

FEBRUARY 28 & 29, 2020

THE 10TH ANNUAL
EARLY CHILDHOOD
STEM CONFERENCE

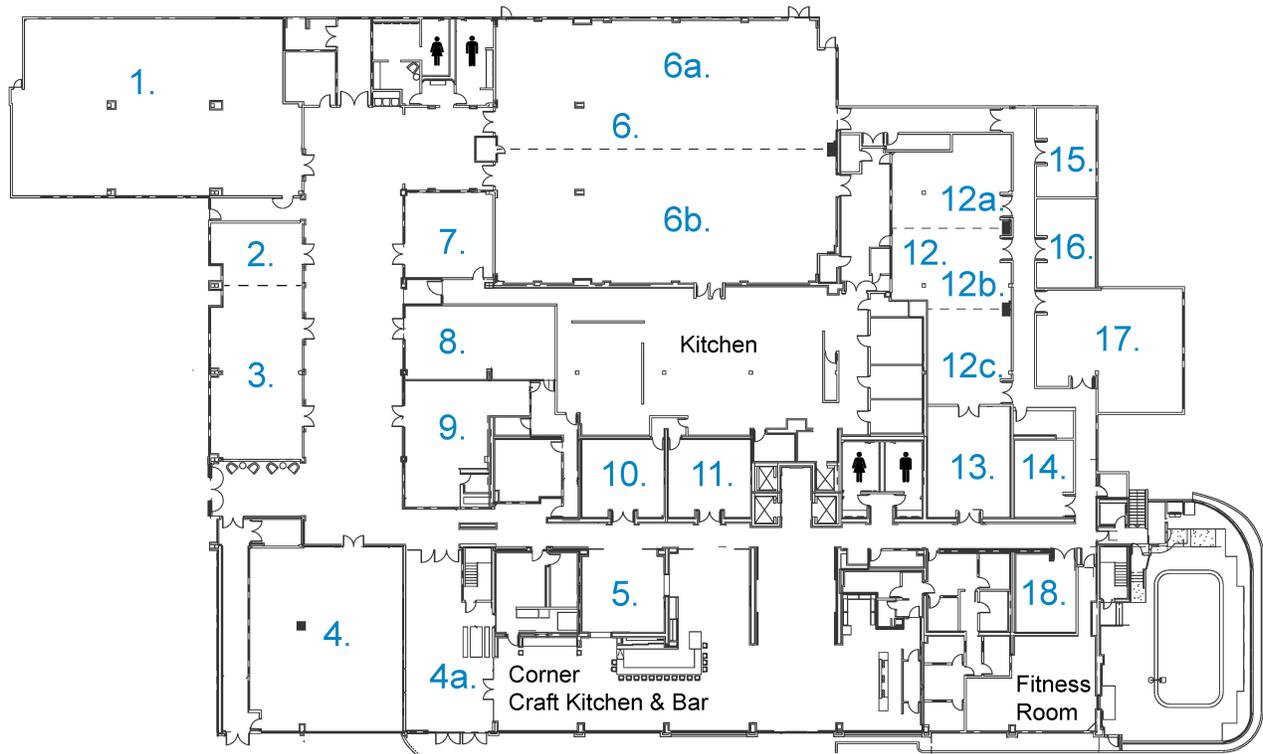
PLAYING ABOUT WITH STEM



the children's
center
caltech

The Pasadena Hilton
168 South Los Robles Ave
Pasadena, CA

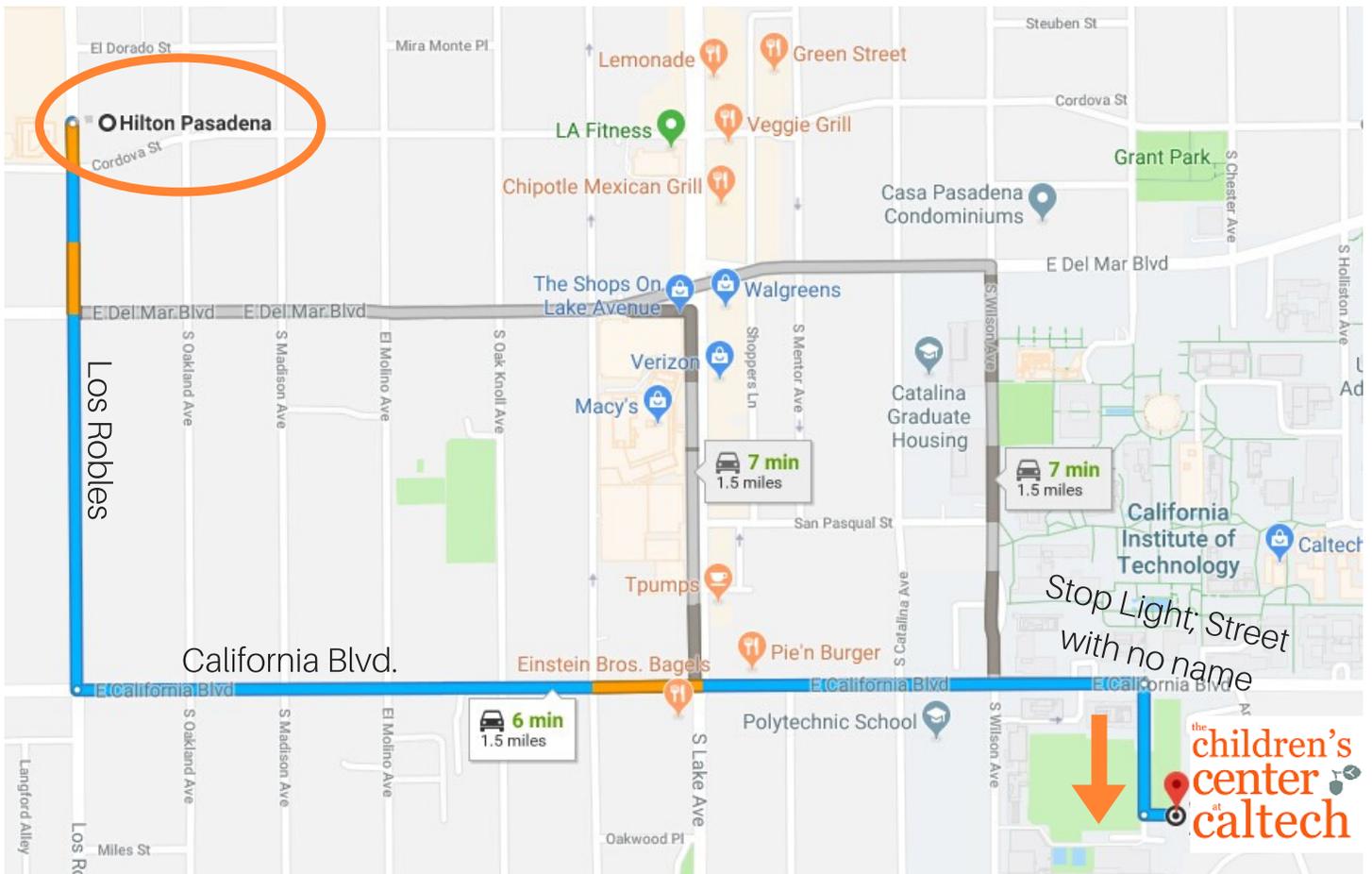
HILTON PASADENA - FIRST FLOOR



- | | |
|---------------------------------|---------------------|
| 1. CALIFORNIA BALLROOM | 12. PACIFIC ROOM |
| 2. PASADENA II | 12a. PACIFIC ROOM A |
| 3. PASADENA I | 12b. PACIFIC ROOM B |
| 4. SAN GABRIEL | 12c. PACIFIC ROOM C |
| 4a. PATIO | 13. SAN DIEGO |
| 5. MEDIA LOUNGE | 14. SANTA MONICA |
| 6. INTERNATIONAL BALLROOM | 15. SACRAMENTO |
| 6a. INTERNATIONAL BALLROOM EAST | 16. SAN JOSE |
| 6b. INTERNATIONAL BALLROOM WEST | 17. MONTEREY |
| 7. SIERRA MADRE | 18. DEL MAR |
| 8. SAN MARINO | |
| 9. SANTA CLARA | |
| 10. SANTA BARBARA | |
| 11. SANTA ROSA | |

TOURS AT THE CHILDREN'S CENTER AT CALTECH

DIRECTIONS FROM THE HILTON HOTEL TO THE CHILDREN'S CENTER AT CALTECH



Transportation is not provided. Shuttle service from the Hilton Pasadena is available, but must be reserved ahead of time and is limited. Please reserve at the hotel front desk.

Alternatively, it is a 30 minute walk from the hotel. Other options include Uber and Lyft. Please plan accordingly as the tour will begin promptly at 1:30pm.

To get to The Children's Center at Caltech from the Hilton Pasadena:

- 1) Head south on Los Robles from the Hotel.
- 2) Turn right onto California Blvd. and head east
- 3) We are located on an undisclosed street off California between Wilson and Arden.
- 4) You will turn right (south) onto the unmarked street at the stoplight located in front of the Caltech sign, the large rust colored Cahill building, and tennis courts. Look for our CCC signage on the corner.
- 5) Follow the tennis courts to the end and there we are! You may park in the Children's Center lot located directly in front of our center.



Panda

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believes that good fortune is best shared.

We proudly support The Children's Center at Caltech
and The Early Childhood STEM Conference.
Thank you for your dedication to inspiring better lives.



WELCOME TO THE 10TH ANNUAL EARLY CHILDHOOD SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS CONFERENCE

This year we celebrate 10 years of bringing Science, Technology, Engineering and Mathematics to Early Childhood Educators from around the globe! In 2000 when the Children's Center at Caltech (CCC) first started exploring children's learning as seen through the lens of STEM, there were few frameworks to draw from for information and inspiration. As we would discover schools, educators, authors and researchers who specialized in this unique perspective in curriculum development, we began to recruit professional growth opportunities for our teachers. To share these rich resources, we began to invite neighboring schools. This led to the creation of the Early Childhood Teacher Collaboration in 2002, which consisted of monthly staff in-service trainings that were thoughtfully planned to enhance the professional growth of our team, including our neighbors and partners in early childhood education.

In 2011, our mission to continue preparing today's children for the challenges of tomorrow, heightened our awareness that it was increasingly important that they have developmentally appropriate, inclusive and culturally sensitive approaches in science, technology, engineering and mathematics (STEM). Yet, meeting the needs of an economically, ethnically and socially diverse student population - especially for the youngest of learners - is challenging. And so, the Early Childhood Science, Technology, Engineering and Mathematics (ECSTEM) Conference was born.

