ComSciCon'16

Communicating Science Workshop 2016

June 9th - 11th, Cambridge, MA

www.comscicon.com

@comscicon ***#comscicon16***

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Welcome Letter

Dear ComSciCon participant,

Thank you for joining us at the ComSciCon 2016 workshop!

Since we founded ComSciCon in 2012, our goal has been to empower young scientists to become leaders in science communication, extending the impact of research in their field to broad and diverse audiences as ambassadors for science and engineering. We believe that graduate students have the greatest potential of any group to expand the capacity of science to interface with the broader society.

Through outreach, writing, organizing scientific communities, and other entrepreneurial endeavors, we want to help you drive the culture and perception of science for future generations.

In the following three days, you will meet some of the most accomplished and ambitious science communicators in America, exchange experiences and ideas through active discussion, collaborate together to revise your own works, and push the boundaries of your capabilities as a science communicator.

We are grateful, first and foremost, to the fifty remarkable graduate students from across the country that have traveled to Cambridge to pursue these goals. The opportunity for this cohort to meet, interact, and collaborate with each other is the fundamental function of ComSciCon. We thank the invited experts who have shared their time with us, guiding us towards these ends. And we applaud the sponsoring organizations and supporters of ComSciCon, whose enduring commitments have made this program possible.

We know the test of this workshop's success will be how its impacts carry on with you throughout your career, be it in research, education, journalism, policy, or elsewhere. We encourage you to, from the moment you read this letter, develop and maintain relationships with the participants of ComSciCon 2016, and reflect thoughtfully on how the principles discussed and exhibited here can be incorporated into your own practice.

Thank you, again, and welcome to the ComSciCon community.

Yours truly,
The ComSciCon 2016 National Organizing Committee

Organizing Committees

Local Organizing Committee

Ben Cook, *Chair* (Harvard University)
Rodrigo Garcia, *Chair* (MIT)
Erin Dahlstrom (Harvard University)
Susanna Kohler (UC Boulder '14)
John Lewis (Harvard University)
Amber Medina (Harvard University)
Shannon M. Morey (MIT '13)
Nathan E. Sanders (Harvard University '14)

Program Organizing Committee

Erica Kimmerling, *Chair* (Tufts University)
Carrie McDonough, *Chair* (Univ. of Rhode Island)
Reggie Bain (Duke University)
Alex Berardino (New York University)
Molly Gasperini (University of Washington)
Rose Hendricks (UC San Diego)
Shayle Matsuda (Univ. of Hawaii at Manoa)
Kate McClure (Northeastern University)
Christina Sauer (University of Michigan)
Anna Schneider (University of Colorado, Boulder)

Program Schedule

Also available online and as Google Calendar

Thursday - June 9th, 2016

8:30AM	Breakfast
9:00AM	Welcome
9:20AM	Panel 1: Communicating to Non-scientific Audiences through Media Outlets • **Wade Roush,** Multimedia journalist and Outreach Officer, MIT Program in Science, Technology, and Society • **Nidhi Subbaraman,** Reporter at Buzzfeed • **Lisa Grossman,** Editor at New Scientist • **Chris Berdik,** Freelance Science Journalist
11:00AM	Panel 2: Communicating through Policy and Advocacy • **Bina Venkataraman,** Director of Global Policy Initiatives at the Broad Institute and Carnegie Fellow at New America • **Lisa Suatoni,** Senior Scientist, Natural Resources Defense Council • **Suzanne Shaw**, Director of Communications, Union of Concerned Scientists • **Erin Heath,** Associate Director of Government Relations, American Association for the Advancement of Science (AAAS)
12:30PM	Catered Lunch
1:30PM	Panel 3: Communicating through Creative Outlets and Storytelling • **Perrin Ireland,** Senior Science Communications Specialist, Natural Resources Defense Council • **Kishore Hari,** Director of the Bay Area Science Festival • **John J. Stein**, Senior Lecturer in Neuroscience at Brown • **Thomas L. Ricci,** Audiovisual artist
3:00PM	Panel 3 Hands-on Session: Storytelling
4:15PM	Keynote Panel: Communication in Action: A Case Study in Flint, Michigan • **Ansje Miller,** Eastern States Director at the Center for Environmental Health • **Noah Hall,** Associate Professor of Law at Wayne State University • **Siddhartha Roy**, Ph.D. student in the lab of Marc Edwards at Virginia Tech • **Joyce Zhu,** Ph.D. student in the lab of Marc Edwards at Virginia Tech
6:00PM	Careers Mingle and Dinner at the Microsoft NERD Center, 1 Memorial Drive
7:30PM	Video Screening by HHMI Tangled Bank Studios at the Microsoft NERD Center, One Memorial Drive
8:30PM	Return to Dorms

