THE POWER OF CONNECTION: PERFORMANCE, PLAY, AND CREATIVITY

www.cestemer.org
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LOCATION

New York Institute of Technology
16W 61st Street
New York, NY 10023
(Columbus Circle) | For DIRECTIONS click here.

TRANSPORTATION

Amtrak, NJ Transit, LIRR
Arrive at Pennsylvania Station in Manhattan
(Penn Station) | 7th Ave and 34th Street

Metro North
Arrives at Grand Central Station | 42nd Street
and Park Avenue

Subway
For travel within Manhattan/Brooklyn/Queens
Metro Cards can be purchased at machines in
each subway station.
Single ride option available ($3) or you may
purchase a metro card and add money to the
card ($1 charge will be added to purchase).
Each ride is $2.75
You may add money to your card at any
machine.

Yellow Cabs / Taxis
For travel within Manhattan/Brooklyn/Queens and
to/from airports
Are available throughout the city and at airports.
You don’t need to call them on the phone.
Hail a cab by standing on the street corner and
raising your arm.
Cabs are available if the number on the roof is
lit up. If the number is not lit up, that means the
cab already has a fare and isn’t available to stop.
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<th>Hotel Name</th>
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<tr>
<td>JW MARRIOTT ESSEX HOUSE NEW YORK</td>
<td>160 Central Park S, New York, NY 10019</td>
<td># 212.247.0300</td>
</tr>
<tr>
<td>MANDARIN ORIENTAL</td>
<td>80 Columbus Circle, New York, NY 10023</td>
<td># 212.805.8800</td>
</tr>
<tr>
<td>6 COLUMBUS HOTEL – A SIXTY HOTEL</td>
<td>308 W 58th St., New York, NY 10019</td>
<td># 212.204.3000</td>
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<td>THE EMPIRE HOTEL</td>
<td>44 W 63rd St., New York, NY 10023</td>
<td># 212.265.7400</td>
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<td>PARK CENTRAL HOTEL NEW YORK</td>
<td>870 7th Ave., New York, NY 10019</td>
<td># 212.247.8000</td>
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<td>NEW YORK HILTON MIDTOWN</td>
<td>1335 6th Ave., New York, NY 10019</td>
<td># 212.586.7000</td>
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<td>THE MANHATTAN CLUB</td>
<td>200 W 56th St., New York, NY 10019</td>
<td># 888.692.2121</td>
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<td>NOVOTEL NEW YORK TIMES SQUARE</td>
<td>226 W 52nd St., New York, NY 10019</td>
<td># 212.315.0100</td>
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## RESTAURANTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Cuisine</th>
<th>Address</th>
<th>Location</th>
<th>Phone Number</th>
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<tr>
<td><strong>ROBERT (ATOP THE MUSEUM OF ARTS AND DESIGN)</strong></td>
<td>Modern American</td>
<td>Vegan and Gluten Free Options Available</td>
<td>2 Columbus Cir.</td>
<td>212.299.7730</td>
</tr>
<tr>
<td><strong>PER SE (IN TIME WARNER CENTER / THE SHOPS AT COLUMBUS CIRCLE)</strong></td>
<td>French</td>
<td>Vegan Options Available</td>
<td>10 Columbus Cir.</td>
<td>212.823.9335</td>
</tr>
<tr>
<td><strong>BLUE RIBBON SUSHI BAR &amp; GRILL</strong></td>
<td>Japanese / Sushi</td>
<td>Columbus Hotel</td>
<td>308 W 58th St. #6</td>
<td>212.397.0404</td>
</tr>
<tr>
<td><strong>LE PAIN QUOTIDIEN</strong></td>
<td>Bakery/Café</td>
<td>Organic &amp; Gluten Free Options Available</td>
<td>922 7th Ave.</td>
<td>212.757.0775</td>
</tr>
<tr>
<td><strong>THE BOAT BASIN CAFE</strong></td>
<td>Casual New American</td>
<td>West 79th St &amp; The Hudson River</td>
<td>901 Riverside Blvd.</td>
<td>212.496.5542</td>
</tr>
<tr>
<td><strong>INDIKITCH</strong></td>
<td>Indian</td>
<td>940 8th Ave.</td>
<td></td>
<td>646.918.7778</td>
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<tr>
<td><strong>ALAN’S FARMLAND</strong></td>
<td>Deli Sandwiches and Salads</td>
<td>Snacks &amp; Basic Groceries Available</td>
<td>27 Columbus Ave.</td>
<td>212.265.5886</td>
</tr>
<tr>
<td><strong>TURNSTYLE UNDERGROUND MARKET</strong></td>
<td>Various Food Vendors</td>
<td>No MetroCard required to enter</td>
<td>59th St-Columbus Circle Station</td>
<td>212.299.7730</td>
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# CONFERENCE MENU

## BREAKFAST

**Continental Breakfast**
- Assorted Mini Muffins, Mini Danish, Mini Scones, Assorted Mini Croissants
- Assorted Mini Bagels served with Assorted Cream Cheese, Butter and Preserves
- Sliced Seasonal Fruit
- Greek Yogurt

**Beverages**
- Coffee (Regular & Decaffeinated) & Tea
- Orange Juice

## LUNCH

**Hero Sandwiches**
- American Hero: Roast Beef, Turkey, American Cheese, Lettuce, Tomato
- Italian Hero: Mortadella, Genoa Salami, Soppressata, Prosciutto, Capicola, Provolone, Lettuce, Tomato
- The Neapolitan: Seasonal Grilled Vegetables marinated with Balsamic Vinaigrette, Roasted Red Peppers, Fresh Mozarella

**Salad**
- Tossed Salad: Crisp Lettuce, Tomato, Cucumber, Shaved Carrots, House Vinaigrette

**Dessert**
- Assorted Homemade Cookies

**Beverages**
- Bottled Water

## OPENING RECEPTION

**Fajita Station**
- Marinated Steak & Chicken Breast
- Sautéed Peppers and Onions
- Warm Flour Tortilla
- Toppings: Sour Cream, Guacamole, Black Olives, Scallions, Diced Tomatoes, Shredded Lettuce, Shredded Cheese, Pico de Gallo, Colored Tortilla Chips

**Passed Hor d’Oeuvres**
- Frank En Croute, Grain Mustard
- Spinach & Feta Turnovers
- Thai Chicken Satay/Peanut Dipping Sauce
- Grilled Cheese And Tomato Soup Shooters

**Tabletop Appetizers**
- Antipasti Plate: Prosciutto, Marinated Artichokes, Roasted Red Peppers, Marinated Mushrooms, Pepperoncini, Olives, Provolone
- Mediterranean Plate: Hummus, Baba Ghanouj, Feta Cheese, Mixed Olives, Pita Chips
- Crudité Platter: Herb Garlic Aioli, Vegetable Curry Samosas, Mango Chutney

**Dessert**
- Cannoli, PB&J, Chocolate Molten & Cheesecake shooters
- Assorted Homemade Cookies

**Beverages**
- Beer
- Wine
- Soft Drinks
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| **CENTRAL PARK** | Information Kiosk Merchants' Gate  
West 59th Street at Columbus Circle |
| **TIME WARNER CENTER / THE SHOPS AT COLUMBUS CIRCLE** | Shopping & Dining  
10 Columbus Cir.  
New York, NY 10019  
# 212.823.6300 |
| **LINCOLN CENTER FOR THE PERFORMING ARTS** | World's Leading Performing Arts Center  
10 Lincoln Center Plaza  
New York, NY 10023  
# 212.875.5456 |
| **THE METROPOLITAN MUSEUM OF ART** | Largest Art Museum in the United States  
Open 10am - 5.30pm  
1000 5th Ave.  
New York, NY 10028  
# 212.535.7710 |
| **AMERICAN MUSEUM OF NATURAL HISTORY** | Explore Human Culture, Nature, and the Universe  
Central Park West at 79th Street  
New York, NY 10024  
# 212.769.5100 |
| **NYC SUMMERSTAGE** | Free & Benefit Events Across All 5 Boroughs  
www.cityparksfoundation.org/summerstage |
| **YOGA TO THE PEOPLE** | 60 Minute Yoga Classes for Everyone  
$10 suggested donation, mat rental: $2  
2710 Broadway; 3rd Floor  
New York, NY 10025  
# 917.573.9642 |
# NEAREST HEALTHCARE FACILITIES

**Mount Sinai West**  
1000 10th Ave.  
New York, NY 10019  
# 212.523.4000 | Open 24 hours

**Northwell Health-GoHealth Urgent Care**  
199 Amsterdam Ave.  
New York, NY 10023  
# 212.721.4200 | Open 8am - 8pm

**AHF Healthcare Center - Manhattan AKA Columbus Circle**  
30 West 60th St., Suite A-N  
New York, NY 10023  
# 212.582.5006 | Open hours vary

**MedRite Urgent Care**  
330 W 42nd St.  
New York, NY 10036  
# 212.695.4444 | Open 8am - 10pm

# NEAREST PHARMACIES

**CVS**  
241 W 57th St.  
New York, NY 10019  
# 212.247.5848 | Open 24 hours

**Duane Reade**  
4 Columbus Cir.  
New York, NY 10019  
# 212.265.2302 | Open 24 hours

**Arrow Pharmacy**  
883 9th Ave.  
New York, NY 10019  
# 212.245.8469 | Open 9am - 7pm

**Apothecary NYC**  
333 W 57th St.  
New York, NY 10019  
# 212.672.0533 | Open 9am - 6pm
LANXING FU
Superhero Clubhouse

Lanxing Fu is a Chinese-American theater artist. She is a Co-Director of Superhero Clubhouse, for which she is the playwright and co-creator of Mammelephant (The New Ohio / HERE Arts Center) the program director of The Living Stage NYC with University Settlement, and a co-creator of PLUTO (no longer a play) and JUPITER (a play about power), which premiered at La MaMa in 2016. She has led and collaborated on interdisciplinary theater projects about contemporary consumerism, globalization, and the environment in Sri Lanka, Morocco, Turkey, and the United States. As a performer: The Space Between The Letters (dir: Eva von Schweinitz; UTR at The Public), some higher glimmer in a landscape of flat (dir: Sarah Hughes, Collapsible Hole), 36 Peaks (dir: Sarah Cameron Sunde, Baryshnikov Arts Center), and Holidays In/Coyote (dir: Jess Chayes, The Tank). Her essays “Building Possibility in the Age of Climate Change” and “The Birth of a Climate Commons” are published on HowlRound. Lanxing is an alumnus of Virginia Tech and Orchard Project Core Company, and currently works as a Producing Associate with SITI Company.

JEREMY PICKARD
Superhero Clubhouse

Jeremy Pickard is the founder and co-director of Superhero Clubhouse, a NYC-based community of artists, scientists, and environmental professionals invested in a long-term experiment to understand how theater can help shift consciousness in the face of global climate change. Jeremy wears many hats including director, producer, playwright, and performer. He is the lead artist of The Planet Plays, a series of nine interconnected stories about people and climate change, and co-creator of other works of eco-theater including Mammelephant, Flying Ace and the Storm of the Century! and Salty Folk: An Oyster Musical. Since 2010 Jeremy has been the Program and Production Director for the annual Big Green Theater eco-playwriting program with The Bushwick Starr. His essays “On Eco-Theater” and “Temporary Communities in the Era of Climate Change” are published by TCG and No Passport, edited by Caridad Svich.