Since then, the Children's Center at Caltech has brought together distinguished researchers and educators from around globe to promote and increase awareness about the importance of introducing STEM education to early childhood. The goal was to address the challenges facing early childhood educators regarding STEM curriculum and instruction, the implications for early childhood pedagogy and ultimately beginning a national movement focusing on STEM for children from birth to age eight.

Fast forward to 2020, the ECSTEM Conference celebrates its 10th year, Playing About with STEM. We are proud of this journey and look forward to keeping joyful STEM experiences in children's everyday play! It's been a big order, but together we can continue to make great strides toward equipping our children with the tools necessary to create change, innovate, and be effective and productive individuals - the skilled STEM professionals of the future. Thank you for your interest in joining us in this movement to strengthen our educational system for the future generations to come!

Sincerely,
The ECSTEM Committee

SUSAN WOOD, M.A., THE CHILDREN'S CENTER AT CALTECH - EXECUTIVE DIRECTOR

TERESA DE LA TORRE, Ed.S., MSTC THE CHILDREN'S CENTER AT CALTECH - ASSOCIATE DIRECTOR

MONICA DOLAN, M.A. THE CHILDREN'S CENTER AT CALTECH - STEM CURRICULUM COORDINATOR

CAROL CAPITO, IT'S IN THE DETAILS EVENT PLANNING AND OUTDOOR CLASSROOM PROJECT CONSULTANT AND TRAINER - ECSTEM
CONFERENCE COORDINATOR

SEADRA CHAGOLLA, M.B.A., THE CHILDREN'S CENTER AT CALTECH - OFFICE MANAGER

TIFFANY CHOU, B.A., THE CHILDREN'S CENTER AT CALTECH - ACCOUNTS MANAGER

Since 1972, The Children's Center at Caltech (CCC) has grown to become a national leader in STEM Early Education serving children ages six months through five years. The CCC utilizes a constructivist, play based approach to plan, develop, and implement inquiry rich curriculum as seen through the lens of STEM. As a way of reaching out to our community, the CCC conducts professional development workshops and shares research in STEM-based Early Childhood education.



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JOIN US
SUNDAY MARCH 1ST

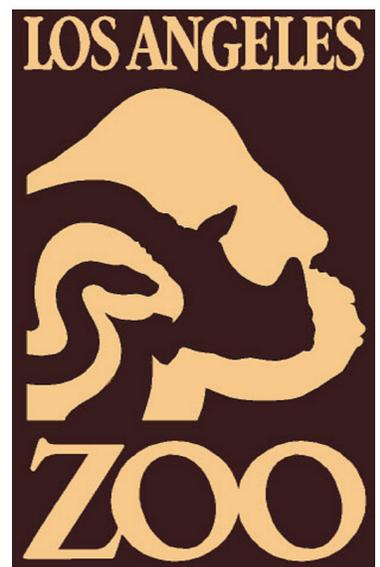
ECSTEM ATTENDEES THAT PRESENT THEIR BADGE AT
THE ZOO GAIN FREE ADMISSION AND ACCESS TO

ANIMALS UP CLOSE



DISCOVER HOW TO EXPLORE THE ZOO THROUGH THE EYES OF A SCIENTIST!
THIS 30 MINUTE PROGRAM USES SCIENTIFIC INQUIRY TO ASK
QUESTIONS, MAKE OBSERVATIONS, AND THINK CRITICALLY ABOUT THE
WORLD AROUND US. A ZOO ANIMAL AMBASSADOR WILL HELP US PRACTICE
OUR SKILLS IN THIS SPECIAL PRESENTATION.

ATTENDEES ARE WELCOME TO JOIN THIS PROGRAM AT 10:15 AND 11:15





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www.huaguook.com

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CREATIVITY
REQUIRES
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PLAY."
- ABRAHAM
MASLOW



Tufts Early Childhood Technology (ECT) Graduate Certificate Program

This blended program contains three courses for educators and practitioners working with young children in pre-kindergarten through second grade

- Learn to teach coding, making, and design in playful early childhood settings
- Experience cutting-edge technologies including KIBO robotics & the ScratchJr app
- Directed by Professor Marina Umaschi Bers, Professor at the Eliot-Pearson Department of Child Study and Human Development and Director of the DevTech Research Group



Graduate School of Arts and Sciences
Early Childhood Technology

go.tufts.edu/ECT

**Now Accepting Applications
for Fall of 2020**





10TH ANNUAL ECSTEM CONFERENCE

SCHEDULE OF EVENTS

Friday, February 28th

Location

7:00 a.m. – 11:00 a.m.	Registration & Check In	Foyer
8:00 a.m. – 10:00 a.m.	Opening Address and Keynote Speaker	International Ballroom
10:00 a.m. – 10:15 a.m.	Break/Hall Of Inquiry	California Ballroom
10:15 a.m. – 11:45 a.m.	Session I Workshops	Breakout Rooms
11:45 a.m. – 12:00 p.m.	Break/Hall Of Inquiry	California Ballroom
12:00 p.m. – 1:00 p.m.	Lunch/Raffle	International Ballroom
1:15 p.m. – 3:30 p.m.	Tour — The Children’s Center at Caltech	The Children’s Center at Caltech
1:15 p.m. – 1:30 p.m.	Break/Hall Of Inquiry	California Ballroom
1:30 p.m. – 3:00 p.m.	Session II Workshops	Breakout Rooms
3:00 p.m. – 3:15 p.m.	Break/Hall Of Inquiry	California Ballroom
3:15 p.m. – 4:45 p.m.	Session III Workshops	Breakout Rooms
4:45 p.m.	Workshops conclude	

Saturday, February 29th

Location

7:00 a.m. – 11:00 a.m.	Registration & Check In	Foyer
8:00 a.m. – 10:00 a.m.	Opening Address and Panel of Experts	International Ballroom
10:00 a.m. – 10:15 a.m.	Break/Hall Of Inquiry	California Ballroom
10:15 a.m. – 11:45 a.m.	Session I Workshops	Breakout Rooms
11:45 a.m. – 12:00 p.m.	Break/Hall Of Inquiry	California Ballroom
12:00 p.m. – 1:00 p.m.	Lunch/Raffle	International Ballroom
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3:15 p.m. – 4:45 p.m.	Session III Workshops	Breakout Rooms
4:45 p.m.	Workshops conclude	





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"SCIENCE IS A WAY
OF THINKING
MUCH MORE THAN
IT IS A BODY OF
KNOWLEDGE."
- CARL SAGAN



GENERAL INFORMATION

REGISTRATION

Registration is required for all attendees. The name badge issued with the paid registration is required for admission to all conference activities. Registration does not include tours. All attendees, presenters, and exhibitors may pick up their registration materials at the Registration & Check In booths.

Additional Opportunities:

You may purchase tickets or sign up for any of the following events at registration, if available (space is limited):

Onsite Registration fees are as follows:

2-days (Friday & Saturday) \$400

1-day (Friday or Saturday) \$300

2-day Student \$225

1-day Student \$150

Group of 10+ 20% off

Tours of The Children's Center at Caltech \$40 per tour

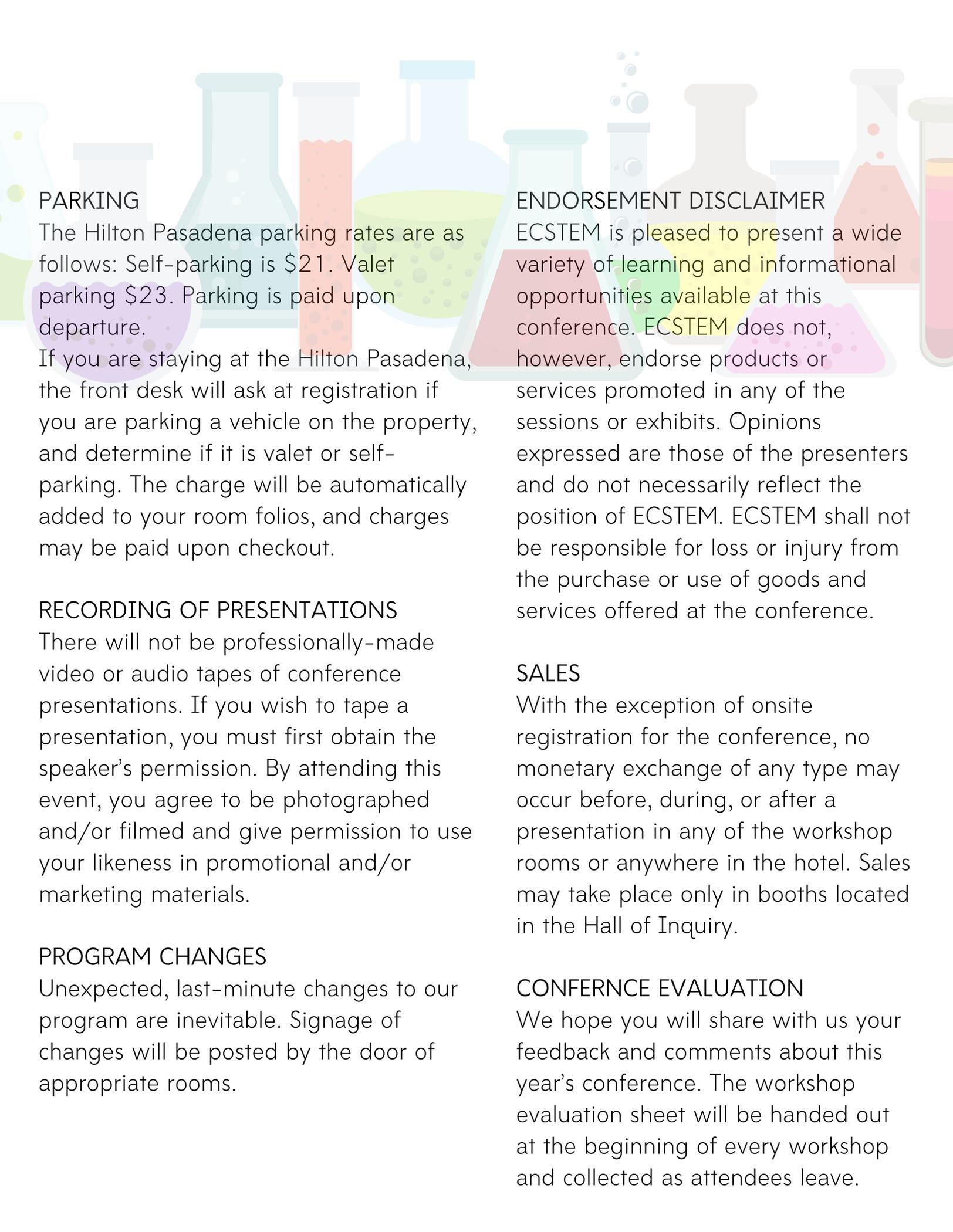
Payment Options:

Please make checks payable to The Children's Center at Caltech. We also accept cash, VISA, MasterCard, American Express, and Discover.

