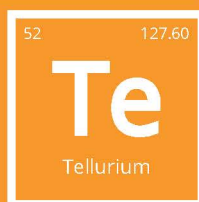
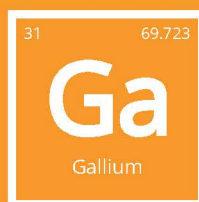
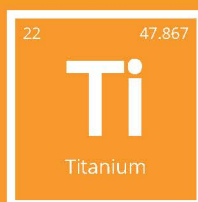
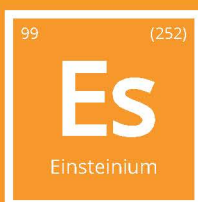
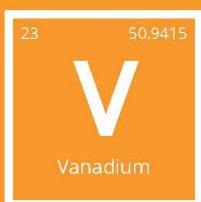
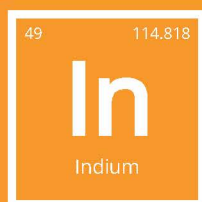


# 16TH ANNUAL EARLY CHILDHOOD STEM CONFERENCE

Science Technology Engineering Math



FEBRUARY 20-21, 2026

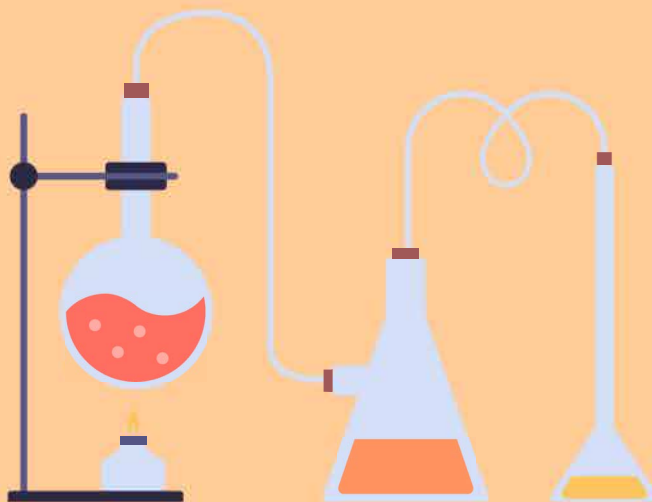


PASADENA, CA

the  
children's  
center  
at  
caltech



Canyon  
Crest  
PRESCHOOL





*“To investigate is to admit that we do not yet know  
— and that is where learning begins.”*

*— Richard Feynman*





# WELCOME TO THE 16TH ANNUAL EARLY CHILDHOOD SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS CONFERENCE

This year, we proudly celebrate 16 years of the ECSTEM Conference, sixteen years of energizing, supporting, and inspiring Early Childhood Educators from around the world! We discovered researchers, educators, and schools who shared this curiosity-driven approach, and our own professional growth blossomed.

We recognize something powerful: the world's future problem-solvers are sitting in today's early childhood classrooms. With the right early experiences, rooted in play, exploration, and wonder, children develop a natural love for science, technology, engineering, and mathematics that stays with them as they grow. This understanding inspired the creation of the Early Childhood Science, Technology, Engineering, and Mathematics (ECSTEM) Conference.

Since then, we have brought together educators, researchers, and thought leaders from across the globe to champion the importance of STEM in early childhood. Together, we've worked to elevate developmentally appropriate, inclusive, and culturally responsive approaches that help children access their innate curiosity, because when children explore math, science, and nature early, they are better prepared to imagine and create solutions for the world they will inherit.

Now, as we celebrate the 16th Annual ECSTEM Conference, we honor the teachers who continue to embrace new ways of learning and teaching. Your openness, creativity, and dedication help ignite that early spark in young children, one that grows into confidence, competence, and a lifelong love of discovery.

Thank you for joining us in this joyful movement as we continue shaping a bright, possibility-filled future together!

Sincerely,

**Susan Wood, M.A.**, Children's Center at Caltech - Executive Director

**Olivia Garcia, B.A.**, Children's Center at Caltech - Associate Director

**Melissa Samples, M.A.**, Children's Center at Caltech - STEM Curriculum Coordinator

**Tiffany Chou, B.A.**, Children's Center at Caltech - Accounts Manager

**Kristine Scott, B.A.**, Children's Center at Caltech - Office Manager

**Pauline McPeake, M.A.**, Canyon Crest Preschool - Founding Director





Since 1972, the Children's Center at Caltech (CCC) has become a national leader in STEM Early Education. The CCC uses a constructivist, play-based approach to plan, develop, and implement an inquiry-rich curriculum through the lens of STEM. As community outreach, the CCC hosts professional development workshops and shares its STEM-based Early Childhood Education research.





Since 2025, Canyon Crest Preschool has embraced childhood as a precious beginning, bringing together trusted early learning practices, passionate educators, and a warm, playful environment where learning and wonder grow side by side. Our nature-based experiences, STEM foundations, Reggio-inspired exploration, and intentional read-aloud strategies support children in asking questions, thinking critically, and discovering with joy. Rooted in research and guided by curiosity, Canyon Crest ensures every child is known, supported, and ready for kindergarten.



# 2026 ECSTEM PROGRAM

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## Friday, February 20th

8:30 a.m. – 10:00 a.m.	Keynote Speaker: Tina Payne Bryson, LCSW, PhD
10:15 a.m. – 11:45 a.m.	Session I Workshops
11:45 a.m. – 1:00 p.m.	Lunch
1:00 p.m. – 2:30 p.m.	Session II Workshops
2:45 p.m. – 3:30 p.m.	Micro-Session III Workshops

## Saturday, February 21st

8:30 a.m. – 10:00 a.m.	Keynote Speaker: Joe Parker, PhD
10:15 a.m. – 11:45 a.m.	Session I Workshops
11:45 a.m. – 1:00 p.m.	Lunch
1:00 p.m. – 1:45 p.m.	Micro-Session II Workshops
2:00 p.m. – 4:30 p.m.	Lab Tours