MÓNICA I. FELIÚ-MÓJER

Finding Myself, Building Communities and Paying It Forward

Mónica grew up in rural Puerto Rico, catching lizards and with a cow in her backyard, which sparked her interest in all-things biology. A PhD scientist-turned-communicator, she taps into her professional and cultural backgrounds, and uses storytelling, science communication, and community-building to make science more equitable and inclusive. Through science communication training, Mónica helps underrepresented scientists’ step into the power of their identities and stories to create social impact. She leads communications and outreach for CienciaPR, a global community of more than 10,000 scientists, students, educators, and allies democratizing science, supporting the career development of underrepresented young scientists, and transforming science education and training in Puerto Rico. She also works with the non-profit iBiology, leading science communication trainings and producing “Background to Breakthrough”, a collection of short films highlighting underrepresented scientists and how their backgrounds and perspectives have spurred insights and innovations. Mónica earned her B.S. in Human Biology at the University of Puerto Rico in Bayamón, and her Ph.D. in Neurobiology at Harvard University. You can find her on Twitter: @moefeliu.
11TH FLOOR | AUDITORIUM

9:00 - 12:00pm
Registration opens

12:00 - 1:00pm
*Martinez & Holmes: Conference Start & Welcome

1:00 - 2:30pm
Kerby: Using interactive techniques like storyboarding, drawing, and small group feedback to help scientists craft effective presentations

2:30 - 2:45pm
BREAK

2:45 - 4:15pm
Cheng, Brown, Egües: Interdisciplinary Collaborations: Thematic Models for Integrating the Arts and Sciences

4:15 - 4:30pm
BREAK

4:30 - 5:15pm
Kroehler: Who, what, when, where, how, and why, why, why? Exercises for distilling your message

5:15 - 6:00pm
Sealfon: Acting Out in Large Lecture Halls

6:00 - 6:15pm
BREAK

6:15 - 8:00pm
Reception with NYIT Provost. (food & beverages served)

Holmes, Dukovski, DePace: Communicating and Humanizing Science in Interdisciplinary Research Programs

8TH FLOOR | RM 822*

1:00 - 1:45pm
*O’Hara: Engaging Practices: Using Technology to Differentiate and Collaborate

1:45 - 2:30pm
Quichocho: Integrated Physics Identities of Women of Color and LGBQ+ Physicists

Lancaster: Ten (mostly) simple things to change the culture of STEM

Dell: Art in the Lab: Drawing from Science

2:45 - 3:30pm
Bright: Performing Research

3:30 - 4:15pm
Gokhale: Changing Millennials’ Attitudes toward IT through Online Discussions

Venkatesh: Finding the right level of engagement: Implementation of Student Presentations at the Board

Hunt: LabX: Science for Society

4:30 - 5:15pm
Shockley: Embodied Education: An Experiential Introduction to Movement-Based Learning

5:15 - 6:00pm
Ginsberg, Mulhern: Performing Science – Drama in the (Lecture) Theatre

*Group Shares are held in the 11th Floor Auditorium. Registration Opening and Breaks are held in the 11th Floor Gallery. Share Fair is held in both the 11th Floor Auditorium and Gallery
USING INTERACTIVE TECHNIQUES LIKE CARTOONING, STORYBOARDING, AND SMALL GROUP FEEDBACK TO HELP SCIENTISTS CRAFT EFFECTIVE PRESENTATIONS | HOLLY WALTER KERBY

Thursday June 20, 1:00-2:30, 11th floor auditorium

This hands-on session will teach you three interactive techniques used to help scientists craft engaging presentations: cartooning content, the structure of story, and guided, small group feedback.

Additional Contributors: Lynda J. Barry, Liz Anna Kozik, Ebony Flowers, Brittland DeKorver, Joan Jorgenson, Anjalie Schlaeppe

Holly Walter Kerby is a chemist, playwright, educator, researcher, and pioneer in the use of story-form to communicate scientific content. She is the founder and director of Story-form Science and Fusion Science Theater. In 2012 Holly was named Community College Faculty of the Year for the nation.

ENGAGING PRACTICES: USING TECHNOLOGY TO DIFFERENTIATE AND COLLABORATE | KATE E. O’HARA

Thursday June 20, 1:00-1:45, 8th floor room 822

In this hands-on session, participants will explore ways in which free web-based technologies can be used to: increase student engagement, differentiate instruction, and foster student collaboration. Participants will learn strategies for implementation in their current, and future, practice.

Kate E. O’Hara, Ph.D., is an associate professor in the School of Interdisciplinary Studies and Education, at New York Institute of Technology. She has a background in instructional technology, urban education, and instructional design. Her research employs the use of narrative and autoethnographic methods within a sociocultural framework.

INTEGRATED PHYSICS IDENTITIES OF WOMEN OF COLOR AND LGBQ+ PHYSICISTS | XANDRIA QUICHOCHO

Thursday June 20, 1:45-2:00, 8th floor room 822

What can institutions do to support minoritized STEM students? In this presentation, we will be looking at student testimony and discussing the support systems that exist for women of color and LGBQ+ physicists in a university setting and the ways we can integrate them into our own communities.

Additional Contributors: Jessica Conn, Erin Schipull, Eleanor Close

Xandria Quichocho is an Afro-Chamorro student researcher at Texas State University. She currently participates in K-12 outreach as the President of the Society of Women in Physics and teaches cello. In the last two semesters of her physics degree, Xandria is studying the integrated physics identities of women of color and LGBQ+ physicists at Minority Serving Institutions.

TEN (MOSTLY) SIMPLE THINGS TO CHANGE THE CULTURE OF STEM | ALEX LANCASTER

Thursday June 20, 2:00-2:15, 8th floor room 822

From changing the way we credit others, how we publish, how we talk about scientific identity, we can all co-create a more egalitarian and humane scientific enterprise. In the spirit of the PLOS’s “Ten Simple Rules”, I offer ten (mostly) simple things anyone can start practicing today.

Alex K. Lancaster is an evolutionary biologist, engineer, writer and consultant. He is a Research Scholar at the Ronin Institute, a Research Affiliate at the University of Sydney, a affiliate of the Institute for Globally Distributed Open Research and Education and a Partner at Cambridge, Massachusetts-based Amber Biology.
ART IN THE LAB: DRAWING FROM SCIENCE | ALISON DELL
Thursday June 20, 2:15-2:30, 8th floor room 822

Art in the Lab: Presentation AND Installation

Additional Contributor: Irina Ellison

Alison Dell is a scientist and an artist whose work explores the structures and patterns in biological systems, and the production of meaning in scientific images. Dell received her Ph.D. from the University of Pennsylvania in 2013, following pre-doctoral research at Columbia University. Both doctoral and pre-doctoral work examined cell signaling in developing neurons.

INTERDISCIPLINARY COLLABORATIONS: THEMATIC MODELS FOR INTEGRATING THE ARTS AND SCIENCES | SANDRA CHENG, GWEN COHEN BROWN, AND AIDA L. EGÜES
Thursday June 20, 2:45-4:15, 11th floor auditorium

Workshop participants will examine an implemented model that interfaces art history, nursing, and pathology; and learn strategies of interdisciplinary course design to promote collaboration between faculty and students across disciplines.

Sandra Cheng, PhD is an Associate Professor of Art History at NYCCT, CUNY. She is the recipient of fellowships and grants from the Metropolitan Museum of Art, the Library of Congress, and the National Endowment for the Humanities. Her research interests include early modern drawings and studio practice; and intersections of art and science.

Gwen Cohen Brown is a Full Professor in the Dental Hygiene Department at NYCCT, a licensed Dentist in New York State and a Fellow in the Academy of Oral and Maxillofacial Pathology. Dr. Brown is faculty at the AIDS Institute and AETC. Dr. Brown has lectured extensively on HIV/AIDS, Common Oral Lesions, Infection Control, and Oral Cancer since 1992.

Aida L. Egües, DNP, RN, APHN-BC, CNE, is a Full Professor of Nursing at New York City College of Technology (City Tech), CUNY. She is also a Fellow in the New York Academy of Medicine, with expertise in acute illness, disparities, interpersonal violence, mentorship, and public and community health nursing research.

PERFORMING RESEARCH | LATRELLE BRIGHT
Thursday June 20, 2:45-3:30, 8th floor room 822

We are the storytelling animal. What story do you want to tell? Explore metaphor, text, movement and sound and bring your research to life for the stage. Arrive with you a brief bit of text or data you wish to explore. Leave with new ways of thinking about it and engaging with it.

Latrelle Bright is a freelance theatre maker and arts advocate. She has served as Program Coordinator for INNER VOICES Social Issues Theatre at the University of Illinois. She currently serves as an adjunct professor at the University of Illinois and Parkland College. Latrelle develops workshops for local organizations, creates performance pieces around issues of labor and the environment and directs theatrical productions.
ABSTRACTS

CHANGING MILLENNIALS’ ATTITUDES TOWARD IT THROUGH ONLINE DISCUSSIONS | ANU GOKHALE
Thursday June 20, 3:30-3:45, 8th floor room 822

Our current NSF-funded project seeks in part to promote more positive attitudes toward IT, particularly among under-represented groups such as women and minorities using online learning communities.

Anu A. Gokhale is a professor and coordinator of computer systems technology at Illinois State University. Originally from India, she has a master’s in physics–electronics from the College of William & Mary, and a doctorate from Iowa State University. She is a recipient of many awards, recent notable one is Fulbright Distinguished Chair in STEM in Brazil.

FINDING THE WRITE LEVEL OF ENGAGEMENT: IMPLEMENTATION OF STUDENT PRESENTATIONS AT THE BOARD | MADHVI VENKATESH
Thursday June 20, 3:45- 4:00, 8th floor room 822

Course-based presentation activities at the board can assist STEM students in gaining experience and confidence in presenting without previously prepared visual aids. This session will guide participants through the process of designing a board-based presentation activity for their students.

Additional Contributor: Taralyn Tan

Madhvi Venkatesh is a Curriculum Fellow/Lecturer at Harvard Medical School and Co-Artistic Director of Prakriti Dance. She has performed across the US and India as a soloist and member of reputed dance companies. Her academic work focuses on science education, both through conventional and arts-based methods.

LABX: SCIENCE FOR SOCIETY | GEOF HUNT
Thursday June 20, 4:00-4:15, 8th floor room 822

LabX is a new public engagement program that aims to empower young adults to use science and scientific thinking in their daily lives and in their communities. This presentation will lay out the goals and objectives for LabX and describe opportunities for potential collaborators.

Geoff Hunt is the Director of LabX, a new public engagement program at the National Academies of Sciences. Prior to this, Geoff was the Manager of Public Outreach for the American Society for Biochemistry and Molecular Biology. He has a PhD in molecular biology from Princeton University.

WHO, WHAT, WHEN, WHERE, HOW, AND WHY, WHY, WHY? EXERCISES FOR DISTILLING YOUR MESSAGE | CAROLYN (CARRIE) KROEHLER
Thursday June 20, 4:30-5:15, 11th floor auditorium

This interactive session will help you create short, clear, and engaging descriptions of your work or research; give you tools to help others do the same; and provide an opportunity to meet other CESTEMER participants and hear about the exciting work they’re doing. Come play with us!