*All full day registrations allow admission to the workshops, exhibitor exploration, opening/keynote address, and includes lunch.

REFUNDS

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



PARKING

The Hilton Pasadena parking rates are as follows: Self-parking is \$21. Valet parking \$23. Parking is paid upon departure.

If you are staying at the Hilton Pasadena, the front desk will ask at registration if you are parking a vehicle on the property, and determine if it is valet or self-parking. The charge will be automatically added to your room folios, and charges may be paid upon checkout.

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 Hall of Inquiry.

CONFERENCE EVALUATION

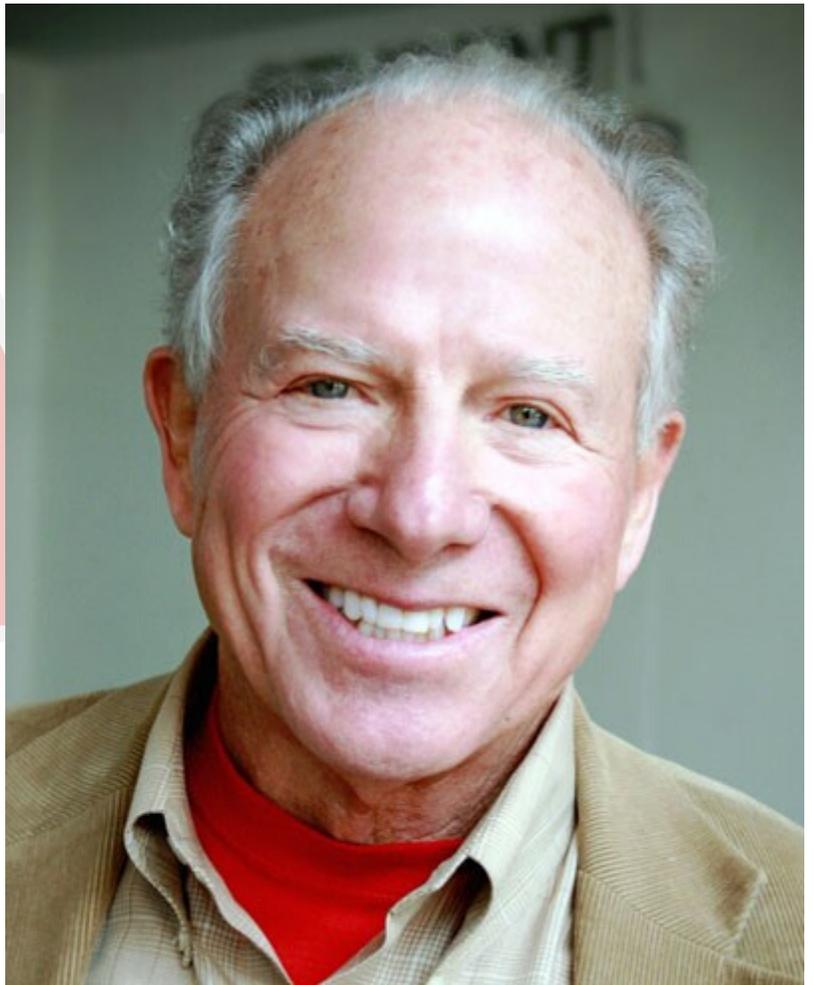
We hope you will share with us your feedback and comments about this year's conference. The workshop evaluation sheet will be handed out at the beginning of every workshop and collected as attendees leave.



KEYNOTE SPEAKER

STUART BROWN, M.D.

NATIONAL INSTITUTE FOR PLAY



Trained in general and internal medicine, psychiatry and clinical research, Dr. Stuart Brown first recognized the importance of play by discovering its absence in the life stories of murders and felony drunken drivers. His years of clinical practice and review of over 6000 personal play histories affirmed the importance and need for healthy play throughout the human life cycle. His independent scholarship and exploration of the evolution and neuroscience of human and animal play have led to the establishment of the National Institute for Play. The Mission of the National Institute for Play (NIFFP) is to bring the unrealized knowledge, practices and benefits of play into public life. Dr. Brown was the instigator and Executive Producer of the three-part PBS series, “The Promise of Play,” and coproduced the BBC-PBS series “Soul of the Universe.”

His experience as a medical administrator, producer, and scientific consultant or creator to numerous other productions on Joseph Campbell, Cosmology, Animal Play, and Stress, plus his scientific and popular writings have identified him as the foremost “practical champion of the knowledge of play.” Dr. Brown’s book: *Play: How it Shapes the Brain, Opens the Imagination, and Invigorates the Soul* has been translated into twelve languages. He co-teaches *From Play to Innovation* at the Hasso Plattner School of Design at Stanford University, and is the “Key Strategist” for the Nevada Medical Center’s Global Play Science Institute. In addition to regular creative scholarly contributions for the PlayCore company, he enjoys other international corporate and academic consulting on play and its many contributions through their engagement with it, as it enhances overall human well-being. As the information base about play grows, it is evident that play is a public health necessity. Our species, he says, “is built for play, and built by play.”

PANEL OF EXPERTS



RIKKE ROSENGREN
FOUNDER
BONSAI INSTITUTE

Rikke Rosengren (born 1974) is a Danish kindergarten teacher and Waldorf educator of children (educated in Australia). She has been the manager and owner of the kindergarten "Bonsai" in Denmark for the past 18 years. This is still her primary focus and the basis for her daily work. How can we create a free space for children to develop according to their potential and hereby become healthy and strong human beings? By creating rhythm and limited frames in both nursery and kindergarten so that the children in a playful manner can develop themselves both physically, artistically and spiritually and learn how to be at peace with themselves.

Rikke Rosengren is also educated in management and gives lectures on the following educational issues

- The development of the child age 1-7
- Cooperation with parents
- Stimulation of the sensory system
- Nature's impact on the development of children
- Play, imagination and creativity
- How media influences the emotions of the child
- Educational framework
- Creating relations between child and adult
- Managing of educational environments

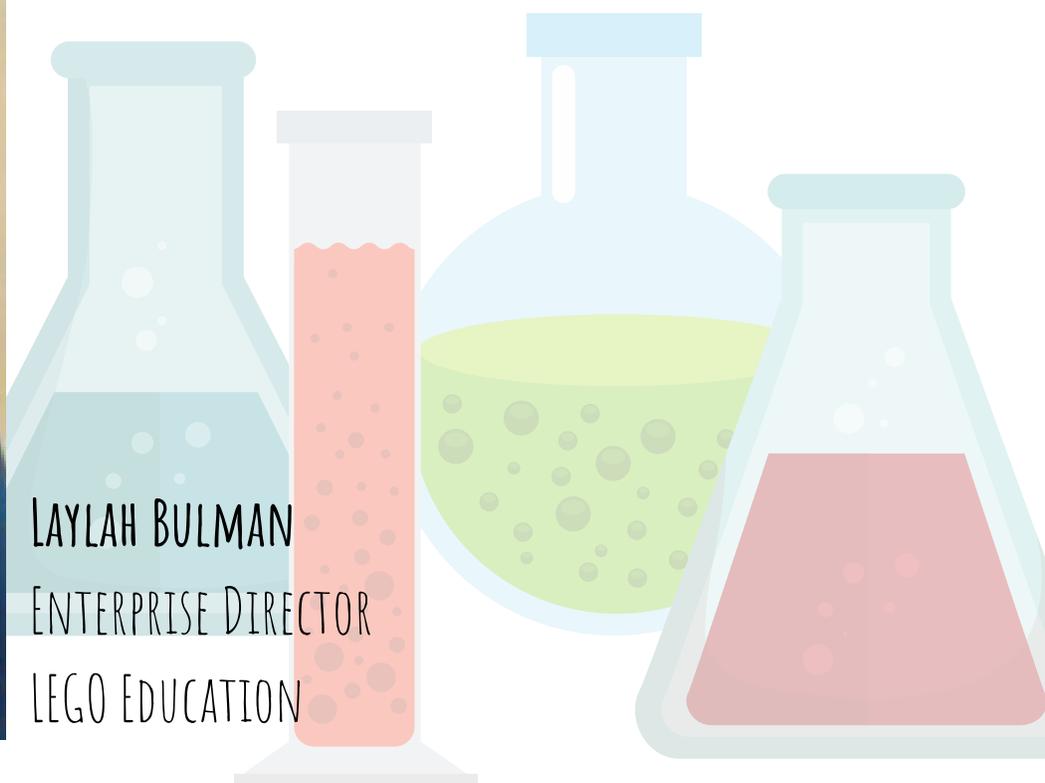
"CHILDREN MORE THAN EVER, NEED OPPORTUNITIES TO BE IN THEIR BODIES IN THE WORLD - JUMPING ROPE, BICYCLING, STREAM HOPPING AND FORT BUILDING. IT'S THIS ENGAGEMENT BETWEEN LIMBS OF THE BODY AND BONES OF THE EARTH WHERE TRUE BALANCE AND CENTEREDNESS EMERGE."

- CARL SAGAN



In terms of development and leadership Rikke focuses on how to create visions for the future and how to create a quality that is founded on common values, that are so concrete that they can be adapted in the everyday life and maintained over a longer period of time. Rikke is the author/editor of several books: a book in English about nature and food; Pumpkin Soup and Cherry Bread (www.florisbooks.co.uk), a storytelling book in Danish (Barnets Eventyrperler) and a song book in Danish (Barnets Sangperler). In autumn 2018 the newest book from Rikke regarding childrens' relationship with nature – Child of Nature – was published. It is also published in Danish: Barnet i naturen. The history of BonsaiBonsai is a private initiative started by Rikke Rosengren, when her first child was going to nursery. She decided to start up a little nursery group with an educational focus on rhythm and nature. That turned out to be a great success, and the waiting list grew rapidly; there was a great need for that specific kind of institution for children. Gradually the need for a kindergarten appeared, and Rikke and her husband established a nature kindergarten in the forest outside of Copenhagen and arranged for a bus to bring the children from the city to the forest every day. They chose the name "Bonsai" – in Japanese it means "littletree". During the past 18 years the teachers of Bonsai have developed an understanding of the need for natural stimulation of the senses for the little child. They have created methods of bringing nature inside and hereby creating educational environments through focusing on the ways in which nature influences the development of the child. The main goal is to create a healthenhancing education:

More information:
rikkerosengren.com
bluepearlbooks.com
bonsaiinstitute.com



LAYLAH BULMAN
ENTERPRISE DIRECTOR
LEGO EDUCATION

Laylah Silva Bulman has spent more than two decades as an innovative leader in multiple facets of Florida education. Ms. Bulman began her career as an Advanced Academics instructor in the Miami-Dade Public Schools system, where she was immediately recognized as a “Rookie Teacher of the Year,” thereafter serving as an Instructional Technology Lead Instructor at Miami Country Day School for nearly a decade. During her tenure in the classroom, she was awarded the Dirksen Congressional Fellowship for Teaching, the PWC Wharton Fellowship for Entrepreneurship, and the SIFMA Foundation Stock Market Game Educator’s Award.