Friday - June 10th, 2016

8:30AM	Breakfast
9:00AM	Panel 4: Communicating through Education and Outreach • **Elizabeth Choe,** Program Coordinator and Executive Producer, MIT+K12 Videos Program • **David Malan,** Professor, Harvard and EdX • **Ralph Bouquet,** Outreach Coordinator, PBS NOVA • **Morgan Rehnberg,** Graduate Student, University of Colorado at Boulder
10:45AM	Panel 5: Communicating with Diverse Audiences • **Danielle Lee,** postdoctoral researcher, Cornell, author of blog "The Urban Scientist" • **Lonsdale Koester**, Executive Director of Science Club for Girls • **Kristin Finch,** Program Manager for the Center for STEM Diversity, Tufts University • **Vivian Underhill,** Ph.D. Student, UC Santa Cruz
12:15PM	Catered Lunch
1:15PM	Interactive Small Group Sessions: • Mock Interviews • Pitch Slam
3:30PM	Expert Review Session
5:30PM	Group Photo - First Floor Balcony
6:30PM	Banquet Dinner at Elephant Walk Restaurant (Porter Square)

Saturday, June 11th, 2015

8:30AM	Breakfast
9:00AM	How to Run a ComSciCon-local Event (with discussion/breakout time)
10:30AM	Multimedia Poster Session
12:30PM	Lunch
1:00PM	Keynote Address by Bassam Shakhashiri
2:00PM	Intro to Writing for a K-12 +Audience and Creating a STEM Lesson Plan
2:15PM	Teacher Review & Lesson Plan Creation
3:15PM	Lesson Plan Creation
4:40PM	Group Discussion: How was the standard tied to the science?
5:00PM	Closing Remarks

Poster Session Schedule

Saturday, June 11th, 2016

Session 1: 10:30am-11:30am

Screen 1:	**Aggie Mika** *Science Buffs: a STEM research blog run by grad students at the University of Colorado Boulder*
Screen 2:	**Alison Caldwell** *Using YouTube For SciComm: It's Not Rocket Surgery, It's Brain Science!*
Screen 3:	**Christin Monroe** *Princeton ACS STEM Outreach and Professional Development*
Screen 4:	**(Victoria) Ashley Villar** *Taking a bite out of your science*
Screen 5:	**Carla Dario** *Making Waves: "A Glass of the Sea" Traveling Exhibition on Marine Biodiversity*
Screen 6:	**Anya Burkhart** *Synapse: the MIT Biotech Report*
Screen 7:	**Elizabeth Bajema** *Analytical Chemistry Meets Citizen Science*
Screen 8:	**Jacqueline Gamboa** *Electrons, SCAPING, and Magic!*
Screen 9:	**Jared Mondschein** *The Penn State Science Policy Society*
Screen 10:	**Maya Bialik & Stephanie Sassee** *The People's Science: A three-pronged approach to improving the relationship between research and society*
Screen 11:	**Mallory Nobles** *The Code for Success in Engaging Young Female Students in Tech*
Screen 12:	**Shelley Chestler** *ENGAGE: hands-on science communication training for graduate students*

