

7th Annual Kickoff Conference

**BUILDING ARIZONA'S**

# STEM ECOSYSTEM

Aug. 31st,

2017

7:45am-

4:00pm

MESA ARTS CENTER



ARIZONA  
**SCITECH**  
festival



**MCEsa**

Maricopa County Education Service Agency



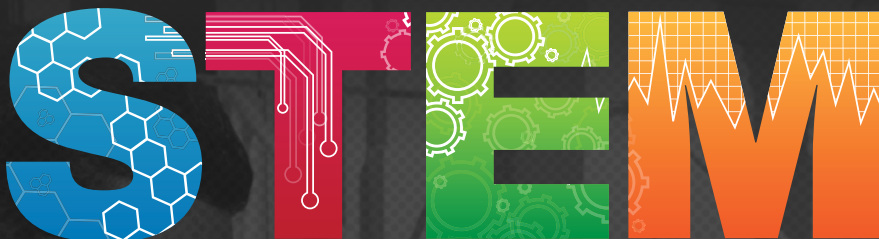
**FREEPORT-McMORAN**  
COPPER & GOLD FOUNDATION

**ARIZONA**  
COMMERCE AUTHORITY

**MESA**  
ARTS  
CENTER

FREE ADMISSION!

# CONNECT2



THE UNIVERSITY  
OF ARIZONA



ARIZONA  
SCITECH  
festival

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A family-friendly event celebrating Science,  
Technology, Engineering, Math and Medicine

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Register Today at [bit.ly/C2S2018](http://bit.ly/C2S2018)

**Saturday, January 27, 2018**  
Downtown Phoenix

# CONFERENCE SCHEDULE

**7:45-9:00: Registration & Networking Breakfast**

Main Lobby

Exhibitors - 1st, 2nd and 3rd floor

**9:00-10:00: Welcome / Keynote Speaker**

Ikeda Theater

**10:15-12:00: Morning Sessions**

Mesa Arts Center Main Building,  
Studios North & South Buildings,  
Mesa Contemporary Arts Building  
Exhibitors - 1st, 2nd and 3rd floor

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**12:00-1:00: Lunch (On Your Own)  
and/or Lunchtime Sessions**

Mesa Arts Center Main Building,  
Studios South Building,  
Mesa Contemporary Arts Building  
Exhibitors - 1st, 2nd and 3rd floor

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**1:15-4:00: Afternoon Sessions**

Mesa Arts Center Main Building,  
Studios North & South Buildings,  
Mesa Contemporary Arts Building  
Exhibitors - 1st, 2nd and 3rd floor

## CONFERENCE SPONSORS

### PLATINUM



**MCESA**

Maricopa County Education Service Agency

### SILVER



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## STRATEGIC COLLABORATORS



KEYNOTE SPEAKER

# Fredi Lajvardi



**Nationally Recognized  
STEM Educator & Subject  
of the Critically-Acclaimed  
Documentary, *Underwater  
Dreams*, and Major Motion  
Picture, *Spare Parts***

Fredi Lajvardi kindles your innate sense of ingenuity with his remarkable firsthand account of how he transformed a group of high school students into a national champion robotics team.

Fredi captivated the country when he led his team of disadvantaged teenagers in a university-level underwater robotics competition, where they defeated leading schools, including top-ranked MIT. Their story inspired the acclaimed documentary “Underwater Dreams” and was also adapted into the major motion picture, “Spare Parts,” starring actor and comedian, George Lopez as Fredi. His award-winning Falcon Robotics team will be featured in the 2017 film “Dream Big.”

Honored with numerous awards for his spirited passion for teaching, Fredi continues to serve as a prominent advocate about the importance of STEM education nationwide.

With humor and compassion, Fredi brings audiences on his inspiring journey, illustrating the need to embrace diversity and invest in people to help others realize their potential. His incredible real-life tale equips you with the real-life encouragement to maximize your own potential and to work together to solve complex problems.