Carrie Kroehler, associate director of the Center for Communicating Science at Virginia Tech, believes in the power of play. She is a biologist and writer who is committed to helping researchers communicate their work to people outside their specialties.
**EMBODIED EDUCATION: AN EXPERIENTIAL INTRODUCTION TO MOVEMENT-BASED LEARNING | EMMA SHOCKLEY**

Thursday June 20, 4:30-5:15, 8th floor room 822

What is embodied education and how can you make use of it in order to make your classroom or organization more effective and inclusive? Experience an example of this form of education and learn how to make use of it for yourself. All levels of movement experience welcome!

Emma Shockley (Graduate Student, Laban Institute of Movement Studies) has a degree in physics, in addition to a rigorous background in dance and other communicomovement modalities. She is currently working towards becoming a Certified Movement Analyst, with the goal of eventually developing a methodology for integrating movement into tradition classroom environments.

**ACTING OUT IN LARGE LECTURE HALLS | CAROLYN SEALFON**

Thursday June 20, 5:15-6:00, 11th floor auditorium

How can we actively engage hundreds of people in learning challenging STEM concepts and abstract models in a large lecture or concert hall? Come to this session to explore co-creating dynamic, interactive, insightful STEM representations that you may wish to try with your audience of any size.

Carolyn Sealfon (Doctor, University of Toronto/Ronin Institute) has taught, or more, facilitated learning in the University of Toronto Department of Physics, at Princeton University as Associate Director of Science Education, at a Pennsylvania public university, at an inner-city high school in New Jersey, and in interactive workshops across the continent.

**PERFORMING SCIENCE – DRAMA IN THE (LECTURE) THEATRE | RINSKE GINSBERG AND TERRY MULHERN**

Thursday June 20, 5:15-6:00, 8th floor room 822

This interactive presentation details the unique collaboration between a Biochemist and Actor trainer and combines oral presentation, film and live performance to put the Drama into the Lecture Theatre. Participants will find themselves spontaneously folding into alpha-helices & beta-sheets (literally!)

Additional Contributors: Dr Sarah French, Lecturer in Higher Education, Melbourne Centre for the Study of Higher Education

Rinske Ginsberg is a Lecturer in Theatre (Actor's Body) at the Victorian College of the Arts, University of Melbourne. A Master of Theatre Practice. Rinske has over 35 years’ experience as performer, movement educator, actor trainer and dramaturge in theatre education and the performing arts. She teaches into BFA Acting and BFA Theatre at VCA Theatre.

Terry Mulhern is the Director of Teaching and Learning for Biochemistry and Molecular Biology, University of Melbourne. He teaches in the BSc, BBiomed and MD programs. Terry is passionate about helping students ‘act like scientists’ and embody biological processes in a supportive and fun collaborative peer-peer learning environment.
COMMUNICATING AND HUMANIZING SCIENCE IN INTERDISCIPLINARY RESEARCH PROGRAMS | RAQUELL HOLMES, ANGELA DEPACE, AND ILIJA DUKOVSKI
Thursday June 20, 6:15-8:00, 11th floor auditorium

Can we build humanistic, inclusive communities in Tier 1 research programs? Does a course that develops scientists as people impact science? Experience and explore how we create conditions with play in Systems Biology and Bioinformatics for student communication training, growth and transformation.

Additional Contributor: Mia Anderson

Raquell Holmes, Ph.D, the founder of improvscience, is a pioneer in the use of improvisation and performance to advance scientific communities. Formally trained as a cell biologist, she uses her training in human development from the East Side Institute to help scientists build collaborative learning and research environments.

Dr. Angela DePace is an Associate Professor of Systems Biology at Harvard Medical School where her lab studies transcription. She teaches scientific communication and is widely recognized for her commitment to mentoring and career development. She received an NSF CAREER award in acknowledgement of her innovative research and teaching.

Ilija Dukovski studied theoretical physics at Belgrade University, Serbia. His Ph.D. from University of Massachusetts, Amherst is in computational physics. In industry, he developed Density Functional Theory and Monte Carlo methods for modeling charge transport in semiconductors. He currently works with Daniel Segrè, Boston University developing COMETS (comets.bu.edu).
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<th>Time</th>
<th>11TH FLOOR</th>
<th>8TH FLOOR</th>
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<tbody>
<tr>
<td>8:30 - 9:00am</td>
<td>Morning Coffee</td>
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<td>9:00 - 10:30am</td>
<td>Holmes, Rich: Creating heart in a world of STEM</td>
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<td>10:30 - 10:45am</td>
<td>BREAK</td>
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<td>10:45 - 12:15pm</td>
<td>Citron: Ebisu Sign Language Theatre Laboratory: An Ensemble of Deaf Performer-Researchers</td>
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<td>12:15 - 12:30pm</td>
<td>Group Share</td>
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<td>12:30 - 1:30pm</td>
<td>LUNCH</td>
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<td>2:15 - 3:00pm</td>
<td>Schedel: Kepler Concordia: Play the Solar System</td>
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<td>3:00 - 3:15pm</td>
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<td>3:15 - 5:30pm</td>
<td>Share Fair (see next page for details)</td>
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<td>5:30 - 5:45pm</td>
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<td>5:45 - 6:00pm</td>
<td>BREAK</td>
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<td>6:00 - 7:00pm</td>
<td>Keynote Talk (Location: Auditorium on Broadway), Pickard &amp; Fu: Eco-Theater: Intersectional Collaboration and New Storytelling in the Age of Climate Change</td>
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<td>7:00pm -</td>
<td>Dinner &amp; Fun</td>
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<td>9:00 - 9:45am</td>
<td>Venkatesh: Through Fish Eyes: Increasing Awareness about Marine Ecosystems through classical Indian Dance</td>
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<td>9:45 - 10:30am</td>
<td>Williams: The Intersection of Identity and Performing Arts for Black Physicists</td>
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<td>10:45 - 11:30am</td>
<td>Eshun-Willson: iMCB+: An Inclusion &amp; Diversity Initiative to Empower Underrepresented Graduate Students and their Allies</td>
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<td>11:30 - 12:15pm</td>
<td>Zaretsky: BioArt Labs: Live Art, Experimental Protocol, Bioethics and Aesthetics</td>
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<td>10:45 - 11:30am</td>
<td>Bardhan, Leary: How Innovative Ideas Transcend through Nurses Telling Stories</td>
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<td>1:30 - 3:00pm</td>
<td>DePodwin: It Only Takes One Person to Open the Door</td>
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<td>1:30 - 3:00pm</td>
<td>Hyater-Adams: Performing Physics: An Analysis of Design-Based Informal STEAM Education Programs Presentation</td>
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<td>11:30 - 12:15pm</td>
<td>Watt, Sealfon: Fake Facts and Courageous Curiosity</td>
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*Group Shares are held in the 11th Floor Auditorium. Registration Opening and Breaks are held in the 11th Floor Gallery. Share Fair is held in both the 11th Floor Auditorium and Gallery.*
### CESTEMER Slam

**[11th Floor Auditorium]**

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<th>Time</th>
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<tr>
<td>3:15 - 3:20pm</td>
<td><strong>Introduction</strong></td>
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<td>3:20 - 3:50pm</td>
<td><strong>Myronuk</strong>: Isolating Elements: The Scientific Method on Stage</td>
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<td><strong>Kruesel</strong>: From Autism (and Vaccines?) to Zebra Mussels: Science Advocacy in a College Communications Course</td>
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<td><strong>Berman</strong>: Movemathics: Math meets movement</td>
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<td>3:50 - 5:20pm</td>
<td><strong>Tobin</strong>: “Laser”</td>
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<td>4:20 - 4:50pm</td>
<td><strong>Sherr, Diotti, Adebola</strong>: The usage of 3D printed models to enhance learning in gateway biology courses</td>
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<td><strong>Kruesel</strong>: Poetic-Scientist or Science-Poet?: A Reading of Poems Inspired by My Previous Life in Biochemistry</td>
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<td><strong>Merry</strong>: Why Improv Creates Meaning</td>
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<td><strong>Mages</strong>: Lima Beans: Telling a True Personal Science Story</td>
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<td><strong>Coe</strong>: Poetry Reading by Terese Coe, including her translations from Jorge Luis Borges, Pierre de Ronsard, and Heinrich Heine</td>
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<td>4:50 - 5:20pm</td>
<td><strong>Hockman</strong>: Scientists and Writers: How A University Collaboration (and Beyond) Shows They're Good Friends</td>
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<td><strong>Prefontaine</strong>: Physics and Figure Skating: Supporting the performer and scientist in each of us</td>
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<td><strong>Solomon</strong>: Dancing Physics: Engaging Black Girls in Embodied Learning</td>
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<td><strong>McCray</strong>: Here in the garden: Using dance to facilitate informal science learning</td>
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### CESTEMER Gallery

**[11th Floor Gallery]**

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<th>Time</th>
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<tr>
<td>3:15 - 3:20pm</td>
<td><strong>Battor</strong>: Teaching as a Playworker</td>
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<td>3:20 - 3:50pm</td>
<td><strong>Borinskaya</strong>: RISE UP: Rutgers INSPIRE mentoring Sessions promote Early Undergraduate Participation in biomedical research</td>
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<td><strong>Holmes, Borinskaya, Shockley, Friedmann</strong>: UX Science: Building Learning Ensembles Across Class and Race</td>
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<td>3:50 - 5:20pm</td>
<td><strong>Harwell</strong>: Queering Informal STEM Learning: Overview of a participatory approach to investigating the queer visitor experience at informal STEM education institutions</td>
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<td><strong>Kroehler, Raun</strong>: Communicating Science: An Ethnographic Study</td>
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<td><strong>Muindi</strong>: Stories in Science Gallery</td>
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<td>4:20 - 4:50pm</td>
<td><strong>Murray</strong>: The Survivor Experience: Memory, Identity, &amp; Self-Worth</td>
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<td><strong>Remis</strong>: DIY Solar Cells for Non-Scientists</td>
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<td><strong>Sumner</strong>: Rhizomatic Play Wheel: Linking Your Play Zones &amp; Offers</td>
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<td><strong>Timperman, Schenkel, Bertholf</strong>: Science and Art, transforming Students and Changing the World through Study Abroad</td>
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**Freeman**: Aaron Freeman’s video interview station. 11th floor, RM 1119, Thu-Sat.
THROUGH FISH EYES: INCREASING AWARENESS ABOUT MARINE ECOSYSTEMS THROUGH CLASSICAL INDIAN DANCE | MADHVI VENKATESH
Friday June 21, 9:00-9:45, 8th floor room 822

Come and see excerpts from Prakriti Dance’s newest production “Through Fish Eyes,” which utilizes the dynamic classical Indian dance form, Bharata Natyam, to evoke empathy about dwindling marine ecosystems. This will be interspersed with discussion on the development and meaning of the work.

Additional Contributors: Kasi Aysola, Lisa-ann Gershwin, Ramya Kapadia, Madhavi Reddi, Vanita Todker, Seema Vishwanath

Madhvi Venkatesh is a Curriculum Fellow/Lecturer at Harvard Medical School and Co-Artistic Director of Prakriti Dance. She has performed across the US and India as a soloist and member of reputed dance companies. Her academic work focuses on science education, both through conventional and arts-based methods.

CREATING HEART IN A WORLD OF STEM | RAQUELL HOLMES AND MARIAN RICH
Friday June 21, 9:00-10:30, 11th floor auditorium

Experience the improvscience approach to building creative, inclusive and developmental science communities- social therapeutics. Bring you to our improvisational practice that builds a playful learning ensemble and conditions in which participants can get help “creating heart” in their STEM worlds.

