor of science in business administration, marketing and management from Missouri Southern State University.



JEFF WELD, PH.D., is Executive Director for the Iowa Governor's STEM Advisory Council, a post he's occupied since 2011. Additionally, Jeff serves as STEM Education Policy consultant for the White House Office of Science and Technology Policy after completing a one-year appointment there to lead the production of *America's Strategic Plan for STEM Education*, published in late 2018. He is on extended leave from a faculty position in the Department of Biology at the University of Northern Iowa.

The Triangle Coalition for STEM recognized Jeff in 2014 with their "STEM Champion Award." In 2013 his alma mater, the University of Iowa, bestowed upon Weld their "Alumni of Distinction Honor" by the College of Education. As a faculty member at Oklahoma State University and currently the University of Northern Iowa, Jeff secured \$5.6 million in grants and published scores of research articles, essays, chapters and two books, the latest *Creating a STEM Culture for Teaching and Learning*, (NSTA Press, 2017). A decorated former teacher and professor, Jeff was the 2007 national collegiate biology teacher of the year.



ROB "RC" CUNNINGHAM teaches geometry, statistics and AP Computer Science Principles at Spirit Lake High School.

He started his teaching career at Sioux Falls Roosevelt High School in his home state of South Dakota before moving to Spirit Lake four years ago. In the fall, Rob also works as a football coach at the high school and makes the rounds as a high school basketball official in the winter.

He is a graduate of the University of South Dakota with a bachelor's in mathematics education and a master's in educational administration.

While not at school, RC can be found spending time with his wife Kayla, a chemistry and physics teacher, and 18-month-old son Keene. Rob likes to work in his garage during the summer and has enjoyed two different STEM Teacher Externships over the past few years.

GENERAL SESSION SPEAKER BIOGRAPHIES



RAQUEL FAULKNER is a Senior Engineer at Collins Aerospace where she has contributed to the design and integration of commercial avionics systems for more than seven years. Raquel earned her bachelor of science degree in aerospace engineering from Tuskegee University in 2011. She was exposed to aviation, for the first time, while participating in her high school's Air Force Junior Reserve Officer Training Corp program. Participating in the programs' Intro to Aviation course and summer camps inspired her to pursue a career in aviation. During her time at Tuskegee, she participated in STEM-related extracurricular activities and was granted the opportunity to participate in Collins Aerospace's (then Rockwell Collins) Summer Internship Program. The summer internship program offered exposure to the aviation industry and provided the chance to work with a team of engineers and technicians in a dynamic and collaborative working environment. Raquel credits her success to her family and the dedicated educators and mentors who offered continuous support and encouragement throughout her educational and professional career.



KRISTEN RICKEY, PH.D., has been an educator for more than 20 years. Rickey has served as the Superintendent of West Delaware Schools for eight years and an administrator and teacher in Tripoli, Cedar Rapids and Marion. Rickey has also taught courses at Coe College, Cornell College and the University of Iowa.

Under Dr. Rickey's leadership, West Delaware Schools has placed a strong emphasis on providing students with opportunities to experience challenging academics in a real-world context. West Delaware received an Iowa STEM BEST® grant to create DelCO Best, creating innovative partnerships between students and local business and government entities for the benefit of both. West Delaware was also one of the first high schools in Iowa to offer a Registered Apprenticeship program for students, recognized by the United States Department of Labor and supported by an Iowa Workforce Development Innovative Opportunities grant.

Dr. Rickey serves on the Iowa Clearinghouse for Work-Based Learning Advisory Board. She is vice-chair of the Northeast Iowa Regional Career and Technical Education Partnership. Additionally, she serves on School Administrators of Iowa Rep Council and Executive Leaders Steering Committee.

Dr. Rickey is a past recipient of the Perry Eugene McClenahan Award for Outstanding Graduate Work in Educational Administration, and Outstanding Honoree in the category of Mentor/Development of the YWCA Tribute to Women of Achievement.



ANDY ROBERTS is Business Manager/Financial Secretary Treasurer of Plumbers and Steamfitters Local 33, which represents more than one thousand highly skilled plumbers, pipefitters, welders and HVACR technicians throughout western and central Iowa.

Among his duties, Andy oversees the administration of registered apprenticeship- and journeyman-level training, as well as local union health, welfare and retirement trusts. He also works closely with owners, contractors and local leaders to forecast and meet industry employment demand, which includes recruitment and continuing education programs.

He currently serves as Executive Vice President of the Iowa State Building and Construction Trades Council and is the Secretary/Treasurer of the Central Iowa Building and Construction Trades Council. He also serves as a member of the Iowa Workforce Development Board. Prior to 2010, Andy worked as a General Foreman for A.J. Allen Mechanical and holds numerous trade and industry certifications.