# PROGRAM OVERVIEW

Experience programs in the following 7 tracks:

1. Art, Design Through STEM
  2. Community STEM Action & Volunteerism
  3. Computer Science & Engineering
  4. Festival & Event Planning
  5. STEM Careers & Business
  6. STEM Instruction
  7. Student Voice
- 

CHECK OUT **EXHIBITORS,  
BREAKFAST, AND MORE  
ON ALL 3 FLOORS!**

**1st Floor – Exhibitors, Water Stations**

**2nd Floor – Exhibitors, Breakfast (begins at 8am),  
Water Stations**

**3rd Floor – Hands-on Exhibitor Fun!  
Including Special Features:**

- A Show Case of the Latest Virtual Reality-Based Immersive Technologies Presented by ITSA
- Participate in a Mind-Blowing Hour of Code





MESA ARTS CENTER

**(R) REGISTRATION**

### Mesa Arts Center Main Building

Ikeda Theater  
 Virginia Piper  
 Repertory Theater  
**(M)** Musician's Warm-Up Room  
*(backstage)*  
 Farnsworth Studio Theater  
 Nesbitt/Elliott Playhouse  
 1st, 2nd and 3rd floor lobbies  
 (exhibitors)

### Mesa Contemporary Arts Building

Dobson Lecture Hall  
*(Lower Level)*  
 Multi-Purple Room  
*(Lower Level)*

### South Studios Building

Acting Studio *(2nd Floor)*  
 Drama Studio *(2nd Floor)*  
 Music Studio *(2nd Floor)*  
 Glass Studio *(1st Floor)*

### North Studios Building

Printmaking Studio *(1st Floor)*  
 Lapidary Studio *(2nd Floor)*



## Immersive Teaching STEAM Academy

*ITSA provides fun and exciting projects  
using cutting-edge technologies!*



**The more they do, the more they learn.**

# PROGRAM SCHEDULE

MESA ARTS CENTER MAIN BUILDING						
TIME	Mesa Arts Center Main Lobby	Ikeda Theater (FOOD ONLY ALLOWED ON STAGE)	Virginia G. Piper Theater (NO FOOD ALLOWED)	Farnsworth Studio Theater	Nesbitt/Elliott Playhouse (NO FOOD ALLOWED)	Musician's Warm-Up Room (*backstage-entrance between Ikeda and VGP Theater)
7:45 - 9:00	Registration (Floor 1) Exhibitions (Floors 1-3) Breakfast: Floor 2					
9:00 - 10:00		Keynote with Fredi Lajvardi				
10:15 - 11:00	Registration (Floor 1) Exhibitions (Floors 1-3)  A Showcase of the Latest Virtual Reality-Based Immersive Technologies (All Day, Floor 3) Participate in a Mind-Blowing Hour of Code (All Day, Floor 3) Water Stations (Floor 1 & 2)	Arizona STEM School Community of Practice (*on stage)  *Closed session. Open to 2017-2018 AZ STEM School CoP Members Only	Imagined Realities: STEM Learning and New Media	STEM Identity Journey	Women in Engineering & Computer Science	Branding by Design
11:15 - 12:00			From A to Z: Everything You Need to Know About Everything	STEAM/STEAM Projects for Homeschoolers	Teen Science Cafés: Putting Teens in Command of Their Future	Communities Engaged: S.T.E.A.M is Everywhere!
12:00- 1:00			Underwater Dreams Screening + Panel	Educator Lunchtime Meetup	Arizona's Got STEM Talent Show IV	Event-Planners: Secrets of the Trade. Let's Meet Up!
1:15 - 2:00		Educator STEM Innovations SWAP (on stage)	Starting and Running a Makerspace	Mentorship 101: Mentorship in Motion	How Does a Community Design Itself? [Community-Engaged Design Through Prototyping]	Social Media: A Relationship-Building Party
2:15 - 3:00		Modeling STEM Instruction (on stage)	Once Upon a Science	Chief Science Officer (CSO) 101: What It Means to Be a CSO	The March for Science Panel	Keeping It Alive: Offering up Fresh Perspectives
3:15 - 4:00			Underwater Dreams Screening	Volunteers in STEM	Changes Lives & Open Doors by Teaching Coding (Even If You Don't Know How)	