Raquell Holmes, Ph.D, the founder of improvscience, is a pioneer in the use of improvisation and performance to advance scientific communities. Formally trained as a cell biologist, she uses her training in human development from the East Side Institute to help scientists build collaborative learning and research environments.

Marian Rich, founder of Career Play, Inc. is trained as an actress, improviser and theatrical director. For over 30 years, Marian has built innovative educational environments where people from all walks of life come together to grow and develop. As faculty at the East Side Institute she trains educators, scholars and activists from around the world who want to infuse their work with the power of performance.

THE INTERSECTION OF IDENTITY AND PERFORMING ARTS FOR BLACK PHYSICISTS | TAMIA WILLIAMS
Friday June 21, 9:45-10:00, 8th floor room 822

We consider the role performing arts plays in the development of a science identity. Building on previous studies, we analyze interviews of Black Physicists and identify themes that relate to their participation in the performing arts, and map those themes onto the CPI framework.

Additional Contributors: Simone Hyater-Adams, Kathleen Hinko, Kerstin Nordstrom, Claudia Fracchiolla, Noah Finkelstein

Tamia Williams is a physics and theatre arts student from New York City. She earned her BA in Physics & Theatre Arts from Mount Holyoke College, where she graduated Cum Laude with Departmental High Honors. Her research background is in physics education research that focuses on developing theories connecting physics identity and racial identity for students of color, as well as looking at the intersection of the performing arts on black identity.
**IMCB+: AN INCLUSION & DIVERSITY INITIATIVE TO EMPOWER UNDERREPRESENTED GRADUATE STUDENTS AND THEIR ALLIES | LISA ESHUN-WILSON**

Friday June 21, 10:00-10:15, 8th floor room 822

The first of its kind, iMCB+ will empower STEM graduate students and their allies to develop concrete solutions to overcome unconscious bias and imposter syndrome. We aim to collaborate with pioneers in improvisation and performance art to create a safe, inclusive climate on our campus.

Additional Contributors: Michelle Reid, Susan Marqusee, David Weisblat, Iswar Hariharan

Lisa Eshun-Wilson is a PhD Candidate in the Division of Biochemistry, Biophysics, and Structural Biology at the Department of Molecular Cell Biology of UC Berkeley. She is interested in how cancer cells exploit microtubule structure to manipulate and strengthen their cytoskeletons. Her most recent published work shows how the chemical modification, acetylation, which is upregulated in aggressive cancer cells, promotes more mechanically resilient and stable microtubules.

**BIOART LABS: LIVE ART, EXPERIMENTAL PROTOCOL, BIOETHICS AND AESTHETICS | ADAM ZARETSKY**

Friday June 21, 10:15-10:30, 8th floor room 822

Bioart WetLabs create an interface between biology and the arts. Goals: demystify the tools and protocols of science, appreciation of biodiversity as complexity, teach science without fact production. Experiential bioethics-in-action engages enigma, producing innovative conceptual re-evaluations.

Adam Zaretsky is a Wet-Lab Art Practitioner. Zaretsky stages lively, hands-on bioart production labs on: foreign species invasion (pure/impure), radical food science (edible/inedible), jazz bioinformatics (code/flesh), tissue culture (undead/semi-alive), transgenic design issues (traits/desires), interactive ethology (person/machine/non-human) and physiology (performance/stress).

**EBISU SIGN LANGUAGE THEATRE LABORATORY: AN ENSEMBLE OF DEAF PERFORMER-RESEARCHERS | ATAY CITRON**

Friday June 21, 10:45-12:15, 11th floor auditorium

An ensemble of deaf actors, led by a hearing director – Ebisu Sign Language Theatre Lab was formed in 2014 as part of GRAMBY (Grammar of the Body) interdisciplinary research project that investigates compositionality in human language (www.gramby.haifa.ac.il ). Lecture and physical theatre workshop.

Atay Citron is associate professor and former chair of the Theatre Department at the University of Haifa and founding director of its pioneering academic training program for medical clowns. Since 2014, he is the director of the Ebisu Sign Language Theatre Laboratory.
**HOW INNOVATIVE IDEAS TRANSCEND THROUGH NURSES TELLING STORIES | NEIL BARDHAN AND MARION LEARY**

Friday June 21, 10:45-11:00, 8th floor room 822

If innovation represents ideas, who has better ideas than nurses? And what better way to express such ideas than storytelling! Learn how First Person Arts & Penn Nursing collaborated to create & present a live public storytelling event in which members of the nursing community shared their stories.

Neil Bardhan is a communication consultant based in Philadelphia. He has worked at the University of Rochester, The Max Planck Institute for Psycholinguistics, and The University of Tuebingen. Neil now combines his interest in science, communication, and performance with workshops and coaching for diverse clients. He is the Manager of Applied Storytelling at First Person Arts.

Marion Leary is the Director of Innovation at Penn Nursing. Ms. Leary has established herself as a leader in the field of nursing innovation. Ms. Leary is a proponent of using science communication to amplify nursing science and was Philadelphia’s Geek of the year in 2017.

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**IT ONLY TAKES ONE PERSON TO OPEN THE DOOR | BECKY DEPODWIN**

Friday June 21, 11:00-11:15, 8th floor room 822

This 10-minute oral presentation will discuss the importance of talking about difficult topics and the ways in which we can provide people with a comfortable and safe atmosphere to be open and honest and allow meaningful, positive change to occur to end the stigma surrounding mental health.

Additional Contributor: Dakota Smith

Becky DePodwin is a meteorologist with a passion for communication, and mental health advocacy. Becky holds a bachelor’s in meteorology, a master’s in emergency management and is active in the American Meteorological Society as chair-elect of the Board for Early Career Professionals & on the steering committee of the Early Career Leadership Academy.

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**PERFORMING PHYSICS: AN ANALYSIS OF DESIGN-BASED INFORMAL STEAM EDUCATION PROGRAMS | SIMONE HYATER-ADAMS**

Friday June 21, 11:15-11:30, 8th floor room 822

Come learn about the evolving design and implementation of the Performing Physics Program, an outreach program the brings together physics and performance art!

Additional Contributors: Kathleen Hinko & Noah Finkelstien

Simone A. Hyater-Adams, PhD student at CU Boulder, is a researcher with a passion for creating more opportunities for Black students. She uses her personal experiences to guide her interdisciplinary research and develops/facilitates diversity workshops with goals to cultivate a more inclusive and equitable STEM field.
**FAKE FACTS AND COURAGEOUS CURIOSITY | NANCY WATT AND CAROLYN SEALFON**
Friday June 21, 11:30-12:15, 8th floor room 822

YES, people are social beings who want inclusivity AND we can view diversity as a threat. How does it feel to watch people get hurt by fake facts? Our brains naturally believe fake facts (biases and misconceptions) but with courageous curiosity, this improv-PHYS-ation workshop tackles our perception.

**Nancy Watt** (President, Nancy Watt Communications) has a BA in Psych/Sociology, Certification in Applied Positive Psychology and is a Conservatory Graduate from Toronto’s Second City. Her combined skill of intelligence, energy, humor and charisma engages an audience and facilitates learning with laughter and connection.

**Carolyn Sealfon** (Doctor, University of Toronto/Ronin Institute) has taught, or more, facilitated learning in the University of Toronto Department of Physics, at Princeton University as Associate Director of Science Education, at a Pennsylvania public university, at an inner-city high school in New Jersey, and in interactive workshops across the continent.

**THE CHAOS THEORY OF NOW: THEATRE AND SCIENCE TOGETHER | JENNIFER JOY**
Friday June 21, 1:30-2:15, 11th floor auditorium

The multimedia solo show, “The Chaos Theory of Now” mashes up chaos and complexity theories with characters from today, from Trump voters to Antifa activists. After the performance, we’ll discuss how science can illuminate the human condition – and how theatre can illuminate science.

**Jennifer Joy** (Performing Artist/Writer, Jennifer Joy Productions) has toured all over the US with her troupe, The SciArt6, and with her science-inspired solo shows, to rave reviews. She’s worked with NASA, the Library of Congress and AESS. Her podcast, Where Science Meets Art, includes collaborations with hip hop artist, Benu Muhammad. She has an MFA in Drama from UC Irvine.

**WHAT’S IN A NAME? HOW CLEARER DEFINITIONS LEAD TO BETTER DESIGNS | SOLEY ESTEVES AND DEBRA EVERETT-LANE**
Friday June 21, 1:30-3:00, 8th floor room 822

Interactive, participatory, collaborative — we disagree about what these mean. But how can we create effective experiences for scientific education and outreach if we can’t understand each other? This interactive session will show how clearer definitions leads to better design and greater impact.

**Soley Esteves** is inspired by how museums build more innovative, curious and socially-engaged communities. Currently, she produces public programs, in-gallery engagements, and interpretive materials inspired by intersections of science, art, and culture at the American Museum of Natural History in New York.

**Debra Everett-Lane** uses her skills as a designer, writer, and educator to create exhibits, experiences, games, and other projects that enable audiences to learn, create, share, and have fun. She is currently Asst. Dir. of Special Projects in the Exhibition Dept. at the American Museum of Natural History.
KEPLER CONCORDIA: PLAY THE SOLAR SYSTEM | MARGARET SCHEDEL
Friday June 21, 2:15-3:00, 11th floor auditorium

Kepler Concordia is a new musical instrument for scientific exploration of the solar system as an immersive experience created by a team of programmers, artists, musicians, and engineers led by Dr. Kelly Snook, former NASA Scientist and Professor of Media Technology. www.http://concordia.world/

Additional Contributor: Kelly Snook

Margaret Anne Schedel (Associate Professor, Stony Brook University) is a composer and cellist specializing in the creation and performance of ferociously interactive media whose works have been performed throughout the United States and abroad.

SHARE FAIR | CESTEMER SLAM [11TH FLOOR AUDITORIUM]

AARON FREEMAN'S VIDEO INTERVIEW STATION | AARON FREEMAN
Thursday – Saturday, (including Share Fair), 11th floor room 1119

Society for Neuroscience YouTuber Aaron Freeman wants to interview CESTEMER members about how you approach science communication and why you think it is important. The interviews will be posted on the SFN YouTube channel and Facebook pages. If you have 15 free minutes during the conference please drop by and share your thoughts!

Aaron Freeman is Artist In Residence of the Chicago Society for Neuroscience & a YouTuber for Chicago Public Media. He is a teaching assistant for the University of Chicago’s neurobiology MOOC, performs as an emcee, stand-up comic and creates humorous science-based videos for the Annals of Internal Medicine.

ISOLATING ELEMENTS: THE SCIENTIFIC METHOD ON STAGE | JEN MYRONUK
Friday June 21, Share Fair, 3:20-3:50, 11th floor auditorium

How can living history theater and scholarly portrayals of scientists engage the public’s understanding of the scientific method? Facilitated by filmmaker Jen Myronuk, participants will experience a sample scene from the film Humanity Needs Dreamers: A Visit With Marie Curie as digital theater.