Session 2: 11:30am-12:30am

Screen 1:	**Amanda Freise** *Creating SciComm Opportunities at UCLA and Beyond*
Screen 2:	**Rachael Alexandroff** *Johns Hopkins University Public Outreach: Teaching Physics and Astronomy in Baltimore City Classrooms*
Screen 3:	**Jessica Sagers, Kelsey Tyssowski & Chiara Ricci-Tam** *Science in the News: a model for graduate student training and effective public engagement*
Screen 4:	**Erin Satterthwaite** *Experience, Engagement, and Excitement: Promoting ocean literacy and observational skills through "Marine Scientist for a Day" K-12 outreach program*
Screen 5:	**Rianna Murray** *Volatile organic compounds and particulate matter in childcare facilities in the District of Columbia: Results from a pilot study*
Screen 6:	**Kate Fehlhaber** *Knowing Neurons: A creative neuroscience education website by young neuroscientists*
Screen 7:	**Eleanor Lutz** *Bite-Size Biology: Sharing science with animated GIFs*
Screen 8:	**William Chen** *Using games to overcome the challenges of climate science communication*
Screen 9:	**Maryam Zaringhalam** *Using podcasting to engage in policy and advocacy from the Ivory Tower*
Screen 10:	**Anna Fagre** *Microphile: A collaborative blog on infectious disease*
Screen 11:	**Liz Albertorio-Saez** *Science at your fingertips: Developing an educational platform for science centers to engage and train scientists to communicate current scientific research*
Screen 12:	**Carrie McDonough** *Oceanbites.org: Oceanography Research for Broad Audiences*

Invited Panelists and Speakers

Panel 1: Communicating to Non-scientific Audiences through Media Outlets

@wroush

Wade Roush is a veteran science and technology journalist working at MIT, where he is an outreach officer, in the Program in Science, Technology, and Society, and a former acting director, of the Knight Science Journalism Program. From 2007 to 2014, Roush was chief correspondent, San Francisco editor, columnist, and editor-at- large at Xconomy, an online news network covering high-tech innovation. From 2001 to 2006 he was senior editor and San Francisco bureau chief at MIT Technology Review. In earlier posts he was the Boston bureau reporter for Science, managing editor of supercomputing publications at NASA Ames Research Center, and Web editor at e-book startup NuvoMedia. Roush earned a B.A. in history and science from Harvard College in 1989 and a PhD in the history and social study of science and technology from MIT in 1994.

@NidhiSubs

Nidhi Subbaraman is a science reporter at BuzzFeed News. Previously, she covered science and technology as a reporter at the Boston Globe's business desk and tech blog, BetaBoston. She has also been a daily writer at NBCNews.com and Fast Company. Her work has appeared online and in print at New Scientist, Scientific American, Nature News, MIT Technology Review, Spectrum News and elsewhere.

@astrolisa

Lisa Grossman decided she wanted to be an astronomer when she was 8 years old, but got sidetracked after college by an inability to specialize. She is currently the physical sciences news editor at New Scientist. She holds a BA in astronomy from Cornell and a graduate certificate in science writing from UC Santa Cruz, and her work has appeared in New Scientist, Wired.com, Science News, and other publications. Last year she received the IOP-STFC Physics Journalism Prize for a story about the epic quest for natural quasicrystals. She lives in Cambridge, MA with her partner and a dark matter cat.

@chrisberdik

Chris Berdik is a freelance science journalist, and a former staff editor at *The Atlantic* and *Mother Jones*. His stories have appeared in the *New York Times*, *Boston Globe*, *Washington Post*, *Salon*,*Politico*, the *Daily Beast*, and *New Scientist*, among others. He also writes about education technology for the *Hechinger Report* and *Slate*. Chris has a BA in history and literature from Harvard (1996) and an MA in journalism from Stanford (2001). He has won grants from the Society of Environmental Journalists, the National Association of Science Writers, and the Pulitzer Center on Crisis Reporting, as well as a fellowship from the Institute for Journalism and Natural Resources. In 2012, he wrote about the placebo effect (including its non-medical manifestations) in his book, *Mind Over Mind: The Surprising Power of Expectations.*

Panel 2: Communicating through Policy and Advocacy

Lisa Suatoni is a senior scientist in the oceans program at the Natural Resources Defense Council, and she specializes on the intersection of science and policy, as it applies to ocean conservation. Lisa has worked on a variety of topics including ocean acidification, sustainable fisheries management, and the impacts of oil spills. Lisa has a Ph.D. in Ecology and Evolutionary Biology from Yale University and a master's degree in environmental policy from the Yale School of Forestry and Environmental Studies. Lisa is also the Timothy B. Atkeson Environmental Lecturer in Law at Yale Law School, where she co-directs the Yale Environmental Protection Clinic.

@binajv

Bina Venkataraman leads efforts to advance the role of science and technology in public life. She is currently a Carnegie Fellow at New America and Director of Global Policy Initiatives at the Broad Institute. She teaches at MIT.