**\*\*For Limited Capacity sessions, please check Registration to see if there are any more spots available. First come, first served.**

**Tracks Correspond to Colors on Grid:**

Computer Science and Engineering
  Art, Design Through STEM
  STEM Instruction
  STEM Careers & Business



**ROOM MAP on page 6. • SESSION DESCRIPTIONS starting on page 12.**

NORTH & SOUTH STUDIO BUILDINGS					MESA CONTEMPORARY ARTS BUILDING	
TIME	Acting Studio (*S. Studios Building, 2nd Floor)	Drama Studio (*S. Studios Building, 2nd Floor)	Music Studio (*S. Studios Building, 2nd Floor) [A 2-for-1 Session]	MAC Art sessions	Dobson Lecture Hall (Lower Level)	Multi-Purpose Room (Lower Level)
7:45 - 9:00						
9:00 - 10:00						
10:15 - 11:00	Community Organizing to Promote STEM Experiences	**Video Game Design Workshop for STEM Teachers/ Mentors (10:15am-12pm) [Limited Capacity: 20]	Hands-on STEM Learning for Educators: The Internet of Things / Creating 360° Tours [Smartphone + laptop required]	**MAC Printmaking: Solarplating (Printmaking Studio: N. Studios, 1st Floor) [Limited Capacity: 14]	How to Produce a STEM Virtual Field Trip!	
11:15 - 12:00	Think Outside the Box - Tips, Templates, and Tools		Hands-on STEM Learning for Educators: Kids Making Sense / Experience It - By Doing	**MAC Glass-Making: Flameworking (Glass Studio: S. Studios, 1st Floor) [Limited Capacity: 12; Age limits: 13, or 11 with parent or guardian]	Engineering Projects in Community Service (EPICS)	
12:00-1:00	RAIN Lunchtime Meetup					Geometry in Food
1:15 - 2:00		**Video Game Design Workshop for STEM Teachers/ Mentors (1:15-3pm) [Limited Capacity: 20]	Hands-on STEM Learning for Educators: Robotics in the Classroom / Drones in the Classroom	**MAC Glass-Making Lecture/Demo: Hotshop (Glass Studio: S. Studios Building, 1st Floor) [Limited Capacity: 20]	Creating an Effective Program of Study and the Impact on Workforce Development	Superfoods for a Super Hero's Life
2:15 - 3:00			Hands-on STEM Learning for Educators: 3D Technology / First LEGO League for Your Classroom		The Postgenomic Era: What Does It Mean?	Improvise Data
3:15 - 4:00		Video Game Design Expo	Bioinformatics in the Classroom - Mining the Information in Genomes	**MAC Jewelry-Making Lecture/Demo (Lapidary Studio: N. Studios Building, 2nd Floor) [Limited Capacity: 15]	The Impact of Emerging Technologies in Arizona	Computer-Aided Drafting (CAD) Workshop

**\*\*For Limited Capacity sessions, please check Registration to see if there are any more spots available. First come, first served.**

Festival & Event Planning
  Community STEM Action & Volunteerism
  Student Voice

# SCIENCE FOR ALL

Use your tax dollars to help low-income Arizona youth acquire critical jobs skills and transform Arizona into a **KEY TECH HUB!**



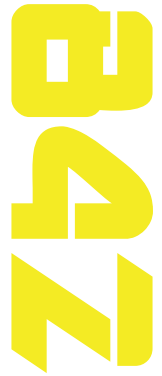
## Get up to **\$800\*** in tax credits by donating to **Science for All**

Science for All seeks to provide Arizona K-12 youth living in poverty with critical workplace employability and technical skills necessary for securing employment in STEM\*\* fields. We currently serve 69 Arizona schools with low-income student populations. There are over 1300 such schools in Arizona, representing a large unmet need.