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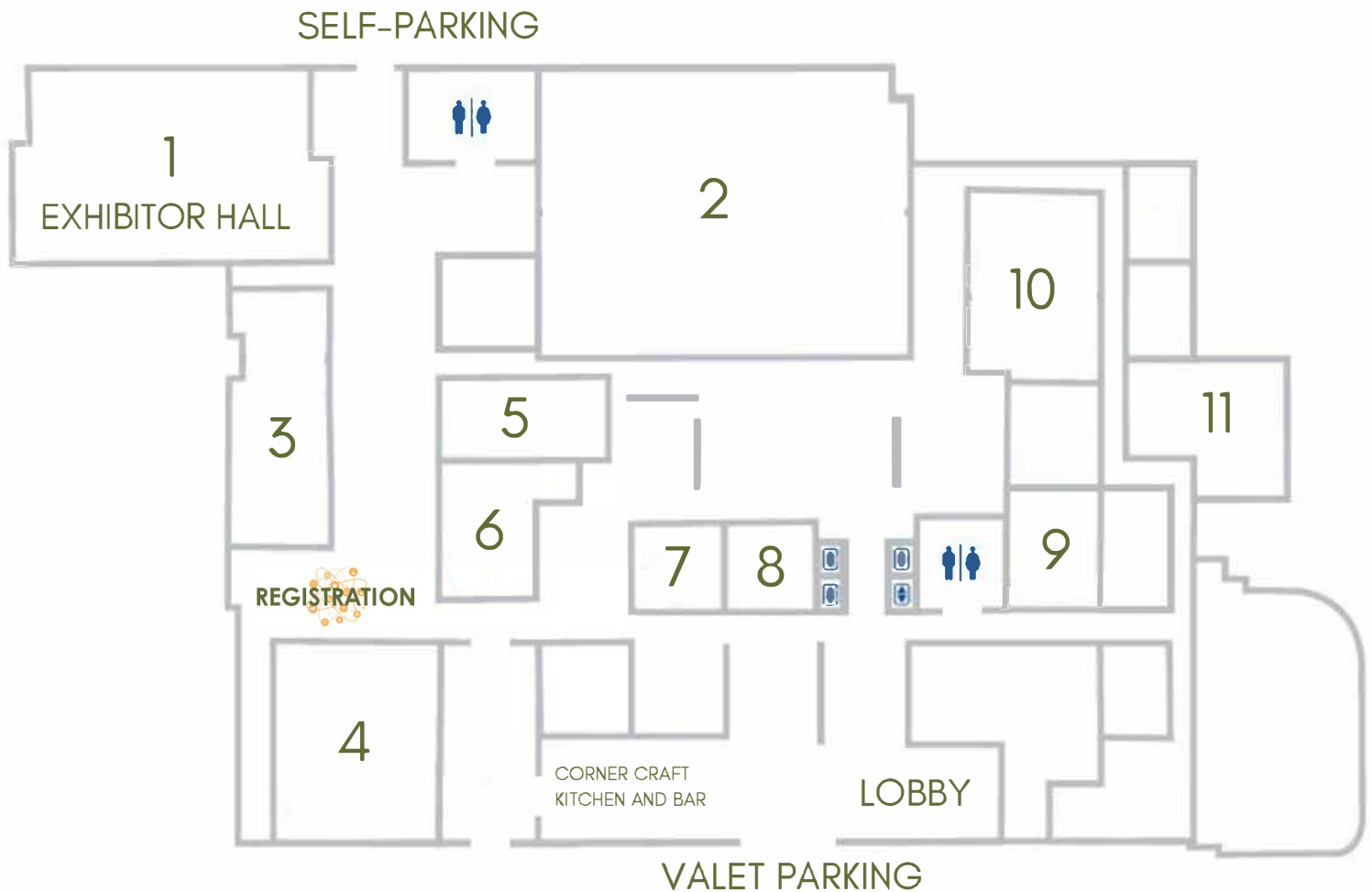
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# HILTON PASADENA - FIRST FLOOR



1. CALIFORNIA BALLROOM
2. INTERNATIONAL BALLROOM
3. PASADENA
4. SAN GABRIEL
5. SAN MARINO
6. SANTA CLARA

7. SANTA BARBARA
8. SANTA ROSA
9. SAN DIEGO
10. PACIFIC ROOM A & B
11. MONTEREY



*“Investigation is  
the heart of science.”*  
– Neil deGrasse Tyson



## Messing About with STEM

A 3-credit course  
offered to  
educators at any  
point along  
their post-high  
school  
professional  
journey.

Re-awaken the joy of  
inquiry, curiosity, and  
wonder in this eight-week  
course exploring the role  
of **science, technology,  
engineering, and  
mathematics**  
with young children.

*“My honest wish is for this course to be a mandatory experience for all caregivers, educators, support staff, and extended family members. The best way to advocate for children's encounters with STEM is to continue our own encounters with STEM.”*

- Messing About with STEM Course Participant

[boulderjourneyschool.com/TEP](http://boulderjourneyschool.com/TEP)

# LAB TOURS

SELF-GUIDED TOURS  
(OPEN ACCESS)

Saturday, February 21st

No registration required. Drop in anytime between 2:00–4:30 pm.