GENERAL SESSION SPEAKER BIOGRAPHIES



MICHAEL THOMAS is a junior at Albia Community High School.

He is a member of the Albia Aspire course. Aspire is a new STEM course as of 2018. There are several projects available in this course and Michael is currently on five of them, being a lead on one of them. Being a “lead” means that he creates meeting agendas, distributes the work equally among team members and he is held accountable for meetings being held on time.

After high school, Michael planned to be a physics major in college, but through ASPIRE he has found more options available that he is passionate about.

In his free time he enjoys playing soccer, baseball, wrestling and video games, and researching different topics in astronomy and physics.



TERI VOS is Outreach and Community Relations Manager at Vermeer Corporation, a global industrial and agricultural equipment company headquartered in Pella, Iowa. She manages the organization’s outreach strategy and leads initiatives that promote an effective and inspired workforce through awareness of STEM skill needs and various issues that impact the future of industry and economic development.

Teri’s focus on building the workforce pipeline gives visibility to the wealth of career opportunities in, and positive perceptions of, manufacturing. She is particularly involved in connecting with K–12 students, and mentoring and volunteerism at Vermeer, including the development of Registered Apprenticeships and robotics mentoring programs, in conjunction with the Career Academy of Pella.

Teri serves in a number of council roles and service groups. She is an Iowa Governor’s STEM Advisory Council Member, the Co-Chair of Million Women Mentors–Iowa, Pella Area Community and Economic Alliance Workforce Development Council Chair, and an Association of Equipment Manufacturers I Make America Committee Member.



CARRIE RANKIN holds a B.A. in chemistry-marketing and has served the Iowa Governor’s STEM Advisory Council as Managing Director and Assistant Director for Development for six years.

Rankin has experience managing a statewide network of six Regional STEM Hub Managers, as well as 20 years of experience in the development realm, building experience with business and industry and external constituent partners. She currently assists in managing the Iowa STEM Council, comprised of multiple STEM stakeholders, supported by both legislative appropriations and public-private financial support.

Carrie has led the Iowa STEM Council development of a Business Engagement Committee, establishment of a Computer Science is Elementary program for the State of Iowa, as well as the naming of the Iowa STEM Council as a National STEM Ecosystem partner.

GENERAL SESSION SPEAKER BIOGRAPHIES



PEGGY A. WHITSON, PH.D., who grew up on a farm near Beaconsfield in southern Iowa, went on to become a biochemist and NASA astronaut. Whitson accrued a cumulative time in space of 665 days, a current record for any U.S. astronaut and a record for women worldwide. Her leadership roles included serving as first female Commander of the International Space Station during Expedition 16 and also during 51; first female and non-military Chief of the Astronaut Office; and first female Chairperson of the Astronaut Selection Board. During Whitson's most recent Expedition 50/51/52 (2016–2017) she participated in four spacewalks, bringing her career total to 10, also more than any other woman in the world.

Her NASA experience began in 1989 working as a Research Biochemist in the Biomedical Operations and Research Branch at NASA's Johnson Space Center. From 1995 to 1996, she served as Co-Chair of the U.S.-Russian Mission Science Working Group. In April 1996, she was selected as an Astronaut Candidate and began training.

Upon completing two years of basic astronaut training covering Space Shuttle and International Space Station Systems, her many assignments included Lead for the Crew Support Office in Russia; Aquanaut and Commander of the 5th NASA Extreme Environment Operations Mission in an underwater marine habitat; and Deputy Chief of the Astronaut Office. Her spaceflight experience began in 2002 as Expedition 5 Flight Engineer 1 when she was named the first Science Officer of the ISS. On her second and third flights she served as Commander of the International Space Station. She has performed more than 500 scientific investigations in space, including cardiovascular, neurovestibular, immunological and biomedical research. Whitson retired from NASA in 2018.

Whitson was born in Mount Ayr, Iowa, in 1960, and graduated from Mount Ayr High School in 1978. She received a bachelor of science in biology and chemistry from Iowa Wesleyan College in 1981 and a doctorate in biochemistry from Rice University in 1985. Dr. Whitson is married to Clarence F. Sams, Ph.D.

GENERAL SESSION SPEAKER BIOGRAPHIES



ROGER HARGENS is recognized as an innovator and change leader even within industries known for evolving by the month, the week, the day and even by the hour. As president, chief executive officer and chairman of the board of managers of Accumold, Inc.—a world leader in injection micro-molding located on a 15-acre campus in Ankeny, Iowa, Hargens is known for frequently reminding employees and clients that change is more than inevitable. His mantra: “Change constantly presents us with opportunities that we must embrace, not fear, and it is the reality of doing business every minute of every hour on a global scale.”