Bina previously served as Senior Advisor for Climate Change Innovation in the Obama White House, where she drove new policies and coalitions among the private sector, scientific agencies, and cities to combat climate change. In the first Obama term, as senior advisor to the President's Council of Advisors on Science & Technology (PCAST), she pushed policy reforms in epidemic preparedness, wireless technology, and science education.

Bina is a former journalist for the *New York Times* and the *Boston Globe*, where she covered science, health, and the environment. She is an alumna of Brown University and Harvard's Kennedy School. In 2015, she was named a Global Young Leader by the French-American Foundation.

@UCSUSA

Suzanne Shaw has more than 25 years' experience in nonprofit and private sector marketing and communications. Since 2000, she has lead communications efforts for the Union of Concerned Scientists, a national nonprofit that puts rigorous, independent science to work to solve our planet's most pressing problems—from combating global warming and developing sustainable ways to feed, power, and transport ourselves, to fighting misinformation and reducing the threat of nuclear war.

At UCS, Shaw helps scientists and other technical experts communicate their research to decision makers, the media, and public audiences, and oversees a team that develops and executes communications and engagement strategies for UCS issue campaigns.

She is a co-author of the book *Cooler Smarter: Practical Steps for Low-Carbon Living*. Erin Heath is the Associate Director of Government Relations at AAAS. She handles a range of policy issues of interest to the scientific community, with a particular focus on biomedical and public health research as well as public and policy engagement. She co-chairs the Coalition for National Science Funding and the Engaging Scientists and Engineers in Policy Coalition, heads the selection committee for the AAAS Science and Technology Congressional Fellowships, and sits on the steering committee of the Golden Goose Awards.

She holds a Master of Science with Merit in Public Policy and Administration from the London School of Economics and Political Science. Prior to graduate school, she spent years as a journalist in Washington, most notably as a science policy reporter and columnist for the National Journal.

Erin Heath is the Associate Director of Government Relations at AAAS. She handles a range of policy issues of interest to the scientific community, with a particular focus on biomedical and public health research as well as public and policy engagement. She co-chairs the Coalition for National Science Funding and the Engaging Scientists and Engineers in Policy Coalition, heads the selection committee for the AAAS Science and Technology Congressional Fellowships, and sits on the steering committee of the Golden Goose Awards. She holds a Master of Science with Merit in Public Policy and Administration from the London School of Economics and Political Science. Prior to graduate school, she spent years as a journalist in Washington, most notably as a science policy reporter and columnist for the National Journal.

@PublicHeath

Panel 3: Communicating through Creative Outlets and Storytelling

Perrin Ireland is a visual storyteller at the Natural Resources Defense Council. She uses doodles to report on the science behind environmental issues. She is also a trained graphic facilitator, with experience scribing high level visioning sessions and conferences around the country.

@experrinment

John Stein is a Senior Lecturer in the Neuroscience Department at Brown University. He has a B.A. Biology from Saint Anselm College and a Ph.D. in Physiology from Brown University. Since 2013, he has co-taught a class with Rhode Island School of Design professor Steven Subotnick on Communicating Science through animation and visual media. In addition to his research, Dr. Stein participates in science outreach projects throughout the state of Rhode Island. He is currently collaborating with members of the University and local professionals on a NCRR/NIH Science Partnership Award titled Project ARISE: Advancing Rhode Island Science Education. The goal of ARISE is to develop innovative science instruction in local high school science classrooms.

Kishore Hari is a science educator with more than a decade's experience producing live science events. He's the director of the Bay Area Science Festival based out of UC-San Francisco, the science correspondent for Adam Savage's Tested.com, and co-host of the weekly Mother Jones science podcast Inquiring Minds. Follow his musings about science, hockey, and other nerdery @sciencequiche.

@sciencequiche

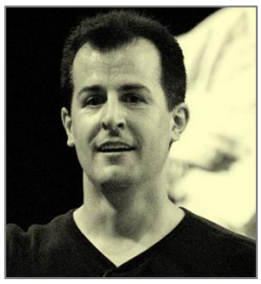
Born in Pennsylvania, educated in Providence Rhode Island (RISD), **Thomas L Ricci** is a multidisciplinary artist making non-narrative audiovisual work that explores the viewer's perception of sound, image and time. Working mostly in motion graphics and sound, he draws inspiration from experimental filmmakers, painters, musicians and sound artists from the 1950s and 1960s, he is drawn to the dichotomy of simple form and complex structure. He is interested in making contemplative and visceral work that investigates relationships between sound and image as well as light and space. Taking cues from the scientific method, his work can take an experimental approach to analysis, observation and recording of data, which is ultimately reformed through different iterations of digital or analog media. www.sonochromia.com