The Children's Center at Caltech



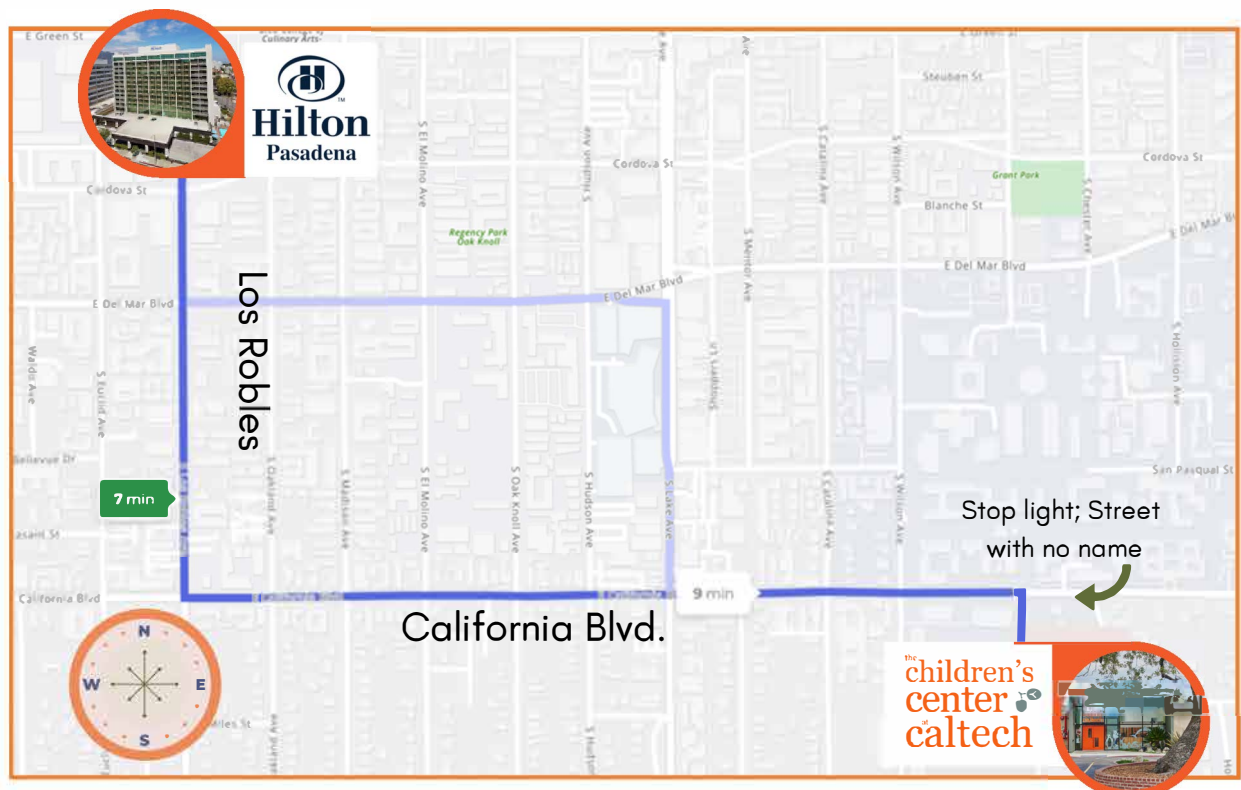
Think Tank Science Mobile Lab



Polytechnic Elementary Science Lab

**All tours will begin at The Children's Center at Caltech (1200 E California Blvd. Pasadena, CA 91125).  
Transportation is not provided.**

## GETTING THERE





## GUIDED TOURS (ADVANCED REGISTRATION REQUIRED)

**Saturday, February 21st**

**Tour Times: 2:30 pm & 3:15 pm**

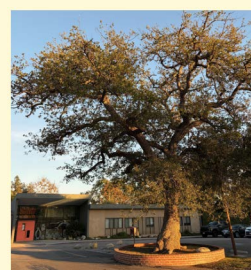
Sign-ups available at the Registration Table (Hilton Pasadena).

Choose one lab and one timeslot.






**Caltech Lab Meeting Point**

Meet at the Oak Tree in front of The Children's Center at Caltech at your scheduled tour time.



**All tours will begin at The Children's Center at Caltech (1200 E California Blvd. Pasadena, CA 91125).  
Transportation is not provided.**

LAB	DESCRIPTION
AMBER Lab 	Bipedal Robotics - Research in robotics, locomotion & prosthetic design
Parker Lab 	Rove Beetles - Evolution of species, symbiotic relationships & biosphere
Taboada Lab 	Frog Optical Traits - Biochemistry of fluorescence, transparency & optical traits in amphibians



# GENERAL INFORMATION

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## REGISTRATION

Registration is required for all attendees. The name badge issued with the paid registration is required for admission to all conference activities, including the Children's Center at Caltech Tour. All attendees, presenters, and exhibitors may pick up registration materials at the Registration & Check in booths.

## ADDITIONAL OPPORTUNITIES:

You may purchase tickets at registration, if available (space is limited)

2-days (Friday & Saturday) \$495

1-day (Friday or Saturday) \$325

Group of 10+ 10% off

## PAYMENT OPTIONS

Checks are payable to the Children's Center at Caltech.

Cash, VISA, MasterCard, American Express, and Discover also accepted.

\*All full day registrations allow admission to the workshops, exhibitor hall, keynote speakers, and includes lunch.

## REFUNDS

We do not offer refunds. Participants may send an alternate in place if they are unable to attend.

## **PARKING**

The Hilton Pasadena maintains a controlled parking lot. Parking rates are discounted for the ECSTEM Conference. Parking rates are as follows: Valet parking is \$18 and includes in/out privileges. Valet overnight parking is \$25 and includes in/out privileges.

The adjacent self parking structure is open to the public. Parking rates are as follows: \$20 and does not include in/out privileges.

## **RECORDING OF PRESENTATIONS**

There will not be professionally-made video or audio tapes of conference presentations. If you wish to tape a presentation, you must first obtain the speaker's permission. By attending this event, you agree to be photographed and/or filmed and give permission to use your likeness in promotional and/or marketing materials.

## **PROGRAM CHANGES**

Unexpected, last-minute changes to our program are inevitable. Signage of changes will be posted by the door of appropriate rooms.

## **ENDORSEMENT DISCLAIMER**

ECSTEM is pleased to present a wide variety of learning and informational opportunities available at this conference. ECSTEM does not, however, endorse products or services promoted in any of the sessions or exhibits. Opinions expressed are those of the presenters and do not necessarily reflect the position of ECSTEM. ECSTEM shall not be responsible for loss or injury from the purchase or use of goods and services offered at the conference.

## **SALES**

With the exception of onsite registration for the conference, no monetary exchange of any type may occur before, during, or after a presentation in any of the workshop rooms or anywhere in the hotel. Sales may take place only in booths located in the Exhibitor Hall.

## **CONFERENCE EVALUATION**

We hope you will share with us your feedback and comments about this year's conference. The workshop evaluations will be available via QR code throughout the sessions.



# M. JOYCE

CHILDREN'S PORTRAITURE

---

Modern, fun, unique images of kids just being kids

## School Pictures

Infant through Kindergarten

For more info or to book your school for 2026, visit:

[www.mjoyceportraits.com](http://www.mjoyceportraits.com)





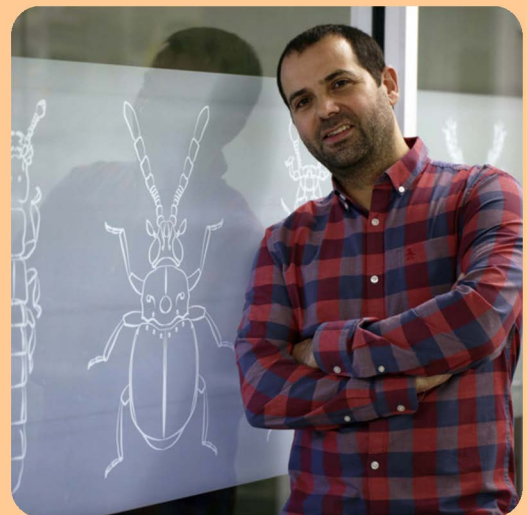
# KEYNOTE SPEAKERS



TINA BRYSON, LCSW, PHD  
FRIDAY KEYNOTE

Dr. Tina Payne Bryson, Ph.D., is a leading parenting expert, psychotherapist, and the Founder and Executive Director of The Center for Connection, a multidisciplinary mental health practice in Southern California. She is the co-author, with Dr. Dan Siegel, of several New York Times bestsellers including *The Whole-Brain Child* and *No-Drama Discipline*, as well as *The Power of Showing Up* and *The Yes Brain*. Drawing from her background in attachment science, child-rearing theory, and interpersonal neurobiology, Dr. Bryson helps parents, educators, and professionals understand how relationships and connection support children's emotional, social, and cognitive development.