\*For 2017, the limits for the AZ Charitable Tax Credit are \$400 for individual donors and \$800 for couples.

**scienceforallaz.org** DONATE ONLINE AT

***Help support  
Falcon Robotics  
by making a  
tax-deductible  
donation.***



**Falcon  
Robotics**



***[coachfredi.wixsite.com/falconrobotics](http://coachfredi.wixsite.com/falconrobotics)***

# 10:15 – 11:00

## Arizona STEM School Community of Practice

IKEDA THEATER (\*on stage; Closed to Community of Practice Members Only)

45 AZ schools are preparing for their 2nd year of learning & growing together in the AZ STEM School Community of Practice, the state's first of its kind!

### [ART, DESIGN THROUGH STEM]

## Imagined Realities: STEM Learning and New Media

VIRGINIA PIPER REPERTORY THEATER

This panel explores how new media professionals are meeting students' needs through virtual reality experiences and alternate reality games.

### [ART, DESIGN THROUGH STEM]

## MAC Printmaking Workshop: Solarplating

PRINTMAKING STUDIO (\*N. Studios Building, 1st Floor)

Learn how to use Solarplate materials & techniques to produce a high-quality, photoengraved-like digital image on a plate and then print it by hand.

**[\*Capacity: 14. Please check Registration to see if there are any more spots available.]**

### [COMMUNITY STEM ACTION & VOLUNTEERISM]

## Community Organizing to Promote STEM Experiences

ACTING STUDIO (\*S. Studios Building, 2nd Floor)

Hear about experiences, best practices, & more from members of vibrant, rural Arizona who use the power of organization and their vision to promote STEM!

### [COMPUTER SCIENCE & ENGINEERING]

## Women in Engineering and Computer Science

NESBITT/ELLIOTT PLAYHOUSE

This moderated panel celebrates and explores the struggles, accomplishments, representation, and future of women in engineering & computer science fields.

### [COMPUTER SCIENCE & ENGINEERING]

## How to Produce a STEM Virtual Field Trip

DOBSON LECTURE HALL (\*Mesa Contemporary Arts Bldg., Lower Level)

Learn how to share your exciting STEM/STEAM activities with all of Arizona through Distance Learning Technology, no matter where you're based.

## [COMPUTER SCIENCE &amp; ENGINEERING]

**Video Game Design Workshop for STEM Teachers/Mentors**

DRAMA STUDIO (\*S. Studios Building, 2nd Floor)

Help your students level up from players to designers by learning about the elements of game design through the Gamestar Mechanic learning platform.

**[\*1.75-Hour Workshop. Capacity: 20. Please check Registration to see if there are any more spots available.]**

## [FESTIVAL &amp; EVENT PLANNING]

**Branding by Design**

MUSICIAN'S WARM-UP ROOM (\*backstage)

Find out how to uniquely brand your program, project or event in a way that demonstrates a STEAM focus through innovative ideas, wording and imagery.

## [STEM INSTRUCTION]

**STEM Identity Journey**

FARNSWORTH STUDIO THEATER

Come learn about and experience a journey that develops STEM Identity in students and helps students see themselves as STEM professionals.

## [STEM INSTRUCTION]

**Hands-on STEM Learning for Educators: Part 1 of 4**MUSIC STUDIO (\*S. Studios Building, 2nd Floor) **[A 2-for-1 Session]****The Internet of Things (IoT): Connecting Everyday Objects to the Internet**

Find out how to utilize “making” to bring the IoT (connecting any device with an on/off switch to the internet) to your K-12 classroom!

**Creating 360° Tours for VR, Mobile, and Desktop**

Learn how to use HTML & a software framework called A-Frame to create 360° tours that work on desktops, mobile phones, & more!