@sonochromia

Panel 4: Communicating through Education and Outreach

@rlbouquet

Ralph Bouquet is the NOVA Labs Outreach Coordinator and an advocate for the use of inquiry and games/interactives in STEM classrooms. NOVA Labs is a new digital platform from the producers of PBS's NOVA that engages teens and lifelong learners in games, interactives, and videos that foster authentic scientific exploration. At NOVA, Ralph is responsible for working with educators and partner organizations to grow and support the NOVA Labs' educational community through the creation of curricular resources, professional development opportunities, and collaboration with educators.
Before NOVA, Ralph taught high school biology and chemistry in Philadelphia with Teach For America and later developed web and mobile apps with the Canary Calendar team as a co-founder. Ralph received his B.A. from Harvard University, and studied secondary science methods and urban education while completing his M.Ed. at UPenn. In his role at NOVA, Ralph combines his experience as a science educator and tech startup co-founder to help design the educational framework for the NOVA Labs games and interactives and to find creative ways to reach new audiences.
See more at: http://schedule.sxswedu.com/speakers/speaker_766445#sthash.D6sxHHif.dpuf



@davidjmalan

David J. Malan is Gordon McKay Professor of the Practice of Computer Science in the School of Engineering and Applied Sciences and a Member of the Faculty of Education in the Graduate School of Education at Harvard University. He received his A.B., S.M., and Ph.D. in Computer Science from the same in 1999, 2004, and 2007, respectively. He teaches Computer Science 50, otherwise known as CS50, which is Harvard University's largest course, Yale University's largest course, and edX's largest MOOC. He also teaches at Harvard Extension School and Harvard Summer School. All of his courses are available as OpenCourseWare.
Previously, Malan served as Chief Information Officer for Mindset Media. While in graduate school, he worked part-time for the Middlesex District Attorney's Office as a forensic investigator, after which he founded his own startup. On the side, he volunteered as an emergency medical technician (EMT-B) for MIT-EMS. He continues to volunteer as an EMT-B for the American Red Cross.
Malan's research in graduate school focused primarily on cybersecurity and digital forensics. His dissertation was entitled *Rapid Detection of Botnets through Collaborative Networks of Peers*. His more recent publications focus on pedagogy and instructional technologies.

@echoetweets

Elizabeth Choe directs and created the current incarnation of the MIT+K12 Videos Program, an educational outreach initiative in MIT's Office of Digital Learning. She creates and produces video series like Science Out Loud, #askMIT, MIT Physics Demos, and Q's View designed to spark curiosity and a love of science/technology/engineering/math in middle and high school students. Elizabeth also designs and leads workshops and courses for middle schoolers, undergrads, grad students, and staff at MIT on developing basic scripting, hosting, and video production skills in the context of understanding digital media literacy, K-12 education, science advocacy, and engaging a lay audience. She has also produced web series for National Geographic. She earned a B.S. from the Massachusetts Institute of Technology in Biological Engineering.

@MorganRehnberg

Morgan Rehnberg is a graduate student at the University of Colorado at Boulder, where he studies the rings of Saturn as part of NASA's Cassini mission. When he's not plumbing the depths of the rings, Morgan is an outspoken advocate for public engagement with science. At nationally-recognized Fiske Planetarium, he produces *Above & Beyond: Cosmic Conversations*, a show series dedicated to exploring the intersections of science and society. Morgan is best known as a regular contributor to Universe Today's *Weekly Space Hangout*, an astronomy and space exploration roundtable viewed around the world. To get in touch, visit MorganRehnberg.com or follow @MorganRehnberg on Twitter.