Following her tenure in public education, Ms. Bulman took her experiences and skills into the private education sector where she quickly ascended to national prominence at United Data Technologies (UDT) as a national education strategist. Within four years at UDT, Ms. Bulman led a Florida reorganization of their education and created a STEM Learning and Innovation group. Her work at UDT led her to take on leadership positions in a variety of education-related areas including: serving currently as a national Enterprise Director for LEGO Education, and as the Florida representative for the Samueli Foundation headquartered in Corona del Mar, Ca.

In her capacity with LEGO Education, Ms. Bulman was selected in 2018-19 as a LEAD STEM Fellow within the National STEM Ecosystem project, selected in a competitive process from candidates from 84 cities nationwide, a recognition few have achieved.

As the Florida representative of the Samueli Foundation, Laylah sits on the Advisory Board of the Consortium of Florida Education Foundations with the CEO of the Samueli Foundation, Gerald Solomon, as well as recently having been asked by Mr. Solomon to serve as his alternate on CDEF, the California Department of Education Foundation.

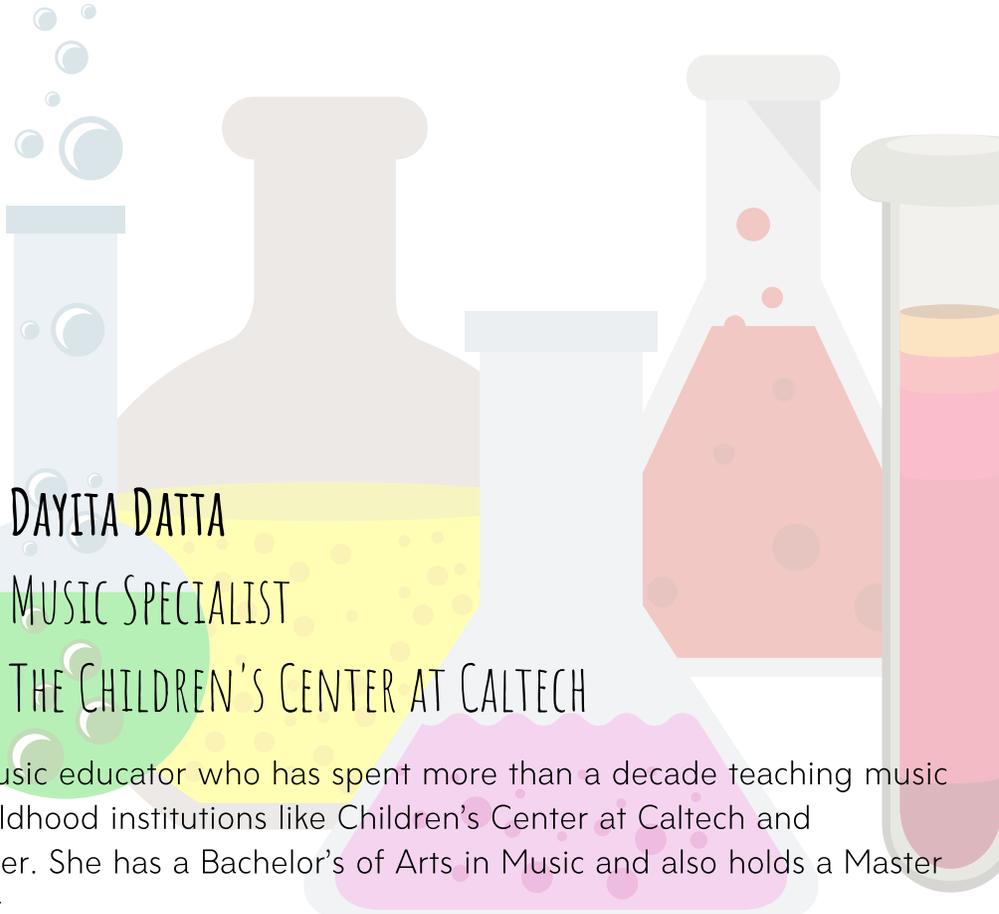
In the spirit of her innovative approach to finding the nexus between learning and social engagement and development for students, Ms. Bulman has recently taken on the role of Executive Director of the Florida Scholastic Esports League, part of a national effort in 39 states to connect children's "play and passion with purpose", designed to engage kids through immersive experiential activities imparting hard and soft STEM skills helping them develop sustainable career pathways to become productive successful adults.

In addition to her successful career, Ms. Bulman recognizes her responsibility to "give back" and serves in various volunteer capacities, including: Mentor for STEM Makerspaces in the Tampa Bay Wipro Science Education Fellowship Program; member of the Miami-Dade County Public Schools STEM Advisory Board; and as an annual Congressional App Challenge judge for Congressman Mario Diaz-Balart. She has published articles around STEM learning spaces, eSports and Case Studies around Computational Thinking and Immersive Learning Environments. And in 2015, Ms. Bulman was selected to be a member of the Leadership Miami program, a civic leadership development program where she continued to exhibit her innovate and leadership skills.

Prior to her teaching career, Ms. Bulman held positions with the U.S. Department of State, The World Bank and BellSouth. Ms. Bulman is a Woodrow Wilson Fellow and national Hispanic Scholar. She is an honors graduate of University of Virginia, the University of Texas at Austin, and the Heinz College Information Systems of Carnegie Mellon University.



"CHILDREN HAVE A
REAL UNDERSTANDING
ONLY OF THAT WHICH
THEY INVENT
THEMSELVES."
- JEAN PIAGET



DAYITA DATTA
MUSIC SPECIALIST
THE CHILDREN'S CENTER AT CALTECH

Dayita Datta is an Orff Certified music educator who has spent more than a decade teaching music and movement at various early childhood institutions like Children's Center at Caltech and Pasadena Child Development Center. She has a Bachelor's of Arts in Music and also holds a Master Teacher Child Development Permit.

Dayita has offered various Educator Workshops at Pasadena City College's Child Development Workshop Initiative (CDWFI), Children's Center at Caltech, Ontario Library, and Stratford School, Milpitas. She has also been conducting music and movement programs for young children at various venues like Childcare and Development department, City of Irvine, Pasadena Central Library, Arcadia Public Library, Cathedral City Library; Arcadia Glib Museum, USC Pacific Asia Museum and Norton Simon Museum to promote, grow, and hone innate musical ability through STEM based music and movement activities for early childhood years. Dayita has been a regular presenter at ECSTEM conferences since the year 2014. She has presented wide variety of topics such as:

- Pattern recognition through song-tales, echo songs, dance, tap, clap, and playing percussion instruments
- Sing, Play and Dance Creative and Improvised Patterns by Exploring Math in Music
- Building strong foundation for future development of language, social-emotional, and motor skills for young children by introducing ear-training, singing games, solfege, finger plays, song-tales, echo songs, folk dance, playing patterns on non-pitched percussion instruments, and pitched barred instruments.

Dayita is also the recipient of "Individual Artist" 2016-2017 grant by Pasadena Arts & Culture Commission and the City of Pasadena Cultural Affairs Division. She also has a strong background in North Indian Classical Music and was awarded "Music Development" grant by Alliance of California Traditional Arts. As a performer, she has performed at various prestigious venues such as Pasadena Art Night, LACMA, Grand Performances, Music Circle, UCI etc.



SCOTT BULTMAN

TOYMAKER

"FRIEDRICH FROEBEL, THE ORIGINAL KINDERGARTEN"

As a toymaker from the 1980's on, Scott Bultman has focused on promoting the original Froebel Kindergarten method internationally since 1997. The son of an early childhood educator mother (founder of a public school readiness program) and a toymaker father (Uncle Goose Toys), his Froebel activity carries on both parents' work. Over the last two decades Scott has assembled a large research archive on the history of kindergarten and regularly hosts conferences on the subject. He is currently producing the documentary series Garden of Children <http://gardenofchildren.org/>.

A photograph of children in a garden setting. In the foreground, a young girl with long blonde hair is looking towards the camera. To her right, another child is holding a green fern frond. In the background, other children and adults are visible, some wearing green shirts, in a lush, green outdoor environment.

gardenofchildren

HOW KINDERGARTEN CHANGED THE WORLD

A documentary series from Match Frame Creative: www.gardenofchildren.org

TIFFANY ALVA

DIRECTOR OF PARTNERSHIPS AND GOVERNMENT AFFAIRS FIRST FIVE ORANGE COUNTY

Tiffany Alva serves as the Director of Partnerships and Government Affairs at First 5 Orange County. In her role as Director of Partnerships and Government Affairs, Alva executes the organization's vision through an intentional focus on partnerships, integration, and communication. She also takes initiative to develop and nurture relationships with cross-sector stakeholders, providing First 5 Orange County with a platform to educate community leadership and advance buy-in to the importance of investing in early childhood systems of care.