Additional Contributor: Susan Marie Frontczak

Jen Myronuk is the Co-Founder & Creative Director of STEM on Stage, a STEAM initiative to promote narrative science through digital theater & immersive media. She is the producer/director of Humanity Needs Dreamers: A Visit With Marie Curie and Pursuit of Discovery: Lise Meitner & Nuclear Fission.
FROM AUTISM (AND VACCINES?) TO ZEBRA MUSSLES: SCIENCE ADVOCACY IN A COLLEGE COMMUNICATIONS COURSE | CLAIRE KRUESEL
Friday June 21, Share Fair, 3:20-3:50, 11th floor auditorium

STEM students come to my communications course knowing how to write lab reports or assemble research posters, but how can we expand the reach of research and critical thinking? These projects showcase some of the unique ways students advocate for science literacy—without the jargon.

Claire Kruesel grew up in Rochester, Minnesota, where she researched at the Mayo Clinic, helped out at her father’s antiques auctions, and began a lifelong love of choral singing. She’s staked her home in Ames, Iowa since 2002, where she earned undergraduate degrees in Biochemistry and Genetics, then an MFA in Creative Writing and Environment.

“LASER” | DANIEL BIRD TOBIN
Friday June 21, Share Fair, 3:50-4:20, 11th floor auditorium

“Laser” is an interdisciplinary performance piece that explores the nature of lasers, the movement of electrons around molecules, and our intellectual and emotional understanding of scientific research.

Additional Contributors: Scott Sayres

Daniel Bird Tobin is a director, performer, and theatre archaeologist. Currently he is a Faculty Fellow in the Center for Communicating Science at Virginia Tech. A graduate of the MFA in Performance program at Arizona State University, he has trained and worked with Dance Exchange, the SITI Company, Tectonic Theatre Project, and the Globe Theatre in London.

THE USAGE OF 3D PRINTED MODELS TO ENHANCE LEARNING IN GATEWAY BIOLOGY COURSES | GOLDIE SHERR, RAFFAELLA DIOTTI, ADIJAT ADEBOLA
Friday June 21, Share Fair, 3:50-4:20, 11th floor auditorium

3D printing offers the unique opportunity for educators to generate tailor-made and highly specific resources that can be incorporated into the STEM classroom. Here, we explain our usage and design of 3D printed models in gateway biology courses to help increase understanding of the subject.

Additional Contributors: Seher Atamturktur, Mark Lennerton

Goldie Sherr is an Assistant Professor in the Department of Biological Sciences at CUNY’s Bronx Community College. She received her B.S. in Biology from the College of Staten Island and obtained her M.Phil. and Ph.D. from CUNY’s Graduate Center. Her research interests include molecular biology, genetics and biology pedagogy.

Raffaella Diotti is an Assistant Professor at CUNY Bronx Community College in the Department of Biological Sciences. Dr. Diotti earned her B.A. in Biochemistry from Mount Holyoke College and her PhD in Cell and Molecular Biology from the CUNY Graduate Center. Dr. Diotti is interested in exploring new technologies and strategies to increase active learning activities in the classroom. Dr. Diotti is active in supporting students led research projects.

Adijat Adebola is an Assistant Professor in the Department of Biological Sciences at Bronx Community College of the City University of New York. She received a PhD in Neurobiology and Behavior from Columbia University. She is interested in the role of the cytoskeleton in cell motility and migration. She also has an interest in incorporating student led research projects in the classroom.
POETIC-SCIENTIST OR SCIENCE-POET?: A READING OF POEMS INSPIRED BY MY PREVIOUS LIFE IN BIOCHEMISTRY | CLAIRE KRUESEL
Friday June 21, Share Fair, 3:50-4:20, 11th floor auditorium

Claire Kruesel writes poetry from the intersection of art and science. Come listen to a poem or two about teaching a Biology lab, studying fracking as a graduate student in Creative Writing and Environment, or considering the discovery of the “God particle”.

Claire Kruesel grew up in Rochester, Minnesota, where she researched at the Mayo Clinic, helped out at her father's antiques auctions, and began a lifelong love of choral singing. She's staked her home in Ames, Iowa since 2002, where she earned undergraduate degrees in Biochemistry and Genetics, then an MFA in Creative Writing and Environment.

WHY IMPROV CREATES MEANING | LIZ MERRY
Friday June 21, Share Fair, 4:20-4:50, 11th floor auditorium

This presentation will make the argument that if Logotherapy had an art form it would be Applied Improvisation. And to understand the power and potential of AI, practitioners should understand the basic tenets of Logotherapy.

Liz Merry has been studying Improvisational Comedy since the late 1980's. She learned about AI as she transitioned to semi-retirement due to health restrictions. Her AI mentors are Ted Desmaisons and Lisa Rowland. Liz is currently very involved in The Sacramento Comedy Foundation, taking and teaching classes and beginning the first specific AI training program in the Central Valley.

LIMA BEANS: TELLING A TRUE PERSONAL SCIENCE STORY | WENDY K. MAGES
Friday June 21, Share Fair, 4:20-4:50, 11th floor auditorium

Telling true science stories allows tellers to share personal experiences of science, as it invites audiences to experience the marvels of science in everyday lives. This story was crafted to engage science teachers in a professional development workshop on telling true personal science stories.

Wendy K. Mages, a storyteller and scholar, she earned a doctorate in Human Development and Psychology at the Harvard Graduate School of Education and a master's in Theatre at Northwestern. She researches the effect of the arts on learning and development, and performs at storytelling events in the US and abroad.
POETRY READING BY TERESE COE, INCLUDING HER TRANSLATIONS FROM JORGE LUIS BORGES, PIERRE DE RONSARD, AND HEINRICH HEINE | TERESE COE  
Friday June 21, Share Fair, 4:20-4:50, 11th floor auditorium

I will read from my translations of Pierre de Ronsard's French (ardent and witty 16th century metrical poems), Heinrich Heine's German (ironic 19th century romanticism), and Jorge Luis Borges’ Spanish (Borges is thought of as a 20th century magical realist but he is far beyond that, and an utterly unique master of metaphysics). These translations have been published in eminent journals in the US, UK, Ireland, and Canada. A selection of them appears in my second book of poems, Shot Silk (Kelsay Books 2015).


SCIENTISTS AND WRITERS: HOW A UNIVERSITY COLLABORATION (AND BEYOND) SHOWS THEY'RE GOOD FRIENDS | CASSANDRA HOCKMAN  
Friday June 21, Share Fair, 4:50-5:20, 11th floor auditorium

Anyone interested in practical relationships between scientists and artists might be interested to know how undergrad and graduate students have benefitted from working together. This project can inform partnerships across campus, as well as community partnerships.

Cassandra Hockman is a science and culture writer working on a Ph.D. in English at Virginia Tech. She collaborates with civil and environmental engineers for her dissertation research, and has covered disease, pollution, environmental justice, science policy, and climate change as a university writer.

PHYSICS AND FIGURE SKATING: SUPPORTING THE PERFORMER AND SCIENTIST IN EACH OF US | BREAN PREFONTAINE  
Friday June 21, Share Fair, 4:50-5:20, 11th floor auditorium

Despite funding and programming aimed at attracting students to the field, physics still lacks diversity. We look to informal spaces that allow students to develop their physics identity alongside their many other identities by intentionally blending physics with other interests such as ice skating.

Additional Contributors: Dr. Kathleen Hinko

Brean Prefontaine is a graduate student within the Physics Education Research Lab at Michigan State University. She works with Dr. Kathleen Hinko researching how informal physics environments can support multiple identities. She works to integrate her research with her other identities as a figure skater and coach by exploring ways that physics and skating events can support youth learners.
DANCING PHYSICS: ENGAGING BLACK GIRLS IN EMBODIED LEARNING | FOLASHADE SOLOMON
Friday June 21, Share Fair, 4:50-5:20, 11th floor auditorium

This presentation explores dance is a site for learning. We share how our project built opportunities for learning and identity development in underrepresented students in STEM. Our presentation will share current design principles for creating more inclusive STEM learning environments.

Additional Contributors: Tracey Wright

Folashade Cromwell Solomon (Principal Investigator, Ed.D., Harvard 2011) has nineteen years of research and education experience, and ten years as a Senior Scientist, then Post-Doctoral Research Fellow at the Cheche Konnen Center at TERC. Her central teaching and research focuses on learning, identity, and exploring the connections between the Arts and STEM. Dr. Solomon is also an Assistant Professor of Education at Framingham State University.

Larry Pratt (Co-Principal Investigator, Ph.D., MIT 1982) is a research scientist at the Woods Hole Oceanographic Institution (WHOI), author or co-author of over 80 journal papers and two books on the physics of fluids, educator in the WHOI/MIT graduate program, and co-teacher of numerous workshops exploring the intersection of art and science.

HERE IN THE GARDEN: USING DANCE TO FACILITATE INFORMAL SCIENCE LEARNING | JAME MCCRAY AND DANCERS
Friday June 21, Share Fair, 4:50-5:20, 11th floor auditorium

The proposed performance is an excerpt from a dance developed for The University of Delaware's 2019 Philadelphia Flower Show exhibit. Come watch an urban garden spring to life while learning about some of the impacts of climate change, and how gardens can heal both the body and the land.

Additional Contributors: Kimberly Schoreder, Jules Bruck

Jamē McCray, PhD is an interdisciplinary ecologist with a passion for dance and theater. She creates educational experiences connecting scientific facts with performing arts to foster learning. Jamē is currently the Environmental Social Scientist at Delaware Sea Grant. She holds a PhD in Wildlife Ecology and Conservation from the University of Florida.

SHARE FAIR | CESTEMER GALLERY [11TH FLOOR GALLERY]

TEACHING AS A PLAYWORKER | MARIA BATTOR
Friday June 21, Share Fair, 3:15-5:30, 11th floor gallery

Teaching as a Playworker by Maria Battor Teaching, as it is currently provisioned by relevant laws in the United States, is developmentally inappropriate in ways that hinder the effectiveness of both learning and teaching. Here I explore the dichotomy of doing good to children as a teacher.

Maria Battor has worked with children for over a decade. Currently her background in anthropology informs her work as a primary teacher. She is also a playworker at Kid Owned and Operated Play, an adventure playground in northern Illinois.
RISE UP: RUTGERS INSPIRE MENTORING SESSIONS PROMOTE EARLY UNDERGRADUATE PARTICIPATION IN BIOMEDICAL RESEARCH | SOFYA BORINSKAYA
Friday June 21, Share Fair, 3:15-5:30, 11th floor gallery

To broaden participation in biomedical science and research at undergraduate level, INSPIRE fellows established mentoring sessions at minority-serving institutions. I will talk about the sessions, outcomes, reflections of the fellows and student feedback. Looking for ideas from CESTEMER audience.

Additional Contributors: Jennifer Fragale, Pragati Sharma, Victoria Dibona, Harita Menon, Suzanne M. Quartuccio

Sofya Borinskaya is a scientist, researcher and educator with training in electrical engineering (B.S.), biomedical science and computational biology (Ph.D.) and NIH IRACDA fellowship that includes teaching at minority-serving institutions. Sofya is an advocate of math education for life sciences and computational approaches in biological research. Sofya is applying improvisation and performance to enhance science education.

UX SCIENCE: BUILDING LEARNING ENSEMBLES ACROSS CLASS AND RACE | SOFYA BORINSKAYA, DAN FRIEDMAN, RAQUELL HOLMES, EMMA SHOCKLEY
Friday June 21, Share Fair, 3:15-5:30, 11th floor gallery

All Stars Project, Inc. uses the developmental power of performance to build learning ensembles of students from different socio-economic backgrounds. Science faculty and students will share the impact that All Stars UX science classes have on their relationship to science and each other.