Panel 5: Communicating with Diverse Audiences

Kristin Finch, Ph.D., is the Program Manager for the Center for STEM Diversity focused on access and retention of underrepresented students in the STEM fields. Her efforts support three unique programs including STEM Ambassadors, which is a professional develop program with an outreach mission that focuses specifically on communicating science to broad audiences. Kristin's background includes mentoring underrepresented students in the STEM fields as an adjunct faculty member at LeMoyne-Owen College (a historically black college), co-founder of Sistahs in Chemistry and President of the Department of Chemistry Graduate Student Advisory Committee at University of Illinois Urbana-Champaign, and Vice-chair of Minorities, Women, and International Affairs on the Postdoctoral Association Council at St. Jude Children's Research Hospital. In addition to earning her Ph.D. in Chemistry from University Illinois Urbana-Champaign, she also holds a certificate in Business Administration.

Vivian Underhill graduated from the University of Colorado with a degree in environmental science and is currently a PhD student in Feminist Studies at the University of California at Santa Cruz. Previously, she worked at the National Snow and Ice Data Center, digitizing and mapping historical records of sea ice concentrations, and subsequently as the lead field scientist at the University of Colorado's Mountain Research Station. She has written on queer and environmental issues for a number of publications, including Bitch Magazine, The Colorado Daily, and New West, and is the author of Autostraddle.com's Queered Science column. Underhill is interested in the intersections of queer ecology, feminist and decolonial science studies, and polar oceanography. Her current work is centered around Indigenous and scientific knowledge related to sea ice loss along Alaska's Northern Slope, examining how they are situated within processes of settler colonialism and extractive capitalism.

@lmgkoester

Lonsdale Koester was appointed the second Executive Director of Science Club for Girls in December 2014, bringing to SCFG a deep and varied background in organizational development, strategic planning, financial management and fundraising. She most recently served for four years as Chief Financial Officer of the Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs. Prior to that, Ms. Koester held several roles in Governor Deval Patrick's administration and both gubernatorial campaigns, as well as the United Way of America and Reading Is Fundamental (RIF), the nation's oldest and largest children's literacy nonprofit. Ms. Koester holds a Masters in Public Policy from Harvard's Kennedy School of Government and B.A. from the University of the South (Sewanee). She is board member of the Boston Philharmonic Orchestra and of Boston's landmark Trinity Church on Copley Square.

@DNLee

Danielle N. Lee is an outreach scientist who studies animal behavior and behavioral ecology. She is currently a post-doctoral research associate at Cornell University studying African giant pouched rats. In addition to her lab and field research in Tanzania, Lee is passionate about science outreach and engaging under-served audiences. Lee writes about science and diversity outreach in S.T.E.M. fields at her blog The Urban Scientist on the Scientific American Blog Network. Her social media efforts have garnered accolades from the Huffington Post, Under the Microscope, Black Weblog Awards, and Niche Blogging in Science. Lee was selected as a 2015 TED Fellow and was named as one of EBONY Magazine's Power 100 and a White House Champion of Change in STEM Diversity and Access. In 2009 Lee was honored as a Diversity Scholar by the American Institute of Biological Sciences and in 2013 she was given the S.T.E.M. Leader Award by the Kansas City Black Family Technology Awareness Association. Her current science outreach efforts emphasize engagement with broader audiences via science journalism. In 2013, Lee helped found the National Science & Technology News Service, a media literacy initiative to bring more science news to African-American audiences and promote science news source diversity in mainstream media.

Keynote Panel: Communication in Action: A Case Study in Flint, Michigan

@4EnviroHealth

Ansje Miller is the Eastern States Director for the Center for Environmental Health. In that role, she represents CEH with elected officials and others in New York and Washington, DC as well as directs the activities in the Eastern States office. For the past 22 years, Ms. Miller has led both state and national advocacy coalitions and has led successful legislative and regulatory campaigns to promote environmental health leading to the reduction of exposures from toxic chemicals and efforts to mitigate climate change and promote renewable energy. Her organizing efforts, research reports, and popular articles have also led to the creation of numerous policies on global warming including California's AB32. Ansje currently serves on the board of the Reproductive Health Technologies Project (RHTP) and on the steering committees of Safer Chemicals Healthy Families and the Just Green Partnership. Prior to her work at CEH Ansje founded and directed the Environmental Justice and Climate Change Initiative, a coalition that brought together the nation's leading environmental justice, faith-based, and policy organizations to advocate socially just policies on climate change.