Since its inception in 1985, Accumold has produced super-micro, ultra-precision, plastic injection-molded parts that are critical components of the medical, micro-electronics and micro-optics industries. The company is a leading employer of high-skilled jobs in central Iowa, boosted in part by its 12-year-old Accumold Scholars program, initiated by Mr. Hargens, through Des Moines Area Community College.

Under Hargens’ leadership, the company has captured the imagination of public sector officials and private sector trendsetters. Speaking several years ago at the company’s most recent expansion, then-Gov. Terry Branstad, now U.S. ambassador to China, noted, “I’ve known Roger Hargens for many, many years and he’s a guy who makes things happen. Accumold is an industry leader because Roger has infused his determination, vision and pursuit of excellence into every person who works there.”

Prior to joining Accumold in a full-time capacity, Mr. Hargens was president and CEO of Heartland Machinery and Sales Inc., a company he founded in 1995. He began his professional career in 1974 at LH Kurtz Company in Des Moines. At Iowa Machinery and Supply, he worked as a territory manager and served in various roles during 17 years with that company, including regional sales manager, vice president of marketing and as a director.

Mr. Hargens currently serves as the Co-Chair of the Iowa Governor’s STEM Advisory Council, on the Iowa Innovation Council, the Iowa Partnership for Economic Partnership, the board of directors for the Iowa Association of Business and Industry (ABI), and the Des Moines Area Community College Foundation Board.

He received the National Council for Advanced Manufacturing’s 2016 Advanced Manufacturing Leadership Award for a Mid-size Company CEO, in part for “changing the Accumold culture to understand that innovations in product/process development and customer engagement are the differentiators that will allow the company to continue its growth and make it sustainable into the future.”

He was named the 2018 Person of Vision by the Ankeny Economic Development Corporation and was recently recognized by the Society of Manufacturing Engineers with a lifetime membership.

Mr. Hargens and his wife Jane are co-founders of the nonprofit organization Operation Middle Ground, which is focused on helping veterans and families coping with the effects of post-traumatic stress. They have five grown children and live in Johnston, Iowa.



Director **BETH TOWNSEND** has general supervision over the various services Iowa Workforce Development provides to Iowans. The director prepares, administers and controls the budget of the Department and its divisions along with Michael A. Mauro, who is the Division of Labor Commissioner, and Joseph S. Cortese II, who is the Division of Workers’ Compensation Commissioner.

Director Townsend was appointed by Governor Kim Reynolds. She previously served as the Director of the Iowa Civil Rights Commission. Director Townsend served in the Air Force Reserve and retired as a Lieutenant Colonel after 21 years of active and reserve duty.

GENERAL SESSION SPEAKER BIOGRAPHIES



RYAN WISE, ED.L.D., was appointed Director of the Iowa Department of Education by Governor Kim Reynolds. In September 2017, he was named Policy Leader of the Year by the National Association of State Boards of Educations. He is a South Dakota native and has worked in education at the local, state, national and international levels.

Wise began his career as a high school history teacher in Mississippi and Nebraska before moving to his home state of South Dakota to launch and lead Teach for America on the Rosebud and Pine Ridge Reservations. Wise also worked to eliminate educational inequity around the world as one of the founding staff members of Teach for All, a global network of education entrepreneurs.

Wise earned a doctorate in education leadership from the Harvard Graduate School of Education, a master's degree in public administration from the University of Nebraska at Omaha, and a bachelor's degree in history from Creighton University.



KRISTOPHER M. BYAM, B.A., M.A., has been championing school reform since 2006. He is fully committed to a quality 21st Century Education, where collaboration, positive school climate, creativity and innovation are used for the advancement of knowledge.

From his early start as a Business Educator in the Des Moines Public Schools, to becoming the current Principal at Boone High School, Mr. Byam's vision has been focused on the Design Thinking Model and family engagement that affirms transformational education for all students.

He has served as a member of the Core Team on the National Governors Association Policy Academy for Work Based Learning. Through this work, he has brought a new vision of practice and policy to the forefront of K-12 education in Iowa. He has led his team at Boone High School in the development of a Work-Based Learning program called the EDGE, a program where all students are afforded the opportunity of a hands-on experience at different careers regardless of interests, passions and talents. The Boone EDGE (Empowering Desire Guiding Experience) seeks to provide a continuum of support for Work-Based Learning, transforming the outcomes for each individual student.