Sofya Borinskaya is a scientist, researcher and educator with training in electrical engineering (B.S.), biomedical science and computational biology (Ph.D.) and NIH IRACDA fellowship that includes teaching at minority-serving institutions. Sofya is an advocate of math education for life sciences and computational approaches in biological research. Sofya is applying improvisation and performance to enhance science education. sofya.borinskaya.com

Dan Friedman is a life-long political, performance activist and grassroots educator. He is the associate dean of UX, the All Stars Project’s free school of continuing development, the artistic director of Castillo Theatre, and on faculty of the East Side Institute. He is a theatre historian, a playwright, and is writing a Palgrave book on the global performance activist movement. www.danfriedmannyc.org

Raquell Holmes, Ph.D, the founder of improvscience, is a pioneer in the use of improvisation and performance to advance scientific communities. Formally trained as a cell biologist, she uses her training in human development from the East Side Institute to help scientists build collaborative learning and research environments.

Emma Shockley has a degree in physics, in addition to a rigorous background in dance and other movement modalities. She is currently working towards becoming a Certified Movement Analyst, with the goal of eventually developing a methodology for integrating movement into tradition classroom environments.
QUEERING INFORMAL STEM LEARNING: OVERVIEW OF A PARTICIPATORY APPROACH TO INVESTIGATING THE QUEER VISITOR EXPERIENCE AT INFORMAL STEM EDUCATION INSTITUTIONS | TODD HARWELL
Friday June 21, Share Fair, 3:15-5:30, 11th floor gallery

How might queerness impact one’s visit to a science museum? This poster provides an overview of a participatory investigation of the relationship between informal STEM education institutions and the LGBTQ2SIA+ community.

Todd Harwell (he/him) is a PhD student at Oregon State University. His research is aimed at exploring the relationships between informal science education institutions and the LGBTQ+ community. Todd enjoys bicycle commuting, getting muddy on the pottery wheel, and spoiling his feline son.

COMMUNICATING SCIENCE: AN ETHNOGRAPHIC STUDY | CAROLYN (CARRIE) KROEHLER AND PATTY RAUN
Friday June 21, Share Fair, 3:15-5:30, 11th floor gallery

What happens when an anthropologist takes an improvisation-based communicating science course? He gets IRB approval to do a study, writes fieldnotes after every class, interviews other students, does a lot of thinking about communication, trust, collaboration, and improv, and makes a poster!

Additional Contributors: Todd Nicewonger (lead author, not attending)

Todd Nicewonger is a post-doctoral researcher in Learning Systems Innovation and Effectiveness at Virginia Tech, where he is project director for the university’s Destination Areas program and works to facilitate transdisciplinary research.

Patricia Raun is a professional actor and voice coach, a theatre professor, and director of the Center for Communicating Science at Virginia Tech. She developed and teaches the university’s graduate communicating science course and an undergraduate course, Introduction to Applied Collaborative Techniques.

Carrie Kroehler is a biologist, writer, editor, graduate school adjunct faculty member, and associate director of the Center for Communicating Science at Virginia Tech. She teaches Virginia Tech’s graduate-level communicating science course.

STORIES IN SCIENCE GALLERY | FANUEL MUNIDI
Friday June 21, Share Fair, 3:15-5:30, 11th floor gallery

Science is driven by people who face frustrations, mistakes, failures, success, discovery, doubt, confusion, and so much more. But what are their stories? In this exhibit, we invite you to come explore some of the stories from around the world.

Additional Contributors: Jessica W. Tsai

Fanuel Muindi believes in a future where universal access and exposure to science is possible for all. His core belief is that a strong foundation in science is one of the core components for economic growth, social advancement, and ultimately, global peace. During the day, he oversees the PhD program in the Department of Molecular and Cellular Biology at Harvard University. At night, he is a co-founder of the all volunteer Stem Advocacy Institute (SAI).
THE SURVIVOR EXPERIENCE: MEMORY, IDENTITY, & SELF-WORTH | EMMA MURRAY
Friday June 21, Share Fair, 3:15-5:30, 11th floor gallery

Words have power. The significance of written word and thought was assessed in a study of identity in college-aged survivors of sexual assault. Learn about how trauma can impact one's sense of self.

Additional Contributors: Mentor: Elizabeth Johnston, PhD (Sarah Lawrence College)

Emma Murray is a graduate of Sarah Lawrence College and is now a Masters student at Teachers College studying Clinical Psychology with a concentration in Sexuality, Women, & Gender. She works full time as a research assistant studying suicidal ideation in older adults at Weill Cornell Medical College.

DIY SOLAR CELLS FOR NON-SCIENTISTS | ANA SOFIA REMIS
Friday June 21, Share Fair, 3:15-5:30, 11th floor gallery

Vibrant Cells is a resource for making DIY Solar Cells. Weaving the language of energy, botany, chemistry, and circuit design through multimedia modules, Vibrant Cells prototypes the range of aesthetics, costs, and efficiency differently designed solar cells can achieve.

Additional Contributors: Dr. Bhawani Venkataraman

Ana Sofia Remis (Science Communicator, The New School, Interdisciplinary Science) is a multimedia artist and designer with a background in environmental and interdisciplinary science. Born and raised in Miami, FL, she attended the New School where she studied technology & ecology. She has completed research at the Smithsonian Environmental Research Center.

RHIZOMATIC PLAY WHEEL: LINKING YOUR PLAY ZONES & OFFERS | NICOLE SUMNER
Friday June 21, Share Fair, 3:15-5:30, 11th floor gallery

Rhizomatic Play Wheel: Linking Your Play Zones & Play Offers Germinate! Spin the triple wheel to win back your seeds of childhood play Root! Reach lateral strings from zones of play to areas of your home, work or community Grow! Cards with play offers to make- to the person standing nearest to you!

Nicole Sumner is a recovered high stakes tested student, lover of rhizomes and founder of Artways Playways and Purdy Women’s Prison Theatre Program. She teaches at CSUEB and ACOE’s Integrated Learning Specialist Program. Pronouns: she, her, hers. Past conference fave: SF Worm Summit.

SCIENCE AND ART, TRANSFORMING STUDENTS AND CHANGING THE WORLD THROUGH STUDY ABROAD | SABRINA TIMPERMAN, LISA SCHENKEL AND SANDRA BERTHOLF
Friday June 21, Share Fair, 3:15-5:30, 11th floor gallery

What better way to educate then with stories? The Mercy College Veterinary Technology Program faculty will describe a course which bridges the divide between science and art using digital stories to express what students learned after studying abroad.

As faculty members of the Mercy College Veterinary Technology Program, we have over 25 years of combined teaching experience in academic and clinical settings.
KEYNOTE TALK: ECO-THEATER: INTERSECTIONAL COLLABORATION AND NEW STORYTELLING IN THE AGE OF CLIMATE CHANGE | JEREMY PICKARD AND LANXING FU  
Friday June 21, 6:00-7:00, Auditorium on Broadway (1871 Broadway)

Theater is uniquely positioned to offer society a vital space for cultivating hope, exchanging knowledge, and creating new stories that challenge extractive systems and model a regenerative society. Lanxing Fu and Jeremy Pickard will introduce Eco-Theater as a holistic, cross-disciplinary artform that imagines and enacts a just, sustainable future.

Lanxing Fu is a Chinese-American theater artist. She is a Co-Director of Superhero Clubhouse, for which she is the playwright and co-creator of Mammelephant (The New Ohio / HERE Arts Center) the program director of The Living Stage NYC with University Settlement, and a co-creator of PLUTO (no longer a play) and JUPITER (a play about power), which premiered at La MaMa in 2016. She has led and collaborated on interdisciplinary theater projects about contemporary consumerism, globalization, and the environment in Sri Lanka, Morocco, Turkey, and the United States. As a performer: The Space Between The Letters (dir: Eva von Schweinitz; UTR at The Public), some higher glimmer in a landscape of flat (dir: Sarah Hughes, Collapsible Hole), 36 Peaks (dir: Sarah Cameron Sunde, Baryshnikov Arts Center), and Holidays In/Coyote (dir: Jess Chayes, The Tank). Her essays “Building Possibility in the Age of Climate Change” and “The Birth of a Climate Commons” are published on HowlRound. Lanxing is an alumnus of Virginia Tech and Orchard Project Core Company, and currently works as a Producing Associate with SITI Company.

Jeremy Pickard is the founder and co-director of Superhero Clubhouse, a NYC-based community of artists, scientists, and environmental professionals invested in a long-term experiment to understand how theater can help shift consciousness in the face of global climate change. Jeremy wears many hats including director, producer, playwright, and performer. He is the lead artist of The Planet Plays, a series of nine interconnected stories about people and climate change, and co-creator of other works of eco-theater including Mammelephant, Flying Ace and the Storm of the Century! and Salty Folk: An Oyster Musical. Since 2010 Jeremy has been the Program and Production Director for the annual Big Green Theater eco-playwriting program with The Bushwick Starr. His essays “On Eco-Theater” and “Temporary Communities in the Era of Climate Change” are published by TCG and No Passport, edited by Caridad Svich.
**11TH FLOOR | AUDITORIUM**

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<th>Time</th>
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<td>8:30 - 9:00am</td>
<td>Morning Coffee</td>
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<tr>
<td>9:00 - 10:00am</td>
<td>Plenary talk. <em>Feliú-Mójer: Finding Myself, Building Communities and Paying It Forward.</em></td>
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<td>10:00 - 10:15am</td>
<td><strong>BREAK</strong></td>
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<tr>
<td>10:15 - 11:00am</td>
<td><em>Carrijo, El Hage: “Bate-papo com Café”: a conversation café for immigrants in Brazilian context</em></td>
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<td>11:00 - 11:45am</td>
<td><em>Collision, Williams: Science Communication Through the Art of Storytelling</em></td>
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<td>11:45 - 12:00pm</td>
<td>Group Share</td>
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<td>12:00 - 1:00pm</td>
<td><strong>LUNCH</strong></td>
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<td>1:00 - 1:30pm</td>
<td><em>Gentleman: What’s in a name?</em></td>
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<td>1:30 - 2:15pm</td>
<td><em>Elguera, Thomases: Yes, And: Improvisation, Initiative and the Climate Crisis</em></td>
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<td>2:15 - 3:00pm</td>
<td><em>Gelman: Stage Chemistry: Scale &amp; Ratio</em></td>
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<td>3:00 - 3:15pm</td>
<td><strong>BREAK</strong></td>
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<td>3:15 - 4:00pm</td>
<td><em>Hyater-Adams, Quichocho: Exploring the Relationship Between Performance Art and Physics Education Interactive Session</em></td>
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<td>4:00 - 6:00pm</td>
<td><strong>FINALE</strong></td>
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**8TH FLOOR | RM 822***

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<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>10:15 - 11:00am</td>
<td><em>Gross: Discussing the Whitman Poem “When I heard the Learn’d Astronomer”</em></td>
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<tr>
<td>11:00 - 11:45am</td>
<td><em>Gillespie: The Poetry in Science: Creative Writing Workshop for Science Communication</em></td>
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<td>1:30 - 2:15pm</td>
<td><em>Holzapfel: Generating ideas for cartoons with subject-specific humor used for science education</em></td>
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<td>2:15 - 3:00pm</td>
<td><em>Davis: RockEDU Online, Design Thinking, &amp; the Importance of Iteration in STEAM.</em></td>
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<td><em>Garbarino: #SciOut18: Experimenting with Unconference Formats to Promote Egalitarian Frameworks in the Science Outreach Profession</em></td>
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<td><em>Pratt, D'Amour, Spence, Gates-Stuart, Haddock: The Immersive Mesopelagic Performance Lab</em></td>
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<td>3:15 - 4:00pm</td>
<td><em>Woodley: Exploring joy as a product of collaborative work</em></td>
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*Group Shares are held in the 11th Floor Auditorium. Registration Opening and Breaks are held in the 11th Floor Gallery. Share Fair is held in both the 11th Floor Auditorium and Gallery.*
PLENARY TALK: FINDING MYSELF, BUILDING COMMUNITIES AND PAYING IT FORWARD | MÓNICA FELIÚ-MÓJER
Saturday June 22, 9:00-10:00, 11th floor auditorium

As an underrepresented scientist, I haven’t always been able to bring my whole self into STEM spaces. During graduate school, I felt a disconnect between my home community, my cultural identity and my identity as a scientist. In this talk, I will share how I was able to locate myself, embrace my identities and connect with my purpose, and how I combine those experiences with science communication and storytelling to build communities and empower other underrepresented scientists.