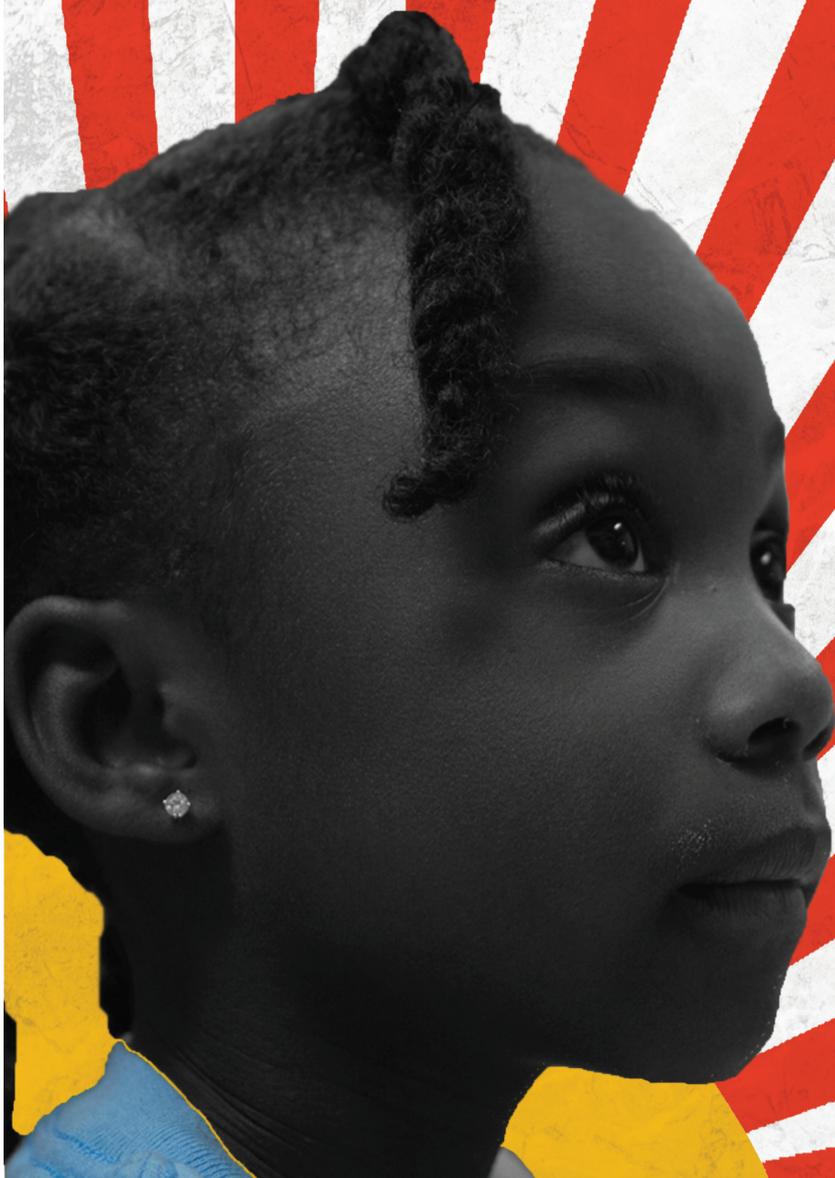
Prior to joining First 5 Orange County, Alva served as the Early Learning Director at THINK Together and has extensive knowledge and expertise in program development and management. She serves on leadership committees for both the national and state associations for the education of young children. Alva holds a Bachelor of Science in Human Services from the University of Phoenix and a Career Technical Education (CTE) Teaching Credential in Early Learning.



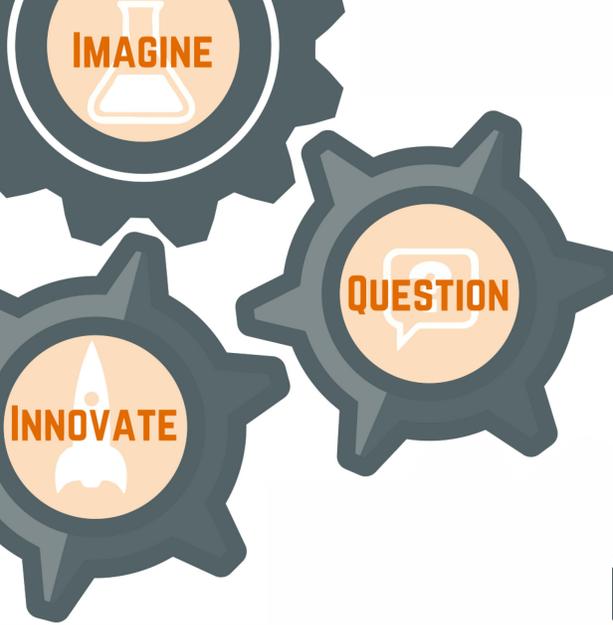
"THE MIND THAT
OPENS TO A NEW
IDEA NEVER
RETURNS TO ITS
ORIGINAL SIZE."
- ALBERT EINSTEIN

EARLY LEARNING IS
NO SMALL MATTER

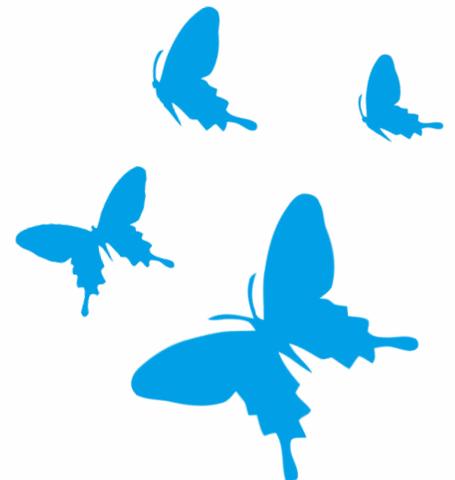
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FRIDAY, FEBRUARY 28
AT 3:15PM

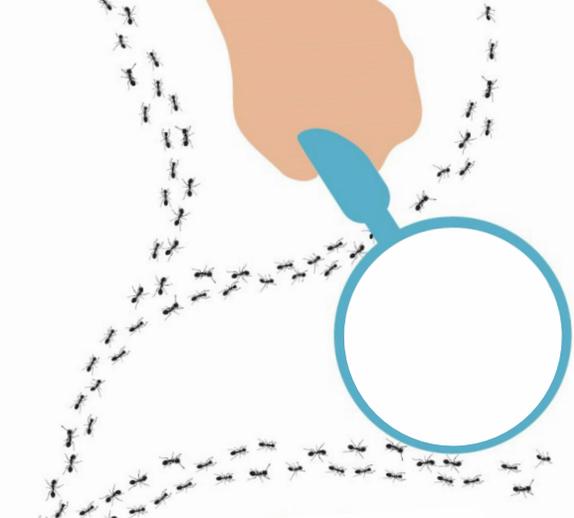


Visit www.ECSTEM.org/registration



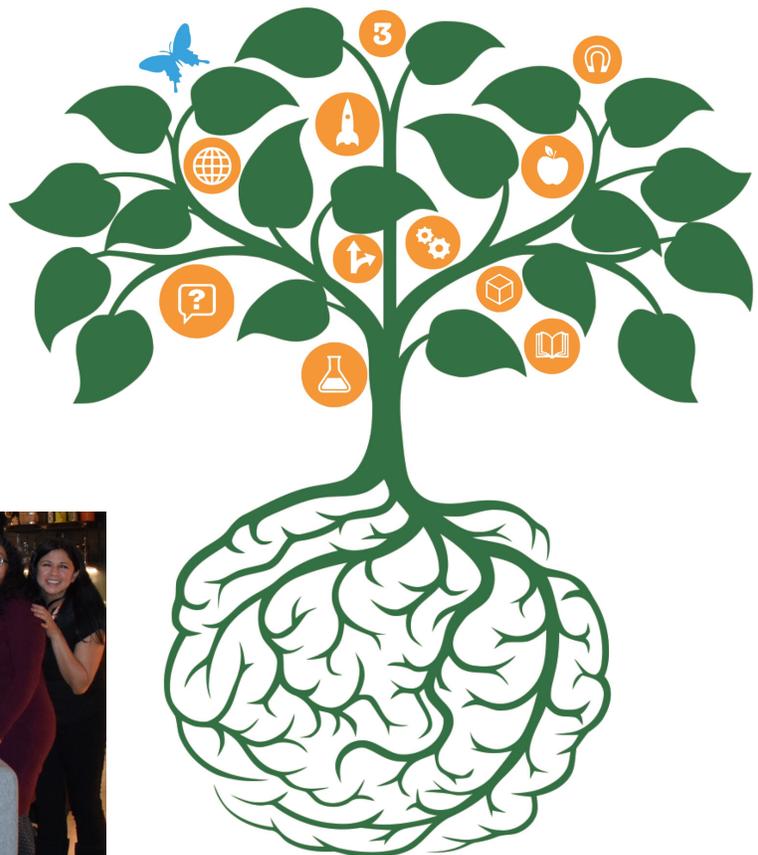
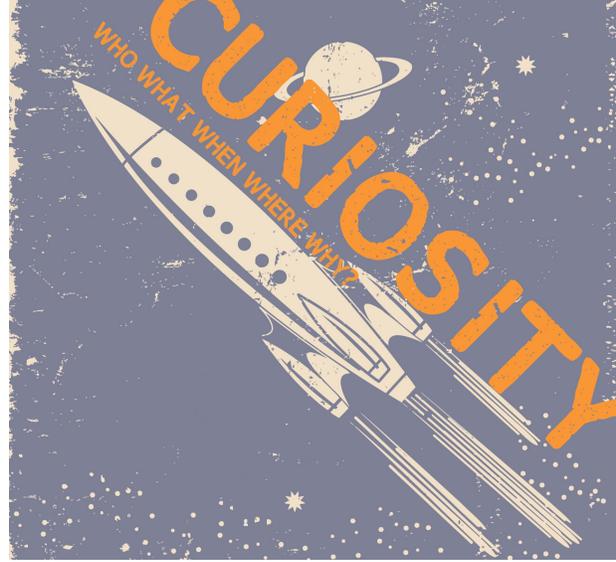
LOOKING BACK
ON OUR ECSTEM
HISTORY...





**LARGER
THAN LIFE**







Picking up **STEAM**



The world needs teachers who can inspire students by introducing them to the exciting areas of science, technology, engineering, the arts, and math.

Pacific Oaks College's B.A. Early Childhood Education, STEAM Specialization trains future educators to implement STEAM in their classrooms.

Pacific Oaks offers

- B.A. credentialing programs with concentrations in Human Development, Community Psychology as well as Early Childhood Education.
- M.A. in Education
- Stand- alone credential program

Want to bring STEAM to Your Organization?

Pacific Oaks can design a STEAM certificate program to fit your organizational needs. Contact Michael Patton, AVP of Admissions, at 626.529.8498 for more information.

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of Education



The Wishing Well
at the Pasadena Waldorf School



Be A Maker Club

 **Exploralearning**



the
**children's
center**
at
caltech



**TOUT ABOUT
TOYS**
Endless Solutions for Learning

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always 110% guaranteed

ECSTEM 2020 Workshop Schedule

To support your conference experience, workshop sessions have been categorized by topic area (Science, Technology, Engineering and Mathematics). Additionally, the target audience has also been specified for each workshop. Conference attendees may follow one topic area for an in-depth, content-rich focus on a particular subject matter, or may pick and choose among topics to sample the full complement of conference offerings. The following are the listing of session tracks and their abbreviations.

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

Friday, February 28th, 2020

Session I: 10:15am – 11:45am

“The A in STEAM”

What does art truly look like through the lens of STEM? Incorporating Math, Science, Form and Function, Mediums, Theorists, Artists and Architects and technique into daily art activities that are meaningful, creative and fun.