**[\*Bring your own laptop & smartphone w/Google Street View installed]**



# 11:15 – 12:00

### [ART, DESIGN THROUGH STEM]

## MAC Glass-Making Workshop: Flameworking (Field Lens & Siphon)

GLASS STUDIO (\*S. Studios Building, 1st Floor)

Make a take-home lens out of borosilicate glass to magnify objects 10x, and a glass siphon to transfer fluids between vessels.

**[\*Capacity: 12. Age limits: 13, or 11 with parent or guardian. Please check Registration to see if there are any more spots available.]**

### [COMMUNITY STEM ACTION & VOLUNTEERISM]

## Think Outside the Box - Tips, Templates, and Tools

ACTING STUDIO (\*S. Studios Building, 2nd Floor)

Bring your event idea & learn tips on how to develop or expand an existing event, templates for action planning, & tools to help keep things fresh

### [COMPUTER SCIENCE & ENGINEERING]

## Engineering Projects in Community Service (EPICS)

DOBSON LECTURE HALL (\*Mesa Contemporary Arts Bldg., Lower Level)

Listen to a panel share its experiences of implementing engineering projects in the community through EPICS, a middle & high school service learning program.

### [FESTIVAL & EVENT PLANNING]

## Communities Engaged: S.T.E.A.M is Everywhere!

MUSICIAN'S WARM-UP ROOM (\*backstage)

This interactive session offers a conversation around how to engage community members & generate excitement around active participation in STEAM.

### [STEM CAREERS & BUSINESS]

## From A to Z: Everything You Need to Know About Everything

VIRGINIA PIPER REPERTORY THEATER

Learn about the latest ideas, inventions, and innovations from around Arizona and the world. Hosted by Craig "The Idea Man" Shames.

**[STEM INSTRUCTION]****Hands-on STEM Learning for Educators: Part 2 of 4**

MUSIC STUDIO (\*S. Studios Building, 2nd Floor) **[A 2-for-1 Session]**

**Kids Making Sense**

Discover how to empower students to become citizen science & use portable air quality sensors to measure particle pollution at their school.

**Experience It By Doing: STEM Experiential Learning**

Since most learning is done experientially, come learn how to combine it with STEM to enhance student interest, identity, & engagement in STEM.

**[STEM INSTRUCTION]****STEM/STEAM Projects for Homeschoolers**

FARNSWORTH STUDIO THEATER

Is your child tech-savvy or interested in the latest technology? Learn about opportunities for them to work in a fun-filled environment at a tech company.

**[STUDENT VOICE]****Teen Science Cafés: Putting Teens in Command of Their Future**

NESBITT/ELLIOTT PLAYHOUSE

Come learn about how Teen Science Cafés provide free & fun way for teens to explore the science & technology affecting their lives and future careers.

# 12:00 – 1:00

## LUNCHTIME SESSIONS

### [ART, DESIGN THROUGH STEM]

#### Geometry in Food

MULTI-PURPOSE ROOM (\*Mesa Contemporary Arts Bldg., Lower Level)

Enjoy a delicious and educational STEAM-focused exploration of food and science with Certified Culinary Educator, Larry P Canepa.

### [COMMUNITY STEM ACTION & VOLUNTEERISM]

#### RAIN Lunchtime Meetup

ACTING STUDIO (\*S. Studios Building, 2nd Floor)

Interested in meeting up with your STEM leaders in the rural parts of Arizona? Bring your lunch and join them in this Lunchtime Meetup!

### [COMPUTER SCIENCE & ENGINEERING]

#### Underwater Dreams Screening + Panel

VIRGINIA PIPER REPERTORY THEATER

*[No food allowed in VGP Theater. Eat lunch before entering.]*

This epic story depicts how the sons of undocumented Mexican immigrants learned how to build an underwater robot from Home Depot parts, and defeated engineering powerhouse MIT in the process. The screening will be followed by a panel discussion held by Fredi's own robotics students.