Joe Parker is an Assistant Professor of Biology and Biological Engineering at Caltech. Originally from Wales, UK, he was drawn to the rich diversity of insects at a young age and developed a boyhood obsession with beetles that he has transformed into his laboratory's research program. He obtained a BSc in Zoology from Imperial College London and a PhD in developmental genetics at the University of Cambridge/Medical Research Council Laboratory of Molecular Biology. Joe's research focuses on understanding how relationships between species emerge during evolution.



JOE PARKER, PHD  
SATURDAY KEYNOTE



### Friday, February 20th

### Location

7:00 a.m. – 2:00 p.m.	Registration & Check In	Foyer
8:00 a.m. – 4:00 p.m.	Exhibitor Hall	California Ballroom
8:30 a.m. – 10:00 a.m.	Opening Address and Keynote Speaker	International Ballroom
10:00 a.m. – 10:15 a.m.	Break	
10:15 a.m. – 11:45 a.m.	Session I Workshops	Breakout Rooms
11:45 a.m. – 1:00 p.m.	Lunch	
1:00 p.m. – 2:30 p.m.	Session II Workshops	Breakout Rooms
2:30 p.m. – 2:45 p.m.	Break	
2:45 p.m. – 3:30 p.m.	Micro-Session III Workshops	Breakout Rooms
3:30 p.m.	Workshops Conclude	

### Saturday, February 21st

### Location

7:00 a.m. – 11:00 a.m.	Registration & Check In	Foyer
8:00 a.m. – 2:00 p.m.	Exhibitor Hall	California Ballroom
8:30 a.m. – 10:00 a.m.	Keynote Speaker	International Ballroom
10:00 a.m. – 10:15 a.m.	Break	
10:15 a.m. – 11:45 a.m.	Session I Workshops	Breakout Rooms
11:45 a.m. – 1:00 p.m.	Lunch	
1:00 p.m. – 1:45 p.m.	Micro-Session II Workshops	Breakout Rooms
1:45 p.m.	Workshops Conclude	
2:00 p.m. – 4:30 p.m.	Lab Tours	The Children’s Center at Caltech



# PLAN YOUR DAY

To support your conference experience, workshop sessions have been categorized by content area (Science, Technology, Engineering and Mathematics) and target audience. Conference attendees may follow one content area to focus on a particular subject matter or may pick and choose among topics to sample the full complement of conference offerings. The listing of content offerings and their abbreviations can be seen alongside.

CONTENT	TARGET AUDIENCE
S - Science	I - Infants
T - Technology	T - Toddlers
E - Engineering	P - Preschool
M - Mathematics	TK - Transitional Kindergarten
	K - Kindergarten
	FG - First Grade
	SG - Second Grade
	A - Administration

## EXHIBITOR HALL

Don't forget to visit the exhibitor hall located in the California Ballroom. View page 30 for the list of exhibitors.

## LAB TOURS

Tours are available in both self-guided and guided formats on Saturday afternoon. Check out pages 8-9 for more information about lab tours.





# FRIDAY, FEBRUARY 20, 2026

## **Keynote: 8:30am - 10:00am**

**Tina Payne Bryson, LCSW, PhD**

***Investigating Behavior: A Brain-Based Approach to Discipline and Resilience in Early Childhood***

In this presentation, Dr. Tina Bryson uses an interpersonal neurobiology lens to invite educators to investigate behavior the way we encourage children to explore the world—through curiosity, inquiry, and a willingness to challenge assumptions. Rather than relying on outdated diagnoses or rigid behavioral interventions, Dr. Bryson encourages participants to ask: What is this behavior communicating? What does the brain science tell us?



Drawing on the latest research in attachment, stress regulation, nervous system states, neuroplasticity, and development, Dr. Bryson offers a clear, engaging, and practical framework for understanding big, challenging behaviors in young children. The session highlights how educators can respond in ways that are not only effective, but also relationship-based and brain-building—supporting both immediate regulation and long-term resilience.

This presentation reflects the spirit of STEM learning by modeling the same investigative mindset we hope to cultivate in children—one that is reflective, evidence-based, and deeply curious. Grounded in her book *No-Drama Discipline* (co-authored with Dan Siegel) and informed by her clinical and educational experience, Dr. Bryson equips participants with actionable strategies and a new way of seeing their work through the lens of inquiry.

## **Session I: 10:15 am - 11:45 am**

### ***“Engineering: Fostering Young Builders and Makers Through Their Natural Interests”***

Come and observe how a classroom of young learners dove into an Engineering-based curriculum—not through textbooks or rigid instruction, but through their own natural interests and curiosity. This presentation will showcase how the Engineering Design Process can be seamlessly integrated into early childhood settings, serving as a framework for inquiry, creativity, and problem-solving. You’ll see how children engaged deeply in block play, art, storytelling, sewing, and mapping, all while applying the core principles of engineering: Ask, Imagine, Plan, Create, and Improve.

**Presenter: Jose Osorio, BA**

The Children’s Center at Caltech

Target Audience: **P TK**

Content: **S T E M**

Location: Monterey, Hilton Pasadena

### **“Singing and Literacy in the Early Years”**

Discover how singing, movement, and ear training—drawing on the Orff and Kodály approaches—work together to nurture early literacy. This session highlights how rhythm, melody, and playful musical exploration can strengthen phonemic awareness, listening skills, and expressive communication in young children.

**Presenter: Dayita Datta, MA**

The Children’s Center at Caltech

Target Audience: **I T P TK K FG SG A**

Content: **S M**

Location: Pacific Room, Hilton Pasadena

### **“Co-Research: Cultivating a Scientific Mindset with Children and Adults”**

This presentation explores co-research as a way to nurture curiosity and scientific mindsets. Using documentation from Boulder Journey School, we share stories of investigating alongside children and families to co-create curriculum.

**Presenter: Alex Morgan, MA**

Boulder Journey School

Target Audience: **I T P TK K**

Content: **S**

Location: Pasadena Room, Hilton Pasadena

### **“Spinning, Rolling, and Swinging: Investigating Balance with Infants and Toddlers”**

Balance investigations are a perfect fit for infant-toddler classrooms as children become immersed in STEM as they explore the role of balance with their bodies and within the world of objects.

**Presenter: Sherri Peterson, MA & Shelly Bromwich, MA**

Iowa Regents' Center for Early Developmental Education at the University of Northern Iowa

Target Audience: **I T A**

Content: **S T E M**

Location: San Gabriel Room, Hilton Pasadena

### **“Forces in Early Childhood: Magnets and the Ups and Downs of Gravity”**

This workshop will include a hands-on approach to understanding the attraction of magnets and the laws of gravity. Participants will have the opportunity to view and create exciting activities for a STEM learning environment.