REBECCA COLE is a senior at West Delaware High School who will be graduating in May 2019. During her high school career, Rebecca has been involved in show choir, music, speech, student council, cross country and dance. In addition to these extracurriculars, she works part-time at Dairy Queen and A-1 Storage. This past year Rebecca was involved in the 160-hour North Iowa Community College Certificate Program in Advanced Manufacturing from the hours of 6 to 9 p.m. every Monday and Tuesday night from October to March. She will be attending Ferris State University in the fall for manufacturing engineering technology with a full-tuition scholarship. Whenever Rebecca does have a free moment, she is an avid reader whose favorite authors include J. K. Rowling, John Flanagan and Rick Riordan.



DAN COX, PH.D., became chief administrator of Northwest Area Education Agency on July 1, 2018. Prior to joining the AEA, Cox served as Superintendent of the Charles City Community School District for five years. Charles City became known statewide as a leader in future ready programming. In 2015, the Charles City, New Hampton, Osage and Rockford school districts created the Iowa BIG North consortium with the assistance of a STEM BEST® Program award co-authored by Cox. A 2017 STEM BEST Program award expanded the consortium from four to seven school districts.

Professionally, Cox serves as President of the School Administrators of Iowa and sits on the governing board of AASA, the School Superintendents Association. He also sits on the advisory board for Project Ingenuity, an Iowa BIG-inspired initiative being launched by Morningside College and Western Iowa Tech Community College this fall.

Cox was named the District Teacher of the Year (2005) at West Marshall and was a co-recipient of the Jordan Larson Outstanding Ph.D. Student Award (2012) at Iowa State University. He has been selected to take part in three Fulbright programs to Argentina and one Fulbright program to Japan.

An avid world traveler, Cox has visited 29 countries and every continent except Africa. He and his wife Lisa reside in Sioux City.

GENERAL SESSION SPEAKER BIOGRAPHIES



ANN LEBO, ED.D., ED.S, M.A., was appointed by Governor Kim Reynolds as the Executive Director of the Iowa Board of Educational Examiners. She previously served as secondary principal in Grundy Center and as a member of the Board of Educational Examiners. She is an adjunct faculty member in education and leadership at Waldorf University and Iowa's Chief Talent Officer for the Council of Chief State School Officers.

Prior to becoming a principal, Lebo was an athletic coach and English instructor at the secondary and post-secondary level for 17 years. Lebo also served on the statewide TLC Task Force in 2012 and was appointed to the Governor's STEM Advisory Council in 2017.

Dr. Lebo holds an Ed.D. and Ed.S. both in educational administration from the University of South Dakota, an M.A. in English language and literature from the University of Northern Iowa, a B.A. in English education from the University of Northern Iowa and a B.A. in speech communication from Iowa State University.



DAVID OTTAVIANELLI, Director, Special Projects, Labor Relations, with John Deere currently works on initiatives with local area high schools, community colleges and other businesses to increase high school student awareness of manufacturing opportunities and potential career paths.

Most of his career at Deere has been in manufacturing leadership positions in the Waterloo Tractor Operations and East Moline Harvester Combine factory.

Prior to Deere, David graduated from the United States Military Academy and served in the U.S. Army and Iowa National Guard as an Infantry Officer. He also received his M.B.A. from the Kelley School of Business at Indiana University.