### [FESTIVAL & EVENT PLANNING]

#### Event-Planners: Secrets of the Trade. Let's Meet Up!

MUSICIAN'S WARM-UP ROOM (\*backstage)

This meet up will be a fun gathering for all interested in sharing STEAM event best practices, from idea generation to implementation & community outreach.

### [STEM INSTRUCTION]

#### Educator Lunchtime Meetup

FARNSWORTH STUDIO THEATER

Connect with other educators in this informal setting and learn about what's happening in other schools through this informal lunchtime discussion.

### [STUDENT VOICE]

#### Arizona's Got STEM Talent Show IV

NESBITT/ELLIOTT PLAYHOUSE

*[No food allowed in Playhouse. Eat lunch before entering.]*

Back by popular demand, come see the amazing STEM talent showcased at our 4th annual Arizona's Got STEM Talent show!

# WHAT ARE YOU DOING DURING LUNCH?

## 1. Attend a session between 12 and 1

Food allowed in the following spaces

- Farnsworth Studio Theater
- Musician's Warm-Up Room (\*backstage)
- Acting Studio (*S. Studios Bldg, Level 2*)
- Multi-Purpose Room (*Mesa Arts Bldg, Lower Level*)

## 2. Check out the amazing exhibitors on levels 1, 2 and 3.

## 3. Purchase a box lunch (limited availability).

## 4. Dine in Downtown Mesa - see registration for local options.



**E - Line  
MEDIA**

## Make Games With the Pros

Youth game studios  
coming to Arizona  
in 2018

sign up for updates at  
<http://bootcamp.elinemedia.com>

# 1:15 – 2:00

[ART, DESIGN THROUGH STEM]

## How Does a Community Design Itself?

### [Community-Engaged Design Through Prototyping]

NESBITT/ELLIOTT PLAYHOUSE

Hear from Mesa project coordinators, involved artists, architects, & more about what is involved in their resident-involved, citywide project and why it matters.

[ART, DESIGN THROUGH STEM]

## MAC Glass-Making Lecture/Demo: Hotshop (Hot Science)

GLASS STUDIO (*\*S. Studios Building, 1st Floor*)

Watch and learn about how fiber optics are made, find out how hot glass conducts electricity, and learn about glass popcorn and Prince Rupert's Drop.

**[\*Capacity: 20. Please check Registration to see if there are any more spots available.]**

[ART, DESIGN THROUGH STEM]

## Superfoods for a Super Hero's Life

MULTI-PURPOSE ROOM (*\*Mesa Contemporary Arts Bldg., Lower Level*)

Bam ! Pow! Splat! Superfoods and Super Heroes come together in this fun, interactive STEAM-focused presentation on foods that are nutritional dynamos.

[COMMUNITY STEM ACTION & VOLUNTEERISM]

## Mentorship 101: Mentorship in Motion

FARNSWORTH STUDIO THEATER

Learn how Arizona STEM professional are engaging with local middle and high schools and ways you can partner with schools and students in your area.

[COMPUTER SCIENCE & ENGINEERING]

## Starting and Running a Makerspace

VIRGINIA PIPER REPERTORY THEATER

Learn about how to start and run a Makerspace, from tools, to space needs, to software, to events, to kits that make for a great Makerspace experience.



## [COMPUTER SCIENCE &amp; ENGINEERING]

**Video Game Design Workshop for STEM Teachers/Mentors**

DRAMA STUDIO (\*S. Studios Building, 2nd Floor)

Help your students level up from players to designers by learning about the elements of game design through the Gamestar Mechanic learning platform.

**[\*1.75-Hour Workshop. Capacity: 20. Please check Registration to see if there are any more spots available.]**

## [FESTIVAL &amp; EVENT PLANNING]

**Social Media: A Relationship-Building Party**

MUSICIAN'S WARM-UP ROOM (\*backstage)

Join the panelists in this session to learn more about creating and cultivating social relationships with your current and future audiences.