Mónica Feliú-Mójer grew up in rural Puerto Rico, catching lizards and with a cow in her backyard, which sparked her interest in all-things biology. A PhD scientist-turned-communicator, she taps into her professional and cultural backgrounds, and uses storytelling, science communication, and community-building to make science more equitable and inclusive. Through science communication training, Mónica helps underrepresented scientists’ step into the power of their identities and stories to create social impact. She leads communications and outreach for CienciaPR, a global community of more than 10,000 scientists, students, educators, and allies democratizing science, supporting the career development of underrepresented young scientists, and transforming science education and training in Puerto Rico. She also works with the non-profit iBiology, leading science communication trainings and producing “Background to Breakthrough”, a collection of short films highlighting underrepresented scientists and how their backgrounds and perspectives have spurred insights and innovations. Mónica earned her B.S. in Human Biology at the University of Puerto Rico in Bayamón, and her Ph.D. in Neurobiology at Harvard University. You can find her on Twitter: @moefeliu.

“BATE-PAPO COM CAFÉ”: A CONVERSATION CAFÉ FOR IMMIGRANTS IN BRAZILIAN CONTEXT | VIVIANE CARRIJO AND NATILIA EL HAGE
Saturday June 22, 10:15-11:45, 11th floor auditorium

The “Bate-papo com café” (conversation café) is a brazilian project for immigrants, in which different narratives create new ways of performing in the world. Join the “Bate-papo” in Brazilian Portuguese and perform in the world through different narratives.

Additional Contributor: Fernanda Liberali

Viviane Carrijo is a PhD in Applied Linguistics and Language Studies, who has always loved performing in the world for others. Currently, she constructs narratives in dialogue with different immigrants in the Brazilian context. She believes that, through diversity, different ways of performing in the world are created, and society is transformed.

Natalia El Hage is a 25 years old Brazilian. Besides being a law student, she spends her time reading and consuming any kind of art available, mostly musicals. Passionate about English, the young student truly believes that learning a new language is immensely regarding and capable of connect nations.

DISCUSSING THE WHITMAN POEM “WHEN I HEARD THE LEARN’D ASTRONOMER” | NICHOLAS GROSS
Saturday June 22, 10:15-11:45, 8th floor room 822

A physicist leads a discussion about the Whitman poem “When I heard the Learn’d Astronomer.” The poem describes Whitman’s experience of a professional astronomical lecture. The discussion will focus on what we can learn about science communication from Whitman’s experience.

Nicholas Gross (Lecturer, Boston University) earned his Ph.D. in physics from Boston University and has been working on a variety of education projects for over a decade.
SCIENCE COMMUNICATION THROUGH THE ART OF STORYTELLING | CHELSEA COLLISON AND TAYLOR WILLIAMS
Saturday June 22, 11:00-11:45, 11th floor auditorium

The objective of this session is to explore how STEM professionals can use storytelling to share their experiences and broaden the public understanding of science. The workshop will include brainstorming exercises and techniques to create dynamic stories.

Chelsea Collison is a full-time Museum Educator at the Florida Museum of Natural History. She has a bachelor's in Anthropology from the University of Florida and a master's degree in Museum Studies from Johns Hopkins University. She has also contributed to outreach and education for a handful of nonprofit organizations such as Rock the Earth, Alachua Conservation Trust, the Hippodrome Theatre, and Voices for Biodiversity.

Taylor Williams is the creative director of Guts & Glory GNV, a live storytelling organization in Gainesville, Florida. She is an adjunct lecturer for a live storytelling class through the College of Journalism at the University of Florida. Taylor's consulting and coaching practice focuses on skills from storytelling, improvisational comedy, and public speaking to help corporate groups and NCAA athletic teams improve their communication skills and work more efficiently together.

THE POETRY IN SCIENCE: CREATIVE WRITING WORKSHOP FOR SCIENCE COMMUNICATION | KATHLEEN GILLESPIE
Saturday June 22, 11:00-11:45, 8th floor room 822

The Poetry in Science workshop is for STEM and STEAM enthusiasts. Participants work in selected styles, and engage in writing prompts of scientific theories and research. Materials provided: abstracts, protocols, and terminology for creative inspiration.

Kathleen “Kate” Gillespie (Assistant Professor in Biotechnology, SUNY Cobleskill) is a scientist, a published poet, short story writer, and playwright. As Kate Gillespie, her work has appeared in Gargoyle Magazine, Silver Blade Magazine, Urbanite Magazine and others. She’s a Writer in Residence at Renaissance House Writer’s Retreat in Martha’s Vineyard and has been featured in arts stories in the Asbury Park Press, Martha’s Vineyard Gazette, Baltimore’s WJZ-TV and WYPR Maryland Public Radio.

WHAT’S IN A NAME? | DARCY GENTLEMAN
Saturday June 22, 1:00-1:30, 11th floor auditorium

For future conferences we want a “tagline” that could serve as a theme or vision for the conference’s outcomes; i.e. Cultivating Ensembles: Tagline for 2021. To help the organizers capture words of aspiration and appeal for possible wordings, this session will generate ideas and conversation.
**YES, AND: IMPROVISATION, INITIATIVE AND THE CLIMATE CRISIS | TERESA ELGUERA AND JOSH THOMASES**

Saturday June 22, 1:30-2:15, 11th floor auditorium

In confronting the climate crisis, we are challenged to understand the facts, feel paralyzed, and discouraged. This interactive workshop will use performance to explore how STEM education can communicate information, brainstorm paths of action and release initiative to protect our planet.

**Teresa Elguera** is an activist, community organizer, teacher, and professional developer. She is currently focused on using improvisational practices to open up new perspectives and possibilities, particularly in using her knowledge and skills to combat the climate crisis.

**Josh Thomases** was a founding teacher and leader at El Puente Academy for Peace and Justice. He currently runs a small charter school network called Great Oaks Charter Schools committed to equity, development and people. He is particularly interested in focusing his efforts in education to combat the climate crisis.

**GENERATING IDEAS FOR CARTOONS WITH SUBJECT SPECIFIC HUMOR USED FOR SCIENCE EDUCATION | MARISA HOLZAPFEL**

Saturday June 22, 1:30-2:15, 8th floor room 822

A creative method for teaching science is using cartoons. To develop new cartoons we go through a creative process which combines 2 creative methods, semantic intuition and the 6-3-5 method. In the workshop we would like to perform this process with the members and hopefully get lots of new ideas.

**Marisa Holzapfel** (Essen, Germany) is a post-doc at the department of chemistry education at the University of Duisburg-Essen. The main topic of her work is using humor and creative methods for science and health education.

**STAGE CHEMISTRY: SCALE & RATIO | ANNA GELMAN**

Saturday June 22, 2:15-3:00, 11th floor auditorium

In the Scale & Ratio Stage Chemistry lesson, students will endeavor to create their own set design based on a Goodman production, with a given scale factor. Then, groups will swap ground plans, and will read and tape out each other’s designs based on the size of their “rehearsal space.”

**Additional Contributors: Willa J. Taylor, Liam Collier**

**Anna Gelman** is the Manager of School-Based Programs at Goodman Theatre. As a Teaching Artist and Director, she has worked with Northern Illinois University, The Runaways Lab Theatre, Rhino Fest, Director’s Lab Chicago, The Greenhouse Theater Center, Prop Thtr, and Organic Theater Company, where she the Media Director. She holds certificates from The Moscow Art Theatre School and The Prague Film School, and is a graduate of Oberlin College.
ROCKEDU ONLINE, DESIGN THINKING, & THE IMPORTANCE OF ITERATION IN STEAM | DISAN DAVIS
Saturday June 22, 2:15-2:30, 8th floor room 822

Online is a new website of curated educational science resources created by/for educators, scientists, and outreach professionals. I’m excited to share how design thinking has shaped our efforts and complements our approach to the scientific process. We welcome contributions for the site.

Additional Contributors: Jeanne Garbarino, Odaelys Walwyn, Doug Heigl, Lizzie Krisch, Maya Kopytman, Kim Howell, Melinda Sekela, DataArt

Disan Davis is a biochemist and teacher, sharing her curiosity and love of science with others through various outreach efforts including the newly launched RockEDU Online website that curates resources for educators, scientists, and outreach professionals.

#SCIOUT18: EXPERIMENTING WITH UNCONFERENCE FORMATS TO PROMOTE EGALITARIAN FRAMEWORKS IN THE SCIENCE OUTREACH PROFESSION | JEANNE GARBARINO
Saturday June 22, 2:30-2:45, 8th floor room 822

How do we ensure that professional platforms are accessible to all who wish to participate? To help support the national science outreach community, the SciOut18 unconference imposed little or no financial stress on participants, while also ensuring that everyone had a seat at the table.

Jeanne Garbarino began her tenure at The Rockefeller University first as a postdoctoral trainee in the Laboratory of Biochemical Genetics and Metabolism, where she studied how individual molecules of cholesterol moved around inside a cell, and how disruptions in this process can impact heart disease risk in humans. After nearly five years, she transitioned to leading efforts centered on public engagement with science as the university’s Director of RockEDU Science Outreach.
THE IMMERSE MESOPELAGIC PERFORMANCE LAB | LARRY PRATT, LISA D’AMOUR, HEATHER SPENCE, ELEANOR GATES-STUART, AND STEVEN HADDOCK
Saturday June 22, 2:45-3:00, 8th floor room 822

Come experience the Immersive Mesopelagic Performance Lab, an interactive performance that invites you deep into the sea. Embody and explore bioluminescence, echolocation, predator/prey and more. We're a group of artists and scientists; experiment with us and help shape this work-in-progress.


Larry Pratt is Senior Scientist at the Woods Hole Oceanographic Institution. His research on the physics of the ocean carries over to his artistic practices in photography, dance, theater and artscience education. http://www.whoi.edu/larrypratt/

Lisa D’Amour: Playwright/Interdisciplinary Artist. Her play Airline Highway was produced on Broadway in 2015; her play DETROIT was a Pulitzer Prize finalist. Commissioned by A.R.T and the Harvard Center for the Environment to write a music theater piece about ocean health. Pearldamour.com


Eleanor Gates-Stuart: PhD. Professor of Creative Industries at Charles Sturt University; Honorary Professorial Fellow, Faculty of Law, Humanities and Arts at University of Wollongong. Her science-arts research is extensive, innovative, questioning and engaging audience in art, science and technology.