**Presenter: Debbie duHadway, BS & Suzanne Gardella, MS**

St. Patrick's Day School

Target Audience: **P TK K FG**

Content: **S T E M**

Location: San Diego Room, Hilton Pasadena

### **“Encounters With the Golden Rain Tree: Celebrating a Culture of Collaborative Investigations”**

Encounters with the Golden Rain Tree marks one year of ongoing research and demonstrates how, through studying one of our school trees, the students used various materials, developed research questions, and, with their teacher's support, created a classroom environment focused on investigation.

**Presenter: Amy Bice & Vannessa Rolle, AA**

New School West

Target Audience: **P TK K**

Content: **S T M**

Location: San Marino Room, Hilton Pasadena

### **“Everyday STEAM”**

This session is designed to help educators effectively include mathematical concepts in classroom settings, childcare centers, and extended home learning environments. Learn new strategies and help make math a lively, practical, and enjoyable part of daily life for children.

**Presenter: Nancy Duran, MA**

East Los Angeles College

Target Audience: **I T P TK K**

Content: **S T E M**

Location: Santa Clara Room, Hilton Pasadena

### **“Ready, Set, STEM! Fun and Foundational STEM for Young Children and Their Teachers and Families”**

Join us to engage in hands-on activities from our Ready, Set, STEM! program, focused on promoting skills, confidence, and enthusiasm for STEM in young children, their teachers, and their families.

**Presenter: Debby Leslie, PhD & Becky Criollo, MA**

University of Chicago & UChicago STEM Education

Target Audience: **P TK K**

Content: **S E M**

Location: Santa Barbara Room, Hilton Pasadena

### **Session II: 1:00 pm – 2:30 pm**

#### **“Cause and Effect with Infants and Toddlers”**

Infants and toddlers are natural scientists exploring their environment by touching, grabbing, dropping, and observing the results of their actions. See how hands-on and play-based explorations help deepen their knowledge of cause and effect.

**Presenter: Cindy Antuna, BA & Lorena Meza, BA**

The Children’s Center at Caltech

Target Audience: **I T**

Content: **S T E M**

Location: Monterey Room, Hilton Pasadena

#### **“ECSTEM in China: Building Learning Experiences for Young Children”**

Discover how leading international kindergartens in China are implementing STEM activities across age groups, blending Eastern and Western teaching practices.

**Presenter: Heidi Luo, MA, HuiJuan Ying & Lina Fu**

Hua Guo Tian Yu Education Technology

Target Audience: **P TK K FG SG A**

Content: **S T E M**

Location: Santa Rosa Room, Hilton Pasadena



### **"Children as Researchers: Cultivating Knowledge in Community"**

This presentation demonstrates a group of children and teachers exploring the 100 Languages, illustrating how their investigations became more collaborative and in-depth as they revisited the same subject collectively. The children engaged in a design thinking process, based on a framework from Stanford Design Lab.

**Presenter: Cindy Nelsen, AA & Octavia Leclerc-Jones, BA**

New School West

Target Audience: **P TK K FG SG**

Content: **S T E M**

Location: San Marino Room, Hilton Pasadena

### **"Creating a STEM-based Woodworking Program!"**

Attendees will learn the benefits and ways to implement a woodworking program with young children safely, and how woodworking can be incorporated into a broader STEM program. Learn about the best tools for young children to use, how to set up a woodworking space for young children, and the step by step process of building children's skills over time.

**Presenter: Paul Ellis, MA**

Brentwood Sunshine Preschool

Target Audience: **P TK K**

Content: **S T E M**

Location: Pacific Room, Hilton Pasadena

### **"Experimentations with Technology, Including AI: How Can Strong Pedagogy Help Us Navigate, Respond To, and Influence the Modern World?"**

We recognize that children learn through experience, and in relation to contemporary society, and children have the right to participate in the world around them. With this in mind, we will share several documented experiences of children working with modern technologies at Boulder Journey School. These experiences span over a decade and include present day.

**Presenter: Alison Maher, MA & Andrea Sisbarro, MA**

Boulder Journey School

Target Audience: **I T P TK K FG SG A**

Content: **S T E M**

Location: Pasadena Room, Hilton Pasadena

### **"Where Investigation Begins: STEM Books for Infants and Toddlers"**

Explore STEM books that encourage discovery and curiosity for infants and toddlers. We will delve into simple board books and materials that demonstrate the importance of real-world concepts as an introduction to STEM.

**Presenter: Jennifer Montgomery, EdD**

College of Southern Nevada

Target Audience: **I T**

Content: **S T**

Location: San Gabriel Room, Hilton Pasadena

### **“Slow Pedagogy as a Pathway to Inquiry: Nurturing Child-Led Investigations Through Time, Trust, and Presence”**

What happens when we slow down to truly listen to children and their questions? Explore how a slow, relational approach to early STEM learning opens the door to deeper inquiry of the world around us. This session is for educators ready to move beyond activity-based STEM and embrace inquiry that unfolds through presence, patience, and sustained curiosity.

**Presenter: Amy Chiu, MEd**

The Work of Play

Target Audience: **T P TK K**

Content: **S**

Location: Santa Clara Room, Hilton Pasadena

### **“Origami STEM for Early Childhood: Exploring 200 Years of Japanese Paper Innovation Through Creative Learning”**

Discover how “ordinary” paper can transform into an extraordinary STEM and creative learning tool. This session introduces a project-based exploration in which children investigate the diverse world of Japanese paper—a material Japanese culture has studied and innovated for over 200 years. Participants will experiment with various types of traditional paper, engage in origami-based physics and engineering activities, and experience how paper exploration can spark children’s curiosity, problem-solving, and creativity.

**Presenter: Yoshimi Ueda, BA & Joslyn Wiilauer, MA**

Kodomo edu International School

Target Audience: **P TK K**

Content: **T E**

Location: San Diego Room, Hilton Pasadena

### **Micro-Session III: 2:45 pm – 3:30 pm**

#### **“Infants Exploring the World Through Their Senses”**

Join us as we discuss practical insights into the vital role of sensory play in early childhood. Using guided, age-appropriate activities, we will explore how engaging the senses of touch, sight, sound, and smell helps build critical nerve connections in a young child's brain. This session provides a wealth of ideas for sensory activities, demonstrating how simple play can lay a strong foundation for a child's lifelong learning.

**Presenter: Eloisa McGah, BA & Elida Lopez, BA**

The Children’s Center at Caltech

Target Audience: **I T**

Content: **S T E M**

Location: San Gabriel Room, Hilton Pasadena

*“Learning happens when experience meets reflection.”*

*– David A. Kolb*

### **“STEM Through Play: Sparking Curiosity in Toddlers”**

This session will inspire educators who are just beginning their STEM journey by showing that toddlers are naturally curious scientists, engineers, and mathematicians. Through a slide show of images, we'll explore developmentally appropriate invitations, such as pouring water, stacking blocks, rolling balls, and noticing shadows. Each image will highlight the underlying STEM ideas (force and motion, cause and effect, spatial reasoning, problem-solving) while staying rooted in toddlers' everyday play.