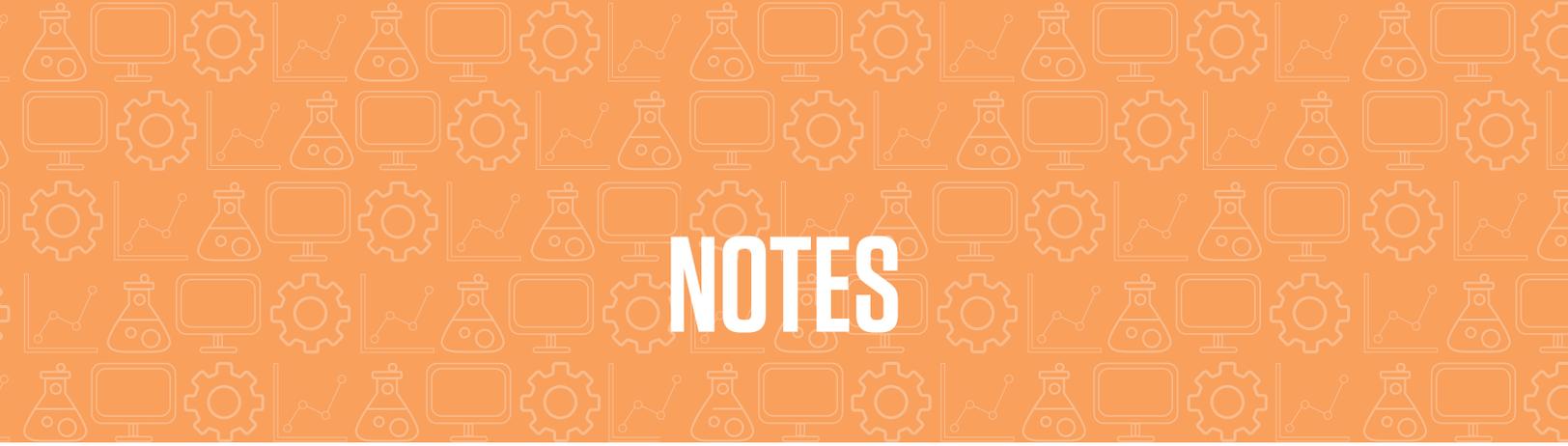


GREER L. SISSON serves as the State Director for the USDOL/Office of Apprenticeship (OA). As State Director, she administers and oversees the Registered Apprenticeship system in Iowa, ensuring Registered Apprenticeship exemplifies high standards, instructional rigor and quality training in a variety of traditional and nontraditional apprenticeship occupations throughout the state. Under her leadership, the development of new apprenticeship programs and technical assistance to existing and potential sponsors has resulted in substantial growth in Registered Apprenticeship in Iowa.

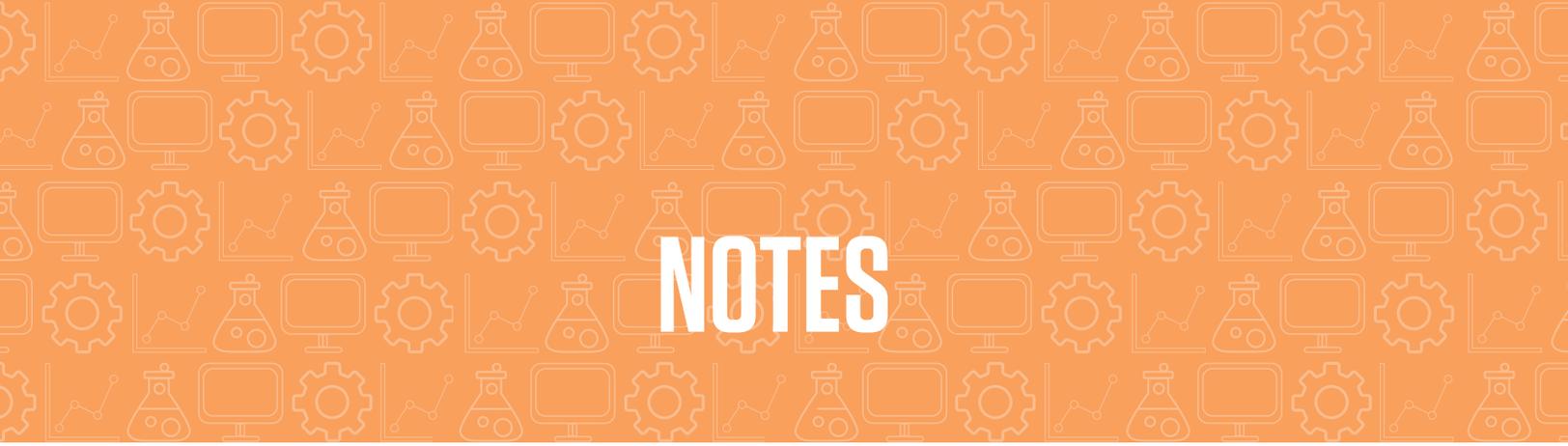
State Director Sisson and her staff develop "Standards of Apprenticeship" and provide technical assistance to potential and existing employers. She and her staff ensure the safety and welfare of apprentices and issue nationally recognized and portable Certificates of Completion to apprentices.

State Director Sisson also works closely with state and local officials and groups representing business, labor, education and government, as well as industry associations, faith- and community-based organizations to promote apprenticeship expansion and equal opportunity for underrepresented communities in the skilled workforce.

State Director Sisson serves as an ex-officio member on the Iowa Workforce State Board and serves on numerous teams and committees throughout the state and at the Federal level. She is a proud military veteran, having retired after 20 years of service in the United States Air Force as an Air Traffic Controller and the Chief of Air Traffic Control Training and Standardization.



NOTES



NOTES

STEM EDUCATION + WORKPLACE PARTNERSHIPS:

GOVERNOR'S 2019 FUTURE READY IOWA SUMMIT SPONSORS

\$10,000



\$5,000



\$2,500



OTHER