Steven Haddock: PhD. Senior Scientist, Monterey Bay Aquarium Research Institute; Adjunct Prof., UC Santa Cruz. Haddock studies deep-sea organisms and bioluminescence using submersibles and genetic techniques. www.mbari.org/haddock-lit He promotes STEM education through practicalcomputing.org, biolum.eemb.ucsb.edu, and jellywatch.org
EXPLORING THE RELATIONSHIP BETWEEN PERFORMANCE ART AND PHYSICS EDUCATION INTERACTIVE SESSION | SIMONE HYATER-ADAMS AND XANDRIA QUICHONO
Saturday June 22, 3:15-4:00, 11th floor auditorium

How can performance art transform a physics educational space? We are interested in the exploration of this question, and invite you to join us in this session to think, play, and create our own answers!

Simone A. Hyater-Adams, PhD student at CU Boulder, is a researcher with a passion for creating more opportunities for Black students. She uses her personal experiences to guide her interdisciplinary research and develops/facilitates diversity workshops with goals to cultivate a more inclusive and equitable STEM field.

Xandria Quichocho is an Afro-Chamorro student researcher at Texas State University. In the last two semesters of her physics degree, Xandria is studying the integrated physics identities of women of color and LGBQ+ physicists at Minority Serving Institutions. She currently participates in K-12 outreach as the President of the Society of Women in Physics and teaches cello.

EXPLORING JOY AS A PRODUCT OF COLLABORATIVE WORK | LOU WOODLEY
Saturday June 22, 3:15- 4:00, 8th floor room 822

In this session, we’ll explore how joy can be a product of collaborative work. We’ll discuss what it’s like to be part of a team where the work feels joyful. We’ll also explore whether there are collaborative conditions that lead to the production of joy – such as overcoming challenges together, sharing vulnerability, humor or discovery, or doing generative work for social good.

Lou Woodley is Director of the Center for Scientific Collaboration and Community Engagement – a research and training institute that supports those building scientific communities. Lou’s activities include designing, developing and delivering the AAAS Community Engagement Fellows Program, providing on demand trainings for community builders, and research into the role of scientific community managers. She is also involved in several STEM diversity initiatives through the NSF INCLUDES program.
PRESENTING INSTITUTIONS

AccuWeather
American Museum of Natural History
Artways Playways; Integrated Learning Specialist Program; CSUEB
Boston University
Bronx Community College
Champaign IL Unit 4 School District
First Person Arts
Florida Museum of Natural History
Goodman Theatre
Harvard Medical School
Illinois State University
improvscience
Individual Artist / University of Illinois
Iowa State University
Jennifer Joy Productions
Laban Institute of Movement Studies
LabX
Marist College
Mercy College
Michigan State University
Movemathics
Nancy Watt Communications
New York City College of Technology
New York Institute of Technology
Oregon State University
PUC-SP
Rockefeller University
Ronin Institute
Rutgers University
SAI
Sarah Lawrence College
Teachers College, Columbia University
Weill Cornell Medical College
St. Francis College
STEM on Stage
Stony Brook University
Story-form Science & Fusion Science Theater
SUNY Cobleskill
TERC
Texas State University
The Center for Scientific Collaboration and Community Engagement (CSCCE)
The New School, Interdisciplinary Science Department
The Ohio State University
The Rockefeller University
East Side Institute
UC Berkeley
University of Colorado Boulder
University of Colorado Boulder/Texas State University
University of Delaware Sea Grant
University of Duisburg-Essen
University of Haifa
University of Toronto / Ronin Institute
VCA Theatre, Faculty of Fine Arts and Music, University of Melbourne
Verve Enterprises
Virginia Tech
Woods Hole Oceanographic Institution
N.Y.C.s is a playful, experiential learning program offered by NYIT’s Office of International & Experiential Education to introduce students to New York City as a hub of knowledge, culture, and career opportunities.

Over the course of one semester and through play (scavenger hunt, anyone?), students from across the world form teams to learn about the services provided by different college departments, get to know New York City’s diverse communities, and complete an externship with a New York City-based startup company that hosts conferences focusing on the future of work.

We scaled down the program for Cestemer, and invite you to play during your breaks, lunch, and after the sessions have finished for the day.

Ready? Grab one (or more) of your fellow conference attendees and become NYIT Navigators. If you like, you can post about your experience on social media, using the hashtags #CESTEMER19 #cultivatingensembles #nyitdidthat #nyitnavigators

**NAVIGATE YOUR COLLEGE**

Venture across campus and find one or more of the NYIT offices below. Speak with the first staff member or student worker you come across. How does he/she help students at NYIT?

- Career Services
- Counseling & Wellness
- International & Experiential Education
- Residence Life
- Campus Life
- Library

**NAVIGATE YOUR COMMUNITY**

Enter Central Park at Columbus Circle and:

- Find The Mall. You may have read this famous phrase before: “To be or not to be: that is the question” – who wrote this and why would we ask you this, standing in the middle of Central Park?

- Continue walking towards Bethesda Fountain. The sculpture at the fountain’s center is also known as the “Angel of the Waters”. What does the angel carry in her hand and what does it symbolize?

- Finally, find Bow Bridge. Facing west, you will have a clear view of the former home of one of the most famous musicians of the 20th century. What is the building’s name and who used to live there?

**NAVIGATE YOUR CAREER**

Network, Network, Network - but with a little fun! While at the conference, spice up those small talk questions:

- If you could have lunch with a famous person, who would it be, why, and what would you talk about?

- What did you want to be when you were a little kid?

- If you had the power to change one thing in the world to make it a better place, what would be and why would you choose it over other things?
General inquiries
Please reach out to the following emails with related inquiries:

- General conference: info@cestemer.org
- Your presentation: program@cestemer.org
- NYIT Residence Hall Housing: Susan Heim - sheim@nyit.edu
- Social media: pr@cestemer.org

Scholarship information
If you have received a Scholarship and you have questions, please consult the Scholarship FAQ (p.45)

Coat Check
There will be a free coat check area on the first and last days of the conference so attendees may check luggage, if they are unable to check in or out of their rooms before the start or after the end of the conference.

- Day 1 (Thursday) & Day 3 (Saturday) only
- Not responsible for any item left at coat check
- No overnight storage

You must have your claim ticket to retrieve times. If you are unable to present your claim ticket, you must wait until all items have been collected for the day before you can retrieve your item.

ID for Registration / security check in
Please have a legal photo ID available for security check-in as well as registration check-in.
You will not be able to enter the building without the proper ID
No refunds will be given to anyone who cannot attend due to lack of proper ID.

Refunds
We are sorry you are unable to attend the conference. Your registration has contributed to the participation of students, artists and researchers in STEAM who were unable to attend without support. Below is our refund policy:

Refund Policy
- A month or more in advance, 75%
- 2-4 weeks in advance, 50%
- Less than 2 weeks, no refund*

*If funds remain after the conference, a refund up to 25% may be given.
FREQUENTLY ASKED QUESTIONS

What should I wear to the conference?
Conference attire is business casual. The format of most CESTEMER sessions are interactive, so expect to be up and moving throughout the day. Wear clothes that you will be comfortable in whether standing, sitting, or moving around.

What food will be provided?
- At the Welcome Reception on Thursday evening, substantive appetizers will be provided
- A complimentary continental breakfast (bagels, yogurt, coffee) will be available on Friday and Saturday
- Lunch will be provided on Friday and Saturday. Please fill out the lunch choices form indicating which option you would like no later than 11:19pm EST on Sunday June 16

What can I expect from staying in an NYIT dorm?
NYIT's Riverside Terrace Residence Hall is located at 350 West 88th St., between West End Ave. and Riverside Dr., in the heart of Manhattan's Upper West Side. Each room at Riverside Hall has a private bath and air conditioning. Furniture includes extra-long twin beds (some single rooms have full size beds), desks, chairs, dressers, and television. Each floor also has a shared kitchen.

How can I best get to NYIT once I'm in New York City?
For detailed information about NYIT and how to travel there from around the area, please see this document.

Is there an online program for the conference?
Yes, the online program schedule can be viewed at http://www.cestemer.org/program-schedule-2019/

Wait list
If you are placed on the wait list for the conference you will be notified if an opening becomes available. Once you receive the notification, bring your notification email to the registration desk and be prepared to pay for registration on site with a credit card. Unfortunately, we cannot accept cash or check payments on site.

What are the NYIT session spaces like?
- Gallery: open space on the 11th floor that people can walk through
- Auditorium: not an actual auditorium. This open space on the 11th floor has moveable seating and can be configured according to your session needs. This space will have a laptop that powerpoints can be loaded onto, with HDMI and VGA connections at the podium
- Room 822: classroom on the 8th floor with moveable tables and chairs that holds 50. Includes two projectors with HDMI and VGA connections and built-in computers that flash drives can be plugged into

Note: If you bring a Mac computer to use for your presentation, you must also bring your own connector cables. Connector cables will not be provided by NYIT.

Will there be a space that I can leave flyers or business cards for people to pick up?
Presenters are welcome to bring materials to distribute within their sessions. A small table will be available for presenters to distribute a handful of flyers (20-30 copies of a single item: one pager, half sheet, cards). Others interested in distributing may reach out to sponsors@cestemer.org.
Can I still apply for a scholarship?  
Scholarship applications for CESTEMER 2019 will close June 6th. If you have concerns about your ability to afford the conference, please reach out to info@cestemer.org.

How do I know what my scholarship covers?  
In the initial scholarship award email that you received, the aspects of the conference that are covered for you were listed in bold. If it said “Registration,” only your registration is covered. If it said “Registration and shared housing,” your registration and the cost of staying in a dorm is covered, and so on.

How do I register for the conference if my scholarship covers the cost of registration?  
To register, you will fill out the same form as everyone else. When you receive confirmation of your scholarship, you should have also received a code that you can enter into the registration form.

Do I pay for my housing up front if the cost of it is covered?  
If you are staying in a provided dorm, no, you do not need to pay for housing up front. If awarded a scholarship for dorm housing, you will fill out the housing form sent by NYIT Housing Coordinators. Any mention of payment should be ignored on your end. The charge will come to CESTEMER.

How do I pay for travel if my scholarship reimburses my transportation costs (flight, train)?  
You are required to purchase your flight yourself and will be reimbursed after the conference. Please save all relevant receipts from your purchases. They will be submitted along with your form at the end of the conference. If possible, please have hard copies of all receipts available to submit at the conference.

How will travel reimbursements be processed?
At the conference, there will be a form for you to fill out to process your reimbursement. Once your reimbursement is processed by NYIT, you will be sent a check in the mail. The minimum expected return time is one month from the conference. Please have your flight and other travel receipts ready to submit at the conference along with the reimbursement form.

My travel will not cost the total amount I was awarded. Can I use the leftover funds to pay for other conferences expenses such as travel or childcare?  
No. Awards are given to cover specific expenses. Every participant (attendees, presenters, organizers, sponsors) incur expenses to participate. The scholarships are given based on need and to maximize diverse participation. If you have received a scholarship and concerns about your ability to afford the conference remain, please reach out to info@cestemer.org.

NOTE: If you are unable to attend, please let us know as soon as possible so that we might offer a scholarship to another attendee.