**Presenter: Monica Diaz, MA**

Canyon Crest Preschool

Target Audience: **T**

Content: **S T E M**

Location: San Marino Room, Hilton Pasadena

### **“Joyfully Building a Love of Science in Young Learners: A Year-Long Curricular Exploration of Science in a Mixed-Age, Play-Based Classroom”**

In this workshop we will be looking at how joy, play, and scientific inquiry all interact in the nursery school setting to engage and connect children to a love of science.

**Presenter: Emma Vallarino, MA & Laura Benard, MA**

Bing Nursery School, Stanford University

Target Audience: **P TK**

Content: **S**

Location: Pasadena Room, Hilton Pasadena

### **“Investigating the Mystery of Unseen Science”**

This workshop explores the mysteries of science as we share strategies, tips, and resources to joyfully and playfully investigate the unseen world of science that surrounds us.

**Presenter: Raissa Lee, MSED**

Irvine Valley College

Target Audience: **I T P TK K FG SG**

Content: **S T E M**

Location: Pacific Room, Hilton Pasadena

### **“Designers in the Making: Inspiring Young Minds Through STEM Play”**

Discover how play-based, interactive STEM nurtures creativity, storytelling, and collaboration in early learners through science connections, mechanical technologies, engineering design, and math reasoning — all in meaningful building experiences.

**Presenter: Meshia Pink, BA**

Bricks 4 Kidz

Target Audience: **P TK K FG SG A**

Content: **S T E M**

Location: Santa Clara Room, Hilton Pasadena

### **“Little Sprouts, Big Ideas: A STEAM Curriculum, Implementing Gardening”**

Our ECE STEAM curriculum, with an implementation of gardening, supports children's growth by encouraging creativity and imagination through open-ended activities. It helps develop essential problem-solving and critical thinking skills, while promoting collaboration and communication among peers. This approach nurtures cognitive, emotional, and physical development, laying a strong foundation for future academic success.

**Presenter: Edith Flores, BA & Natane Ammons, BA**

Drew Child Development

Target Audience: **T P TK**

Content: **S T E M**

Location: Santa Barbara Room, Hilton Pasadena

### **“Follow the Leader: Control and Freedom in STEM Learning Environments”**

Rethink control and freedom in STEM learning. See what can happen when you stop controlling and directing children's learning.

**Presenter: Vivian Belmont, BA**

Imaginology Kids

Target Audience: **P**

Content: **S T E M**

Location: San Diego Room, Hilton Pasadena

### **“Outdoor Adventures with Young Children and Their Teachers”**

You will learn the practical logistics of taking young children and their teachers on extended outdoor adventures (including napping outside) based on the real experience of our San Francisco based preschool.

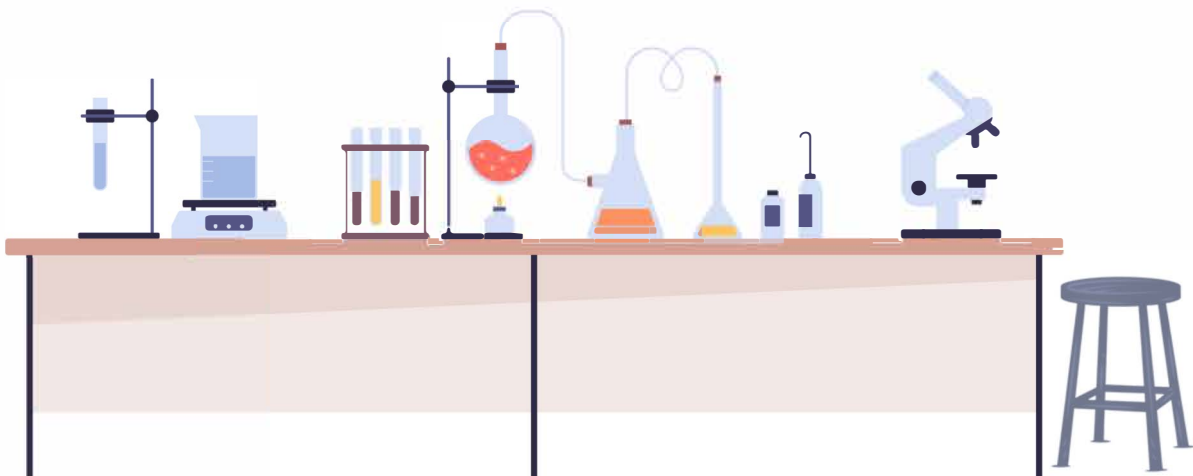
**Presenter: Kim Garcia-Meza, MA**

Escuelita Las Mañanitas

Target Audience **P TK K**

Content: **S**

Location: Monterey Room, Hilton Pasadena





“The art of teaching is the art  
of assisting discovery.”

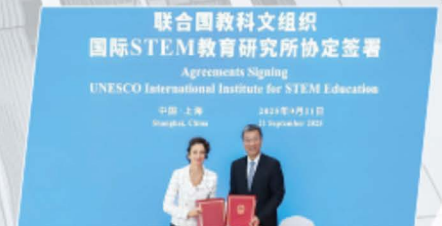
— Mark Van Doren



## Linking Global Perspectives for International Collaboration, Drawing from Eastern Heritage for Local Innovation.

链全球视野国际合作，承东方底蕴本土创生

2026



Huaguo & Shanghai Normal University  
STEM Education Teaching Base  
花果 · 上海师范大学 STEM教育教学基地

Huaguo & East China Normal University  
Joint STEM Research Laboratory  
花果 · 华东师范大学 STEM研究联合实验室

The UNESCO International STEM Education  
Institute Officially Inaugurated in Shanghai  
联合国教科文组织国际STEM教育研究所

花果天育教育科技（上海）有限公司  
Hua Guo Tian Yu Education Technology (Shanghai) Co., Ltd



# SATURDAY, FEBRUARY 21, 2026

## **Keynote: 8:30am - 10:00am**

**Joe Parker, PhD**

### ***Investigating Insects: A Scientist's Journey from Childhood Wonder***

In this talk, Parker will describe his work on the evolution of symbioses and species interactions that underpin earth's biosphere. He will discuss how his scientific work stems from a childhood fascination with the insect world — one that may exist, innately, in perhaps all children.

Through stories from his research, Parker will explore how tiny, often overlooked organisms can reveal some of evolution's biggest ideas. Attendees will gain insight into how curiosity-driven science uncovers hidden connections and how early wonder can grow into discoveries.