## [STEM INSTRUCTION]

**Educator STEM Innovations SWAP**

IKEDA THEATER (\*on stage)

Receive free school resources & info from multiple STEM Masters who want to give, help, & share their inside scoop and best practices with YOU!

**[\*Space for 200+ educators available!]**

## [STEM INSTRUCTION]

**Creating an Effective Program of Study and the Impact on Workforce Development**

DOBSON LECTURE HALL (\*Mesa Contemporary Arts Bldg., Lower Level)

This will be a panel discussion on how to build a Program of Study (Pathway), its importance, how to sustain one, and how to engage partners in your work.

## [STEM INSTRUCTION]

**Hands-on STEM Learning for Educators: Part 3 of 4**

MUSIC STUDIO (\*S. Studios Building, 2nd Floor) **[A 2-for-1 Session]**

**Robotics in the Classroom**

Learn how robotics brings value to your classroom by bringing together STEM topics in this hands-on experience.

**Drones in the Classroom**

Learn how drones can be used as a classroom learning tool and how to start in this session all about drones, STEM, and education!

# 2:15 – 3:00

### [ART, DESIGN THROUGH STEM]

## Improvise Data

MULTI-PURPOSE ROOM (\*Mesa Contemporary Arts Bldg., Lower Level)

Join Humor Writes as they bring you an unscripted, interactive experience that focuses on collaboration, interpersonal skills, & traditional elements of STEM.

### [ART, DESIGN THROUGH STEM]

## Once Upon a Science

VIRGINIA PIPER REPERTORY THEATER

Join RealTimeSTEAM for outlines, tips and resources to aid in telling a compelling story of discovery while accurately reflecting the scientific process.

### [COMMUNITY STEM ACTION & VOLUNTEERISM]

## The March for Science Panel

NESBITT/ELLIOTT PLAYHOUSE

Learn from AZ March for Science sections about the motivations & goals of the March for Science as well as the programs that they plan on implementing.

### [FESTIVAL & EVENT PLANNING]

## Keeping it Alive: Offering up Fresh Perspectives

MUSICIAN'S WARM-UP ROOM (\*backstage)

Find out how and why the seasoned pros re-think and re-design to keep their STEAM activities and event current and fresh for their audience.

### [STEM CAREERS & BUSINESS]

## The Post-Genomic Era, What Does It Mean?

DOBSON LECTURE HALL (\*Mesa Contemporary Arts Bldg., Lower Level)

Join a discussion of the human genome project and the clinical sequencing effort, and how computation and data science can help in these efforts.

### [STEM INSTRUCTION]

## Modeling STEM Instruction

IKEDA THEATER (\*on stage)

Partake in the scientific process with us as you experience this activity to engage students in the discovery of how science works in the real world.

**[\*Space for 200+ educators available!]**

## [STEM INSTRUCTION]

**Hands-on STEM Learning for Educators: Part 3 of 4**MUSIC STUDIO (\*S. Studios Building, 2nd Floor) **[A 2-for-1 Session]****3D Technology: Bring the Future of 3D Technology to Your Classroom... Today**

Learn how to affordably bring the future of innovation, design, prototyping, & inventing to your classroom today!

**First LEGO League for Your Classroom**

Come learn about how your students can become involved with First LEGO League, a premiere program that challenges kids to think like scientists and engineers!

## [STUDENT VOICE]

**Chief Science Officer (CSO) 101:  
What It Means to Be a CSO**

FARNSWORTH STUDIO THEATER

In this session, 2nd & 3rd-year CSOs reflect and present on what it's like to serve as a CSO, perform the role of Ambassador of STEM School Culture, and more!

 **FREEPORT-McMoRAN**

Freeport-McMoRan is pleased to support Arizona SciTech in celebrating science, technology, engineering and math.

We place an emphasis on promoting these areas to help students acquire necessary skills for success in a knowledge-based economy and society.