Presenter: Monica Dolan, M.A.

The Children's Center at Caltech

Target Audience: I T P TK

Content: S T E M

Room: Monterey

“EC Engineering... It's A Mindset!”

Early Childhood Engineering often takes the form of students "building in the block area." Engineering instruction should not be relegated to one center. This workshop will help you "step outside the blocks" in order to create the next generation of problem solvers. Developing an engineering identity in the early years is a significant indicator of educational and professional persistence. This workshop will help educators build the skills they need to engage young learners in engineering while fostering student-centered, inquiry-based learning.

Presenter: Orinthia Harris, M.Ed

Center For Educational Improvement

Target Audience: P TK K

Content: E

Room: Pacific A

“An Alphabet Soup of STEM”

Participants will have a hands-on opportunity to look at STEM preschool curricula while integrating theory with practice.

Presenter: Jayanti Roy, M.A.

Co-Presenters: Phyllis De Motta, M.A., & Shelley Gonzales, M.A.

DeAnza College

Target Audience: P

Content: S T E M

Room: Pacific B

“Sing, Play, Bounce and Wiggle: Creative and Improvised Patterns By Exploring Math In Music”

The workshop will awaken, develop, and refine innate musicality through STEM based music and movement activities for early childhood years. The session will encourage to build a strong foundation for future development of language, social-emotional, and motor skills for young children by introducing ear-training, singing games, solfege, finger plays, song-tales, echo songs, folk dance, playing patterns on non-pitched percussion instruments and pitched barred instruments.

Presenter: Dayita Datta, B.A.

The Children's Center at Caltech

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

Content: **S E M**

Room: **Pacific C**

“Nature, Science and Play”

How can we create an inspiring and developing environment for children to grow with their own curiosity and how can we make an environment to support the state of wonder in children? Through play and nature, how do you unfold the science aspect?

Presenter: Rikke Rosengren

Target Audience: **T P TK K**

Content: **S**

Room: **Pasadena**

“Entry Into Innovation: Engineering For Early Learners”

Are you passionate about promoting innovative thinking in our youngest learners? Let's examine the development of engineering practices for early learners through hands-on exploration and discussion.

Presenter: Courtney Quarteman, M.Ed

EiE Museum of Science

Target Audience: **P K**

Content: **E**

Room: **San Diego**

“Making Sense of STEM in Sensory, Motor and Imaginative Learning”

You can teach STEM through SEL! Discover practically how to use form, function, force, motion and cause and effect in the physical and social emotional development in young children.

Presenter: Tommaso Lana, M.A.

Embodied Learning

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

Content: **S E M**

Room: **San Gabriel**

“Messing About in Mathematics”

Join us to examine, through images and video, stories of children engaging with mathematics. We will note the choices made by teachers in terms of design of environment, selection of materials, and verbal and physical interactions.

Presenter: Lauren Weatherly, M.A.

Boulder Journey School

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

Content: **S T E M**

Room: **San Marino**

“Building and Programming a Project Based Learning Experience”

Using the Engineering Design Process and robotics to create and learn about our world.

Presenter: Raquel Sultan, M.S.

RASG Hebrew Academy Miami Beach

Target Audience: **TK K FG**

Content: **S T E M**

Room: **Santa Barbara**

“My Shadow Moves With Me: Simplifying Science!”

Encourage young children to explore science early: observe, predict and seek evidence by experimenting. Emphasize hands-on STEM experiences that require minimal explanation, build on existing foundations and connect across domains.

Presenter: Angela Russ-Ayon, B.S.

Russ InVisionCo/ AbridgeClub.com

Target Audience: **T P TK K**

Content: **S**

Room: **Santa Clara**

“Differentiated Dice Activities: The Secret To Playful And Purposeful Mathematics Counting and Operations For Preschool, TK and KG Aged Children!”

Research suggests young children might not be ready for numerals! Participants are provided materials to create developmentally appropriate approaches to number sense. Hands-on activities demonstrate differentiated purposeful and playful math activities.

Presenter: Susan Walsh, Ed.D

University of La Verne

Target Audience: **P TK K**

Content: **M**

Room: **Santa Rosa**

“Come Fly With the Birds, Bees and Dragonflies: Create an Invention!”

Participants will engage in thoughtful scientific observation of birds, bees and dragonflies using the creative arts and then create an invention based on what they learn.

Presenter: Mary Jo Pollman, Ph.D

The Children's Center at Caltech

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

Content: **S E M**

Room: **Sierra Madre**

Session II: 1:30pm – 3:00pm

“Teacher Must Reads to Inform Best Practices in ECE”

Each of the following book titles importance will be explained in this workshop. Each book is instrumental to determine best practices for early childhood professionals and will be presented with connections to other best practices in the field of early childhood and to Title 22. 1) 7 Habits of Highly Effective People (teacher) by Stephen Covey 2) Understanding Poverty by Ruby Payne 3) How to Raise Emotionally Healthy Children by Gerald Newmark.

Presenter: Elmida Baghdaserians, Ed.D

Co-Presenter: Veronica Getskow, Ph.D

Los Angeles Valley College

Target Audience: **I T P**

Content: **S**

Room: **Del Mar**

“Building Up and All Around”

Join us for an interactive workshop and learn how a toddler room investigated scale and structure through hands-on explorations with various materials throughout the year.

Presenter: Melissa Samples, M.A.

Co-Presenter: Ingrid Ellegaard-Hansen, B.A.

The Children's Center at Caltech

Target Audience: **T**

Content: **S**

Room: **Monterey**

“Early Childhood Technology - Coding as a Literacy”

Get hands-on with tools to use with your students to bring coding in your classroom as a literacy. Experience how software and hardware can help kids tell stories.

Presenter: Angie Kalthoff, M.A.

Tufts University

Target Audience: **TK K FG SG**

Content: **T E**

Room: **Pacific A**

“The Three Little Pigs: How Straw, Sticks and Bricks Can Inform Children's Understanding of Physics”

The use of a popular story, the Three Little Pigs, as a provocation for exploring the properties of wind and the physics of building with various materials.

Presenter: Karen Heimbaugh, M.A.

KolTikvah Jewish ECC and CSUN

Target Audience: **P TK**

Content: **S E**

Room: **Pacific B**

“Science in Nature”

The Outdoor Classroom at Pacific Oaks Children's School will be sharing examples of how children learn about science in nature.

Presenter: Victor Soto, M.A.

Co-Presenter: Robert Boyman, M.A.

Pacific Oaks College & Children's School

Target Audience: **P TK**

Content: **S**

Room: **Pacific C**

“Making Makers”

Making and tinkering offers many educational and developmental benefits for even the youngest learners. Discover and share ideas for linking literature to low or no-tech project-based learning activities.

Presenter: Ruth Spiro, M.B.A.

Author

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

Content: **S T E M**

Room: **Pasadena**

“Broadening the Lens: Full STEAM Ahead for Neuro-typical and Neuro-atypical Children”

Preschoolers with autism lean towards STEM yet struggle with managing emotions, transitions, and friendship-building. Presentation addresses broadening STEM to STEAM within a social-emotional construct with specific skill-building opportunities for neuro-atypical children.

Presenter: Roni Cohen Leiderman, Ph.D

Co-Presenter: Lorraine Breffni, Ed.D

Nova Southeastern University - Mailman Segal Center For Human Development

Target Audience: **I T P TK**

Content: **S T E M**

Room: **San Diego**

“Mindful Observation of Infants and Toddlers: A Montessori Approach to Objective Engagement”

Objective observation is essential to creating learning environments where young children can thrive. This workshop offers the participant mindfulness techniques to identify personal bias, shift perspective, and focus their lenses.

Presenter: Uniit Carruyo, MS.Ed

West Side Montessori School Teacher Education Program

Target Audience: **I T**

Content: **S**

Room: **San Marino**

“Up, Up And Away: An Interdisciplinary Kite Study With Preschoolers”

Engaging in meaningful play is important. Inspired by the Reggio Emilia approach. Educators follow and facilitate a group of children's inquiry into kites using science and engineering practices, enhancing several cross-cutting concepts.

Presenter: Cris Lozon, Ed.D

Co-Presenter: Jennifer Hardison, M.A.

St.Margaret's Episcopal School

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

Content: **S E M**

Room: **Santa Barbara**

“Science Read-Alouds: A Springboard into 3 Dimensional Learning For Young Children”

Participants will have the opportunity to explore how to use read-alouds and hands-on experiences to support infants, toddlers and preschoolers' science learning.

Presenter: Daryl Greenfield, Ph.D

Co-Presenter: Cynthia Parker, M.Ed., Jeffrey Tisdale, B.A., Abigail Baustert, M.A., & Taryn Austin, B.A.

University of Miami

Target Audience: **I T P**

Content: **S T E M**

Room: **Santa Clara**

“From Caltech to Big Tech: Designing For A Great STEM Environment”

What can independent schools learn from large corporate centers? What can the corporate world learn from independent schools? Designing a great STEM environment can happen at any scale.

Presenter: Summer Vaughn, AIA,LEED AP

Co-Presenter: Jane Kershner, M.S.

March Studio

Target Audience: **TK K FG SG**

Content: **S T**

Room: **Santa Rosa**

“The Family Math Movement”

Learn about the Family Math Movement, a cross-sector collaboration that promotes math activities early and often within the context of family relationships and everyday life, and the ongoing projects in PBS SoCal and Education Development Center.

Presenter: Gemma Lenowitz, B.A.

Co-Presenter: Kimberly Brenneman, Ph.D

Overdeck Family Foundation

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

Content: **E**

Room: **Sierra Madre**

Session III: 3:15pm – 4:45pm

“Exploring Programming Through Music and Movement With Our Youngest Learners”

What is Programming? How do you introduce this concept to young learners? Join us as we discuss a developmentally appropriate curriculum that focuses on introducing programming through music and movement to infants. Take with you a variety of techniques and curriculum possibilities that will help you incorporate programming into your curriculum through music, movement and storytelling.

Presenter: Eloisa McGah, B.A.

Co-Presenter: Tricia Lau, B.A.

The Children's Center at Caltech

Target Audience: **I T**

Content: **M**

Room: **Monterey**

“Storytelling Through Making”

Humans are natural storytellers and makers yet at some point, during their school years, some lose that confidence and the fear of failure start to develop. This workshop will help attendees overcome their doubts and help children nurture and develop a lasting interest in STEM through storytelling and making. Participants will accomplish this through creative experiments and hands-on activities.

Presenter: Mitchell Malpartida, B.S.