## **Session I: 10:15 am - 11:45 am**

### ***"Learning by Making"***

Think Tank is dedicated to enabling equitable access to quality STEAM education by bringing mobile classes and programs directly to schools, regardless of their location or resources. In this session, you'll experience how our dynamic, make-to-learn approach ignites creativity and cultivates critical thinking skills in even the youngest learners.

*\* Visit the Think Tank mobile lab during the Lab Tours from 2:00-4:30 at The Children's Center at Caltech.*

**Presenter: Elad Offer**

Think Tank Science

Target Audience: **K FG SG**

Content: **S T E M**

Location: Pasadena Room, Hilton Pasadena

### ***"Cultivating Curiosity: Discovering How Plants Live & Thrive"***

We've got the dirt on plants! From leaves to sunlight to bug-eating wonders, explore how plants live and thrive through close looking, hands-on investigations, and creative artmaking.

**Presenter: Kristin Brisbois McNutt, PhD**

The Huntington

Target Audience: **K FG SG**

Content: **S E**

Location: San Gabriel Room, Hilton Pasadena

### **“The Reluctant Builder”**

Not every child rushes to the block corner. Some hesitate, watch from the sidelines, or join only when prompted. This workshop explores the essentials of supporting “reluctant builders” and making block play inclusive for all learners.

**Presenter: Debbie Severin, BA**

The Caroline Pratt Center

Target Audience: **T P TK**

Content: **E M**

Location: Pacific Room, Hilton Pasadena

### **“Integrating the Engineering Design Process (EDP) in Early Childhood Education”**

This framework leverages STEM integration within early childhood education to explore the Engineering Design Process (EDP). Through structured hands-on experiences and project-based learning, we will demonstrate practical methodologies for teaching core academic subjects including: language and literacy, science, technology, engineering, and mathematics.

**Presenter: Eric Alvarado, MA & Eric Chavez, MA**

Roots and Wings at Seven Arrows Elementary School & Methodist Preschool

Target Audience: **P TK K**

Content: **S T E M**

Location: Monterey Room, Hilton Pasadena

### **“Unleashing Curiosity & Creativity: Early Childhood Learning Through Playful STREAM Activities & Tech”**

This presentation will explore the state of STREAM and how cutting-edge technologies like immersive augmented reality (AR) experiences can transform ECE into a wonderland of discovery.

**Presenter: Phong Tran, BS**

Eye On EdTech, Orange Coast College, & Calif. State University, Fullerton

Target Audience: **I T P TK K FG SG A**

Content: **S T E M**

Location: San Diego Room, Hilton Pasadena

### **“Storytelling as an Interactive Teaching Modality: The Practical use of Felts, Puppets, and Props to Build STEM Vocabulary and Enhance Literacy Through Multiple Disciplines”**

Fun, interactive, and STEMtastic! Unlock dynamic storytelling skills with the practical use of felts, puppets and props! Help build language skills so learners can express their STEM ideas effectively.

**Presenter: Sundrina Cottrell, AA**

Artfelt Puppets, Pieces & Props

Target Audience: **I T P TK K FG A**

Content: **S T E M**

Location: Santa Rosa Room, Hilton Pasadena

*“Without investigation, there is no understanding.”*

*— Hannah Arendt*



### **“Patterns, Patterns, EVERYWHERE – Especially Outside”**

Recognizing patterns is an essential part of the learning process, prevalent in language, daily routines, mathematics, music, art, and dance. But what constitutes a pattern outside? Please join us to explore environments and materials to discover a multitude of patterns outdoors.

**Presenter: Carrie Rothstein-Fisch, PhD & Katie Leon, MA, ABD**

California State University Northridge

Target Audience: **P TK K FG SG**

Content: **S M**

Location: San Marino Room, Hilton Pasadena

### **“Light, Color, and Shadow as Invitations to Thought with Infants and Toddlers”**

Discover how infants and toddlers act as capable researchers when invited into encounters with light, color, and shadow. Through video documentation, dialogue, and hands-on exploration, participants will uncover how environments and materials “speak,” how curation communicates invitation, and how rich sensory experiences nurture early STEM thinking.

**Presenter: Jennifer Kesselring**

Riverfield Country Day School

Target Audience: **I T**

Content: **S T E M**

Location: Santa Clara Room, Hilton Pasadena

## **Micro-Session II: 1:00 pm – 1:45 pm**

### **“The Importance of Design and Nature in Early Childhood Education”**

Discover how evidence-based, nature-infused design transforms young children’s daily experiences—sparking curiosity, problem-solving, resilience, and empathy—while uniting educators and designers to create joyful, inclusive ecosystems of lifelong learning and stewardship.

**Presenter: Losmeiya Huang, MA & Todd Erlandson, MArch**

Growing Place Ocean Park & March Studio

Target Audience: **I T P TK K A**

Content: **S T E M**

Location: San Gabriel Room, Hilton Pasadena

### **“Introducing the Blocks Math Institute!”**

Join us to learn about our developing preschool to second grade unit blocks based mathematics curriculum. Attendees will try lessons from our pre-k pilot curriculum and other evolving curriculums.

**Presenter: Scott Moran, MEd**

The Caroline Pratt Center

Target Audience: **T P TK K FG SG A**

Content: **E M**

Location: Pacific Room, Hilton Pasadena



### **“Bridge Investigators: Decoding STEM Behaviors in 18-24 Month Olds”**

Decode 18-24-month toddler behaviors as early science. Engage in provocations, analyze video, and practice documentation linking dumping, stacking, and transporting to STEM habits, responsive curriculum, and clear, strengths-based family communication.

**Presenter: Tiffany Johnson, MS**

Tiny Chaos Co & Dobson Christian Preschool and Childcare

Target Audience: **I T**

Content: **S T E M**

Location: Pasadena Room, Hilton Pasadena

### **“Let’s Investigate Plants in the Classroom Together!”**

We’ll discover different ways to approach plants in the classroom through the STEM lens. Investigating plants means giving children opportunities to observe, explore, learn responsibility and ask questions about how plants grow and change. The goal isn’t just memorizing facts, but helping children build curiosity, problem-solving skills, and an appreciation for nature.

**Presenter: Mariana Contreras, BA**

Harmon Oaks Nursery School

Target Audience: **T P TK K FG SG**

Content: **S T E M**

Location: San Marino Room, Hilton Pasadena

### **“Your Trash is My Treasure: Meaningful Experiences Through Recyclables”**

Attendees will actively explore and be involved in innovative experiences through recyclables for intentional teaching and implementation of STEM. We will explore activities that offer opportunities for children to be critical thinkers and problem solvers, and where they can practice, learn, create, explore and develop by having experiences that are meaningful, purposeful and targeted.