Noah D. Hall is a law professor at Wayne State University Law School in Detroit, Michigan specializing in environmental and water law. He has co-authored two of the leading casebooks in these fields, "Environmental Law and Policy: Nature, Law, and Society" (Aspen Publishers) and "Modern Water Law: Private Property, Public Rights, and Environmental Protection" (Foundation Press). Professor Hall graduated from the University of Michigan Law School and the University of Michigan School of Natural Resources and Environment, concentrating in environmental policy. He previously served as the founding Executive Director of the Great Lakes Environmental Law Center and has extensive litigation experience and numerous published decisions in state and federal courts. He writes the popular Great Lakes Law blog (www.greatlakeslaw.org) and frequently informs policy and media discussions. Most recently, he was appointed Special Assistant Attorney General for the State of Michigan for the Flint water crisis.

@H2Oetal

Siddhartha Roy is a PhD student and Graduate Researcher in the Department of Civil and Environmental Engineering at Virginia Tech. He works with Dr. Marc Edwards researching failure mechanisms in potable water infrastructure, including erosion corrosion in copper-based premise plumbing and, more recently, the citywide lead contamination and other corrosion-caused water quality issues in Flint, MI now termed the "Flint Water Crisis." He is also the Communications Director for the Edwards' led Flint Water Study team. Sid holds an MS in Environmental Engineering from Virginia Tech and a Bachelor's degree in Chemical Engineering from Nirma University.

@Joyce_ZhuNi

Ni Zhu (Joyce) is a doctoral student in Civil and Environment Engineering at Virginia Tech. Prior to joining Dr. Marc Edwards' group, she has had an undergraduate degree in Environmental Science and Engineering from National University of Singapore and a Masters of Engineering degree in Civil and Environmental Engineering from Massachusetts Institute of Technology. Her doctoral research area focuses on the effects of water chemistry on the attenuation of emerging microbial contaminants and antibiotic resistant gene/bacteria in recycled water distribution systems, using the next-generation metagenomics sequencing technology. Since Professor Edwards started independent research on Flint water contamination last summer, she has been a core member of the Flint Water Study Team, helping with sampling processing and analysis in the laboratory. She has also traveled to Flint to sample identified hot spot buildings in Flint.

Keynote Address

Professor Shakhashiri is a noted chemistry and science educator. He is probably best known for his leadership in national science policy, promoting excellence in science education at all levels, and for his development and use of demonstrations in the teaching of chemistry. His scholarly publications, including the multi-volume series, Chemical Demonstrations: A Handbook for Teachers of Chemistry, are models of learning and instruction. He is an advocate for policies to advance knowledge and to use science and technology to serve society. He promotes the exploration and establishment of links between science, the arts and the humanities, and the elevation of discourse on significant societal issues related to science, religion, politics, the economy, and ethics.

Pop Talks Schedule

Surprise! You just ended up in the elevator with your scientific hero. You have ***sixty seconds*** to explain to them who you are, what you do, and why your work matters.

ComSciCon will give you the opportunity to practice your elevator pitch in front of your peers and get instant feedback from them. We will feature a few pop talks by attendees in between sessions and before lunch each day. You will have one minute to introduce yourself and explain your research to the rest of the attendees. Please remember that not all attendees are expert in your field of interest, so avoid using jargon whenever possible. The audience has "Jargon" and "Awesome" cards in their folders. If they feel like you used jargon, they'll let you know. They can also let you know that you are awesome.

Day One - Welcome		
Carla Alessandra Anna Dario	University of Miami	Environmental Science
Juliet Lamb	Clemson University	Ecology
Mallory Nobles	Carnegie Mellon University	Computer Science
Maryam Zaringhalam	The Rockefeller University	Biology
Rachael Alexandroff	Johns Hopkins University	Astronomy
Panel One		
Amanda Freise	UCLA	Biology
Camila Robles-Oteiz	Yale University	Biology
Elizabeth Bajema	Northwestern University	Chemistry
Eva Mutunga	Univ. of Tennessee, Knoxville	Engineering
Kelsey Allen	MIT	Social Science
Panel Two		
Agnieszka (Aggie) Mika	University of Colorado Boulder	Biology
Anna Fagre	Colorado State University	Medicine
Ashley Villar	Harvard	Astronomy
Cassandra Donatelli	Tufts University	Biology
Shelley Chestler	University of Washington	Environmental Science
Lunch Day One		
Christin Monroe	Princeton University	Chemistry
Kelly Ksiazek	Northwestern University	Ecology
Maria Genco	Brandeis University	Biology
Monica Cook	Georgia State University	Physics
Shannon Moran	Univ. of Michigan, Ann Arbor	Engineering
Panel Three		
Adam Carte	Harvard	Biology
Akinola Oyedele	University of Tennessee, Knoxville	Physics