Masterful Creations STEAM Academy

Target Audience: **K FG SG**

Content: **S T E M**

Room: **Pacific A**

“Bug Investigation”

This investigation of nature and technology highlights the children's deep connection to all living things. As teachers we focused on a game of "capture the bug" that was playing out on the yard and reflected on how our environment was currently being used. We wanted the garden to become a stronger influence and through technology, make the connection to nature that children naturally have more ecologically minded.

Presenter: Adriana Olivera, B.A.

Co-Presenter: Susan Kim, B.A.

New West School

Target Audience: **P TK**

Content: **S T**

Room: **Pacific B**

“STEMming from Culture”

A NAEYC accredited Family Child Interaction Learning (FCIL) Preschool will share how they implement a culturally relevant STEM curriculum to an at-risk population. Leave with helpful strategies and a treat.

Presenter: Pua Aquino, B.A.

Co-Presenter: Kathleen Fong, B.Ed

Partners in Development Foundations - Ka Pa'alana

Target Audience: **T P TK**

Content: **S T E M**

Room: **Pacific C**

“Outdoor Classroom: Cultivating Strong Science-Based Skills through Critical Thinking and Inquiry-Based Learning”

This workshop will show how natural outdoor settings develop 21st century learning skills such as impulse control, mental flexibility through gardening, constructive play, and activities that encourage children to co-construct knowledge.

Presenter: Alison Schultz, B.A.

Co-Presenter: Fernanda Capilla Murillo, B.S.

MiraCosta College

Target Audience: **T P**

Content: **S T E M**

Room: **Pasadena**

“No Small Matter”

No Small Matter is the first feature documentary to explore the most overlooked, underestimated, and powerful force for good in America today: early childhood education. Through poignant stories and surprising humor, the film lays out the overwhelming evidence for the importance of the first five years, and reveals how our failure to act on that evidence has resulted in an everyday crisis for American families, and a slow-motion catastrophe for the country. Visit

www.nosmallmatter.com or <https://youtu.be/Shm-KRh4LFg> to watch the trailer and learn more!

Presented by: The Kindling Group

Screening Sponsored by the UCLA Department of Education

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

Content: **S T E M**

Room: **International Ballroom**

“The Science of Self-Care: Trauma Informed Practices for Teachers”

Come learn what our brains and bodies need in order to nurture others and how to nurture ourselves as well.

Presenter: Dorothy Shapland, Ed.D

Metropolitan State University of Denver

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

Content: **S**

Room: **San Diego**

“Building Empathy as a STEM Practice”

Empathy helps us understand the perspectives of another person or animal. But is it a scientific skill? Discover how the LA Zoo uses empathy as a foundation for STEM-based programming.

Presenter: Dan Keeffe, M.S.

Co-Presenter: Jess Kohning, M.A.

Los Angeles Zoo

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

Content: **S**

Room: **San Marino**

“Mission Advent Science: Empowering Students Through Mission Based & Research Supported Instruction”

Our presentation highlights correlations between current research and practices embedded in NGSS and the mission of the Advent School, illustrated by examples of students engaging in STEM practices through materials-based explorations and projects that reflect Advent's focus on collaboration, social justice, and recognition of children as competent and capable.

Presenter: Judean Patten-Clark, M.Ed

Co-Presenter: Noelle Walters, M.Ed

The Advent School

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

Content: **S T E**

Room: **Santa Barbara**

“A Box Turtle Arrives”

A box turtle arrives in the classroom of 36 Head Start- eligible 3-6 year olds. The children embark on 9 robust projects observing, researching, meeting its needs, and respecting animal rights by developing a relationship and eventually returning the turtle to its natural home.

Presenter: Ann Lewin-Benham, B.A.

Self Employed

Target Audience: **P TK K FG**

Content: **S T**

Room: **Santa Clara**

“Make Counting Count!”

Experience routines that foster number sense. Discover how to use the popular and effective Choral Counting routine and others to amplify the learning and sense-making for all learners.

Presenter: Gabriel Ward, M.A.

HLPUSD

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

Content: **M**

Room: **Santa Rosa**

“STEM- Developing an Observational Perspective”

Children learn STEM everyday. Teachers must be capable of observing this learning. This interactive session will provide teacher the perspective to identify cognitive constructs and processes of STEM.

Presenter: Steven Erwin, B.A.

Kaplan

Target Audience: **I T P TK**

Content: **S T E M**

Room: **Sierra Madre**

Saturday, February 29th, 2020

Session I: 10:15am – 11:45am

“Splashing Through STEM”

Toddlers are natural curious learners. Since children learn best through hands-on experience, we will show you how our toddlers gain knowledge about Earth science. We will cover all aspects of STEM while learning about water and its properties. We will give you insight in some Toddler activities as they grasp this concept.

Presenter: **Diana Ramirez, B.A.**

Co-Presenter: **Amanda Lawson, B.A.**

The Children's Center at Caltech

Target Audience: **T**

Content: **S T E M**

Room: **Monterey**

“The ‘Not-So-Secret’ Garden: Preparing and Implementing Garden Activities For Whole Child Learning”

Gardens are the single best activity to be developed at your early care and education program. Well-developed garden environments can provide rich learning experiences that benefit children of all ages.

Presenter: **Janet Sedhom, M.A.**

Child Educational Center

Target Audience: **I T P TK**

Content: **S M**

Room: **Pacific A**

“Using STEAM & Fairy Tales to Teach Problem Solving”

This workshop demonstrates how to integrate STEAM into the curriculum using only fairy tales. Teachers will inspire students' curiosity, creativity, and problem-solving. This presentation will support the engineering design process, inspire creativity and problem-solving and support the SEPs and CCC of NGSS.

Presenter: **Karisa Cuenca, M.A.**

Co-Presenter: **Edith Correa, B.A.**

Baldwin Park USD

Target Audience: **TK K FG SG**

Content: **S E**

Room: **Pacific B**

“Using the Scientific Method To Promote Perserverance And Interpersonal Skills”

Using recycled and found parts, let's explore the scientific method through the lens of perserverance and interpersonal skills. Actively engage with materials for easy application in your classroom.

Presenter: **Heidi Gallagher, M.S.Ed**

Co-Presenter: **Maisy Abdul, M.S.**

Witchita Collegiate School

Target Audience: **P TK K**

Content: **S T E M**

Room: **Pacific C**

“STEM + Storytelling: Creating Powerful Play Experiences for Students”

How can storytelling facilitate STEM experiences? This hands-on session will demonstrate the power of storytelling to engage learners in design thinking while developing content knowledge and skill acquisition.

Presenter: Laylah Bulman, Ph.D

Co-Presenter: Holly Gerlach, Ph.D

LEGO Education

Target Audience: **P TK FG SG**

Content: **S T E M**

Room: **Pasadena**

“Put On These Glasses To Teach STEAM Tomorrow”

In this fun session, participants will engage in a series of hands-on activities, all designed to enhance students' 21st century skills and remove the intimidation from teaching STEAM.

Presenter: Shakeh Haroutiounian, M.Ed

Co-Presenter: Giovani Dacumas, B.S.

STEM World

Target Audience: **TK K FG SG**

Content: **S T**

Room: **San Diego**

“A Guideline for Designing ECSTEM projects”

This presentation provides a guideline that combines recent findings in neuroscience with biologically driven play patterns to provide ECSTEM project designers with new ways to engage children that match their current level of brain maturation.

Presenter: Jay Beckwith, B.A.

Co-Presenter: Theresa Fogoloni, M.A.

Constructive Play Design

Target Audience: **I T P TK**

Content: **S T E M**

Room: **San Marino**

“Play, Stories and STEM”

A hands-on workshop that centers on several books and uses them as a jump-off point to explore STEM through an inclusive play lens.

Presenter: Maria Elena Serratos, M.A.

Co-Presenter: Claudia Villalobos, M.A.

Discovery Cube

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

Content: **S E M**

Room: **Santa Barbara**

“Story Time Science Curriculum”

A walk through of 8-weeks of Storytime Science Curriculum, - revisiting our favorite children's stories through a STEM lens in both self-directed & teacher guided activities, invitations, stations & provocations.

Presenter: Mariya Danayan, M.A.

Co-Presenter: Lourdes Ochoa, B.A.

Harmon Oaks Nursery

Target Audience: **T P TK K**

Content: **S T E M**

Room: **Santa Rosa**

“Deconstructing Science and Democracy: Making Meaning in a Convoluted Era”

Join us as we deconstruct the concepts of science and democracy through examination of documentation related to two-year-old children's exploration of a fairy garden in their neighborhood.

Presenter: Lauren Weatherly, M.A.

Co-Presenter: Lauren Berry

Boulder Journey School

Target Audience: **T P**

Content: **S T E M**

Room: **Sierra Madre**

Session II: 1:30pm – 3:00pm

“Energy: How Things Move”

Examining the concept of energy and how things move, as it's explored by infants and toddlers of The Children's Center at Caltech.

Presenter: Alexandra Landayan, B.A.

Co-Presenter: Silvia Reano Gonzales, M.A.

The Children's Center at Caltech

Target Audience: **I T**

Content: **S T E M**

Room: **Monterey**

“Discovering the Joys of STEM Through Liquid Play”

This workshop will help early educators engage and amaze their young students in the fun of STEM through the exploration of liquids through hands-on activities

Presenter: Raissa Lee, B.A.

Co-Presenter: Michael Lee, B.S.

ABC Mom Learning Center & Child Care

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

Content: **S T E M**

Room: **Pacific A**

“Never Get Tired of Ramps and Pathways: A Project that Shows Rich Learning Experiences and Positive Developmental Growth”

In this workshop participants will be given a list of scientific terms, how and when to use them with preschoolers. A material list will be provided along with what areas of the classroom can be transformed into ramp exploration (beyond the block area). Participants will have an opportunity to explore some of the exact materials the children created ramps and pathways with. They will see how we incorporated ramps and pathways into all the Desired Results Developmental Profile (DRDP) domains. How we took the children on mini field trips to discover ramps in our world. We will discuss some of the challenges we faced during the project.

Presenter: Emily Kemble, M.A.

Co-Presenter: Cynthia Lopez, B.A.

Fresno State Programs For Children

Target Audience: **P**

Content: **S E M**

Room: **Pacific B**

“Technology in STEAM”

This workshop will focus on rethinking the term "technology" in regards to STEAM in the classroom. How to incorporate STEAM without using computers, robotics and electronics in an early childhood education classroom.

Presenter: Yolanda Carlos, M.Ed

Co-Presenter: Robert Boyman, M.A.

Pacific Oaks College

Target Audience: **P**

Content: **S T E M**

Room: **Pacific C**

“Look at THAT! The Power of Observation”

Why are ants crawling on the yogurt lid? Join us to explore research, videos, and resources for children's developing power of observation.