**Presenter: Joshua Alvarez, MA**

Kaplan Early Learning

Target Audience: **I T P TK K FG SG A**

Content: **S T E M**

Location: Santa Clara Room, Hilton Pasadena

### **“Aventuras al Aire Libre Con Niños Pequeños y Sus Maestros”**

In this presentation titled, *Outdoor Adventures with Young Children and Their Teachers*, we'll learn the practical logistics of taking young children and their teachers on extended outdoor adventures (including napping outside) based on the real experience of our San Francisco based preschool.

*\* This presentation will be delivered in Spanish.*

**Presenter: Kim Garcia-Meza, MA**

Escuelita Las Mañanitas

Target Audience: **P TK K**

Content: **S**

Location: Santa Barbara Room, Hilton Pasadena

## **"Look What I Built! How to Incorporate the Block-Play in STEM Education for Young Children"**

This workshop will focus on strategies to enrich the block-play area in early childhood classrooms by providing practical, hands-on STEM experiences highly relevant to young children. It will also highlight how to integrate children's block play and woodworking experiences into a STEM curriculum while aligning with the Preschool Learning Foundations and DRDP measures.

**Presenter: Rokeya Rahman, MA**

East Los Angeles College

Target Audience: **T P TK K FG SG A**

Content: **S T E M**

Location: San Diego Room, Hilton Pasadena

## CONFERENCE EVALUATION SURVEY

Your feedback matters —  
please take a moment to  
complete the evaluation.

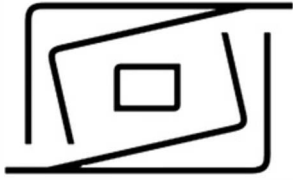




Pacific Oaks

COLLEGE & CHILDREN'S SCHOOL

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AI + Gallery



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MOXIE







*“Investigation is how wonder  
becomes knowledge.”*

*— Carl Saagan*



Thank you for your interest in ECSTEM. In 2000, our research led us to adopt STEM (Science, Technology, Engineering and Mathematics) curricula as a focus of our early childhood program. As leaders in STEM Early Childhood education, we launched ECSTEM ([www.ecstem.org](http://www.ecstem.org)) in 2011, and began hosting an annual conference bringing together educators, policy makers, researchers and other vested community stakeholders to address the needs of our youngest citizens.

The Professional Development Division (PDD) arranges tours, on-site visits and workshops.

- Workshops are held on Saturdays once a month from 9am to 12pm and are \$75 per person. These are pre-scheduled dates; please see below for information regarding upcoming dates.
- One hour tours are scheduled during the week; they are \$125 per group (limited to 2). Please contact our office for more details and scheduling.
- 2.5 hour educator tours available, which includes a description of STEM curriculum and Q&A with the director (limited to 4). Please contact our office for more details and scheduling.
- Half day and full day presentations at your program are available upon request and dependent upon availability. Please contact our office for scheduling and pricing.



# SPRING WORKSHOPS

Workshops are held on Saturdays once a month from 9am to 12pm and are \$75 per person. Includes a tour of the center.

SATURDAY, MARCH 28TH, 2026

## SPRING EDUCATOR WORKSHOP

LOOK CLOSER!  
OBSERVE, DRAW, AND DISCOVER



## Workshop and Tour

Saturday, March 28<sup>th</sup>, 2026  
9 am - 12 pm

Young children naturally observe the world with curiosity, but they benefit from guidance in learning how to look closely and with purpose. This workshop explores ways to help children record their observations and how these practices support creativity, attention, fine-motor development, and early scientific thinking. When we slow down, we give children the time they need to truly see the world around them.

**Presenter:** Melissa Samples  
STEM Curriculum Coordinator

To register for this workshop or any upcoming Spring workshops, use the QR code or visit [ecstem.caltech.edu](https://ecstem.caltech.edu)



# THINGS TO DO IN PASADENA

## Old Town Pasadena

The real downtown of Pasadena hosts many activities and establishments for those looking for fun in the City of Roses. Take a walk along Colorado Blvd. in old town to enjoy a myriad of shopping and dining options. And, of course, every year folks camp out along Colorado the day before the turn of the new year so they can stake out their real estate to watch the annual Rose Parade.

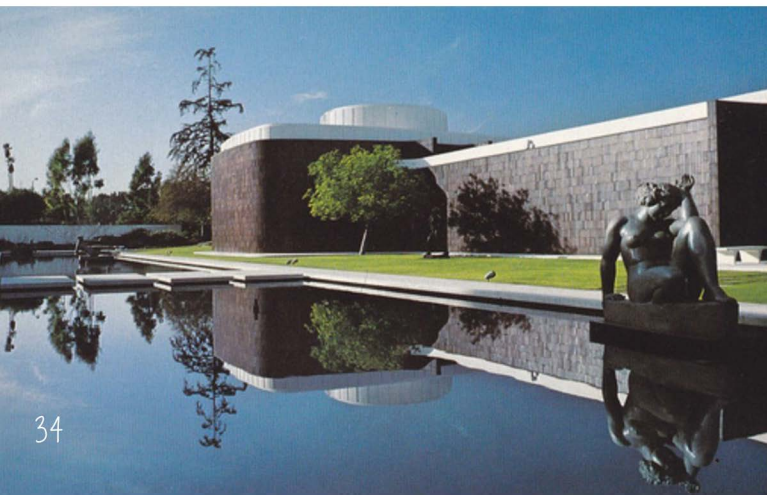
Recommended: True Food Kitchen for lunch, and 85°C Bakery Cafe for dessert.



## Norton Simon Museum

One of the most impressive private collections in the world resides at the Norton Simon Museum, just a few blocks west of the heart of Old Town Pasadena, with works ranging from a 2,000 year period that include paintings from the European Renaissance, 20th century European masters, and incredible sculptures from South and Southeast Asia made more than a millennia ago.

Standard admission is \$20 but the Museum is free for all visitors the first Friday of every month from 4 p.m. to 7 p.m.



## South Lake Ave

If you've exhausted your capacity for shopping on Colorado Blvd, then take a stroll down Lake Ave. A few miles east of Old Town proper, this 12 block strip along South Lake Ave features shops, markets, restaurants, and retailers.

Recommended: Mediterranean Cafe for lunch, and Euro Pane Bakery (just a block east) for macarons.



## The Gamble House

A California and National Historic Landmark can be found mixed in with other well to do suburban homes on Westmoreland Place in Pasadena. Built in 1908, the Gamble House belonged to the on screen Dr. Emmett Brown in the Back to the Future trilogy. Off screen this three-story architect's dream was included in the top 10 houses list of all time by the Los Angeles Times in 2008 and has a yearly rotating occupancy of architecture students from USC.

Drop in on a Tuesday when the rear lawn and terrace are open for Brown Bag lunch carriers or for daily architect based tours.





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## #ECSTEM2026