Visit our [FreeportInMyCommunity.com](http://FreeportInMyCommunity.com) to learn about our commitment to communities.

# 3:15 – 4:00

### [ART, DESIGN THROUGH STEM]

## MAC Jewelry-Making Lecture/Demo: Electroforming, Electro-Etching, & Vitreous Enamel on Copper

LAPIDARY STUDIO (\*N. Studios Building, 2nd Floor)

See how electrical current can attach metal to metal and how molten enamel is fused onto a copper object.

**[\*Capacity: 15. Please check Registration to see if there are any more spots available.]**

### [COMMUNITY STEM ACTION & VOLUNTEERISM]

## Volunteers in STEM

FARNSWORTH STUDIO THEATER

Want to become involved in STEM? Meet volunteers from different STEM organizations to learn about a variety of opportunities available to you!

### [COMPUTER SCIENCE & ENGINEERING]

## Computer-Aided Drafting (CAD) Workshop

MULTI-PURPOSE ROOM (\*Mesa Contemporary Arts Bldg., Lower Level)

Learn about the process, importance, and applications of computer-aided drafting, a skill widely used in the field of engineering.

### [COMPUTER SCIENCE & ENGINEERING]

## Change Lives and Open Doors by Teaching Coding (Even If You Don't Know How to Code)

NESBITT/ELLIOTT PLAYHOUSE

Even if you have no computer skills yourself, come to this panel to learn how AZ kids are getting a great start with coding

### [COMPUTER SCIENCE & ENGINEERING]

## Underwater Dreams Screening

VIRGINIA PIPER REPERTORY THEATER

This epic story depicts how the sons of undocumented Mexican immigrants learned how to build an underwater robot from Home Depot parts, and defeated engineering powerhouse MIT in the process.

### [COMPUTER SCIENCE & ENGINEERING]

## Video Game Design Expo

DRAMA STUDIO (\*S. Studios Building, 2nd Floor)

Come play the 2017 Natl' STEM Video Game Challenge winning games designed by middle & high school students. Design your own game while you're at it!

**[\*Open to players ages 8 and older]**

[STEM CAREERS & BUSINESS]

## The Impact of Emerging Technologies in Arizona

DOBSON LECTURE HALL (\*Mesa Contemporary Arts Bldg., Lower Level)

Learn from local experts about how Arizona is positioning itself as a hub for 3D Printing, Autonomous Vehicles, & more in pursuit of becoming a SMART City.

[STEM INSTRUCTION]

## Bioinformatics in the Classroom - Mining the Information in Genomes

MUSIC STUDIO (\*S. Studios Building, 2nd Floor)

Learn how to use freely-available online tools to guide your students in understanding biological concepts & discovering the connectedness of all life.

GET READY FOR ARIZONA'S LARGEST CELEBRATION OF  
SCIENCE, TECHNOLOGY, AND INNOVATION!

# ARIZONA SCITECH festival®

FEBRUARY-MARCH 2018

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Events anytime at  
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    [azscitech.com](http://azscitech.com)

CELEBRATE ARIZONA  
SCIENCE AND TECHNOLOGY WONDERS





NOTES





## Thanks to the 2018 Arizona SciTech Festival EARLY BIRD SPONSORS

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### Presenting



### Platinum



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### Gold



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### Silver



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### Bronze



### Copper



### Krypton



## Special Thanks to Our Foundational Partners

Arizona Technology Council Foundation, Arizona Science Center,  
University of Arizona, Arizona State University,  
Arizona Board of Regents, Arizona Commerce Authority



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**MESA ARTS CENTER**

# MCESA STEM SUPPORTS *FOR* TEACHERS



See us at our booth for opportunities that connect students to STEM professionals, professions, and real-life challenges.

All opportunities are FREE for teachers, provided by the Maricopa County School Superintendent.

**MCESA** | Maricopa County  
Education Service  
Agency

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