Presenter: Carrie Rothstein-Fisch, Ph.D.

Co-Presenter: Katie Leon, M.A.

California State University, Northridge

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

Content: **S T M**

Room: **Pasadena**

“Rethinking How We View Math in the ECE Classroom”

"Math Phobia" is evident in the field of ECE among educators and this workshop will provide a platform for rethinking how we can reinvent our personal view of math for ourselves so we can reinvent implementation strategies in the classroom.

Presenter: Christine Richard, M.A.

The Growing Place

Target Audience: **I T P**

Content: **M**

Room: **San Diego**

“Mobile-Making STEAM”

This presentation demonstrates that mobile-making can be an excellent STEAM activity, not only an art activity, when the "right" materials and the "right" interventions are provided.

Presenter: Seon Chun-Burbank, Ed.D

Vanguard University of Southern California

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

Content: **S T E M**

Room: **San Marino**

“Defining Strength: Integrating STEM in a Reggio Inspired Classroom”

Kindergartners at the Advent School undertook a long-term investigation on the meaning of strength. Using the Three Little Pigs story, students engaged in engineering challenges and considered strength through the lens of social justice.

Presenter: Paula Hinchliffe, M.Ed

The Advent School

Target Audience: **TK K**

Content: **S E**

Room: **Santa Barbara**

“Emulating Einstein: Using Science Notebooks in Kindergarten Through Second Grade to Support Children's Scientific Thinking and Writing Skills”

This session will present an overview of the science workshop model and how it can enhance STEM learning. We will demonstrate how science notebooks can be used to support children's scientific thinking and writing skills.

Presenter: Emily Lemonds, M.Ed

Co-Presenter: Maureen Wikete Lee, Ph.D

The Saint Louis Science Center, Saint Louis University

Target Audience: TK K FG SG

Content: S E M

Room: Santa Rosa

“The Scientific Method and Play”

Kids are scientists. They are asking questions. They make guesses. They try things out. They watch to see what happens. They tell people what they learned. Maybe enriching your environment for free-play is the Science Curriculum you've been looking for.

Presenter: Kristin Shepard, M.A.

Recess Revolution

Target Audience: P TK K FG SG

Content: S E

Room: Sierra Madre

Session III: 3:15pm – 4:45pm

“Ramps! Tubes! Loose Parts! Playing with STEM”

Join us for a hands-on approach to ramps, tubes and loose parts with infants and toddlers. Presentation in multiple languages.

Presenter: Fabiola Avila, B.A., Chunyu Qi, B.A.

Co-Presenters: Erica Contreras, A.A., & Jennifer Ngoc Tran, A.A.

Colegio Para Bebes

Target Audience: I

Content: S

Room: Pacific B & C

“Garden of Children”

Our educational system is broken. People are frustrated and looking for something better. Parents don't know they have options and worry whether their children can compete in an ever-changing job market. This documentary series will explore all aspects of education by showing how learning works best, with examples from today's classrooms all presented with rich cinematic visuals. Balancing the history of education in America and with a modern exploration of relevant topics, this series will entice and enrich a wide audience from parents, to educators and beyond.

Presenter: Scott Bultman

Froebel USA

Target Audience: I T P TK K FG SG

Content: S T E M

Room: International Ballroom

“Pilot Study of Enhanced - STEAM Coaching: A Practitioner's Guide To Integrating STEAM In Your Classroom Using iPads”

In this session, we will share findings from Child360's STEAM-Enhanced Coaching pilot, including the potential of this technology-based approach to build teachers' skills around STEAM. Attendees will learn about new research in the areas of technology and ECE and will learn practical ways to encourage STEAM in their classrooms. Specifically, participants will learn how to incorporate video-based feedback in classrooms, become familiar with challenges and benefits of introducing video-recording technology in the classroom and consider best practices for making use of video for STEAM-specific feedback. During the session, attendees will have the opportunity to use iPads to record interactions themselves. They will learn how to use the footage to encourage STEAM interactions, enhance STEAM situational awareness and be more mindful about STEAM learning opportunities in the classroom. Materials will include a copy of Child360's Pilot Study of STEAM-enhanced coaching report, STEAM Framework, and STEAM Toolkit.

Presenter: Drew Barrett, M.S.

Child360

Target Audience: **P**

Content: **T**

Room: **San Diego**

“Infants And Toddlers Learning STEM Through Play in The Outdoor Classroom”

Participants will become fully immersed in what infants and toddlers are learning in natural outdoor classrooms. This will be presented through the lens of STEM and will include materials as well as research to support infants and toddlers spending ample time in natural outdoor classrooms.

Presenter: Erinn Levin, B.A.

The Child Educational Center

Target Audience: **I T**

Content: **S T E M**

Room: **San Marino**

“Enhancing STEM Literacy with Magical, Mindful Storytelling Using Felts, Puppets and Props”

Experience the magic of intentional, interactive storytelling using felts, puppets and STEM focused literature! Engage all learner types to build vocabulary, promote literacy throughout STEM disciplines and have fun!

Presenter: Sundrina Kofod, A.A.

Artfelt Puppets, Pieces & Props

Target Audience: **I T P TK**

Content: **S T E M**

Room: **Santa Rosa**

“Practicing Inclusion: Promoting Participation for Young Children With Disabilities in STEM Activities”

This session aims to engage participants in courageous conversations about the importance of early STEM learning and the disparate opportunities provided to children with disabilities in STEM learning.

Presenter: Megan Vinh, Ph.D

Co-Presenter: Chih-Ing Lim, Ph.D

STEM Innovation for Inclusion in Early Education Center

Target Audience: **I T P TK**

Content: **S T E M**

Room: **Sierra Madre**

FUN THINGS TO DO IN PASADENA, CALIFORNIA

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



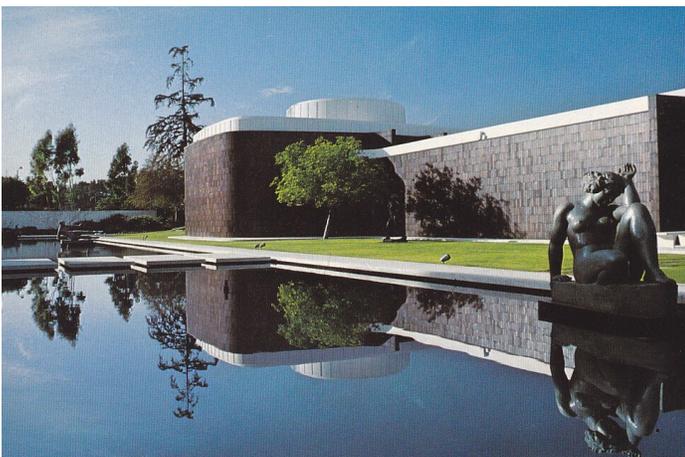
Old Town Pasadena

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, plus there's the Farmer's Market every Sunday with free kids' activities. 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.



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 \$12 but the Museum is free for all visitors the first Friday of every month from 5pm to 8pm.



iPic Theater

This theater creates such a fun, unique movie viewing experience with their recliner sofas, provided blankets & pillows and free popcorn. That's not all though, guests can order a full meal up to 30 minutes prior to the movie showing and have it delivered to their reserved seat. With you meal you'll have the option to accompany it with a glass of wine or cocktail from Salt Lounge. This sounds like a movie night at home, but even better because other people are doing the work for you.



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.



Eaton Canyon

There's many things to do at Eaton Canyon that at least one aspect is bound to appeal to whomever you might be traveling with. Whether you like to hike, go horseback riding or like watching running water, you can find it here. The trail to Eaton Canyon Falls is a popular and often crowded hike that starts off as a fairly easy walking experience, but progresses in difficulty as you approach the falls. If you're not as into physical activity there's still much opportunity to view wildflowers in the spring and an abundance of birds during the crowning of migration (April-May.)



Huntington Library

The Huntington Library serves as a dual purpose establishment by showcasing educational and research based collections and 120 acres of landscaped gardens. There is an admission fee to visit, but they do offer "Free Days" for non-member visitors the first Thursday of each month. You'll have to request your ticket in advance online or by phone to avoid a sellout. There are four dining options here for when your feet need a rest including the Rose Garden Tea Room where you'll delicately eat finger sandwiches and chilled salads of The Cafe for a family friendly option with simple, yet satisfying options such as sandwiches, tacos, quesadillas, and a kid approved children's menu.



Kidspace Children's Museum

This is the place to visit if your family has little ones in it because really, sometimes kids need an outing that is all about them. There are a ton of hands-on exhibits for our little ones who are used to hearing, "don't touch!" and plenty of outdoor activities and programs. The outdoor Robert & Mary Galvin Physics Forest looks like a fantastic place to let kids use their whole bodies and mind to see just how things work. Check out their website for current programs geared for all age ranges.





ECSTEM PROFESSIONAL DEVELOPMENT DIVISION

Thank you for your interest in ECSTEM. Since 1972, The Children's Center at Caltech has been offering high quality child care and education for children ages six months to six years. 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) 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.

Due to the overwhelming demand for tours of our facilities, and requests for professional growth workshops, we have formed a Professional Development Division (PDD) that arranges tours, on-site visits and workshops.

- Workshops are held on Saturday's once a month from 9am to 12pm and are \$70 per person. These are pre-scheduled dates; please visit our website for information regarding upcoming dates.
- One hour Educator Tours are scheduled during the week; they are \$125 per person (\$10 for any additional persons, 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.

ECSTEM SITE CERTIFICATION

ECSTEM is excited to launch our new Site Certification option for programs seeking to focus their work with early childhood STEM concepts. Our certification is comprehensive and covers 60 hours of training in early childhood STEM curriculum, including core and focused areas of STEM topics, and tours of The Children's Center at Caltech and local area museums with a STEM emphasis. Certification will provide your center and your staff the opportunity to expand your knowledge and depth of practice within the domains of science, technology, engineering and math. Contact our PDD department to find out more about this unique opportunity!



ECSTEM Professional Development Division | 1200 E. California Blvd. MC C1-133, Pasadena, CA 91125 | 626-395-6860

ECSTEM INTERNATIONAL



As part of our ongoing efforts to ensure children the world over have access to quality child development and opportunities to explore STEM concepts, ECSTEM has partnered with Shanghai Hua Guo Cultural Development Co. based in China to create a bridge between US and Chinese institutions and educators.

Our combined goal is to train Chinese teachers and parents with a focus on early childhood STEM, and develop model ECSTEM laboratories for different types of early learning communities.



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#ECSTEM2020

#PLAYINGABOUTWITHSTEM

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