Katherine Fehlhaber	UCLA	Biology
Kellie Vinal	Emory University	Chemistry
Peter Pellitier	University of Michigan	Ecology

Day Two - Breakfast		
Alison Caldwell	UCSD	Biology
Anirudh Rajaseshan	University of Colorado, Boulder	Engineering
Anna Ho	Caltech	Astronomy
Brindar Sandhu	Emory University	Biology
Madison Silverstein	Auburn University	Social Science
Panel Four		
Emily Gehrels	Harvard	Physics
Jared Mondschein	Pennsylvania State University	Chemistry
Liz Albertorio	Univ. of Rochester School of Medicine	Biology
Savannah Jacklin	Fisk-Vanderbilt University	Astronomy
Waylin Yu	Univ. of North Carolina at Chapel Hill	Biology
Panel Five		
Alex Generous	Mayo Graduate School	Biology
Anya Burkart	MIT	Engineering
Genevieve Lind	University of Montana	Biology
Jacqueline Gamboa Varela	University of Missouri	Chemistry
Rianna Murray	University of Maryland, College Park	Public Health
Lunch Day Two		
Andrea Villanes	North Carolina State University	Computer Science
Eleanor Lutz	University of Washington	Biology
Erin Satterthwaite	University of California, Davis	Ecology
Jessica Sagers	Harvard	Medicine
Mary Gearing	Harvard	Biology
Interactive Sessions		
Anneli Hoggard	Rice University	Chemistry
Christina Lebonville	Univ. of North Carolina at Chapel Hill	Biology
Kayleigh O'Keeffe	Univ. of North Carolina at Chapel Hill	Biology
Tariana V. Little	Tufts University	Public Health
William Chen	University of Washington	Math / Statistics

Storytelling Breakout Sessions

Group 1: Storytelling with Video (MAIN ROOM)	Group 2: Science Scribing (BUNKER HILL ROOM)	Group 3: Storytelling (CONSTITUTION ROOM)
Experts:	**Experts:**	**Experts:**
John J. Stein	Perrin Ireland	Kishore Hari
Thomas L. Ricci		
Attendees:	**Attendees:**	**Attendees:**
Oyedele Akinola	Anya Burkart	Liz Albertorio
Rachael Alexandroff	Adam Carte	Elizabeth Bajema
Kelsey Allen	Cassandra Donatelli	Shelley Chestler
Alison Caldwell	Anna Fagre	Kate Fehlhaber
William Chen	Maria Genco	Amanda Freise
Monica Cook	Anneli Hoggard	Emily Gehrels
Carla Dario	Savannah Jacklin	Anna Ho
Jacqueline Gamboa	Juliet Lamb	Kelly Ksiazek-Mikenas
Mary Gearing	Christina Lebonville	Genevieve Lind
Alex Generous	Agnieszka Mika	Jared Mondschein
Tariana V. Little	Shannon Moran	Christin Monroe
Eleanor Lutz	Erin Satterthwaite	Peter Pellitier
Rianna Murray	Madison Silverstein	Anirudh Rajaseshan
Eva Mutunga	Ashley Villar	Camila Robles-Oteiza
Mallory Nobles	Kellie Vinal	Siddhartha Roy
Kayleigh O'Keeffe	Maryam Zaringhalem	Jessica Sagers
Brindar Sandhu		Waylin Yu
Andrea Villanes		Joyce Ni Zhu

Careers Mingle & Dinner

Note: This will take place at the Microsoft NERD Center
1 Memorial Drive
Cambridge, MA

TABLE 1: Academia	TABLE 2: Writing & Publishing	TABLE 3: Writing & Publishing	` TABLE 4: Government
Experts:	**Experts:**	**Experts:**	**Experts:**
Vivian Underhill	Wade Roush	Susanna Kohler	Erin Heath
Bassam Shakhashiri	Seth Mnookin		
		Attendees:	**Attendees:**
Attendees:	**Attendees:**	Camila Robles-Oteiza	Eva Matunga
Ashley Villar	Eleanor Lutz	Agnieszka Mika	Juliet Lamb
Savannah Jacklin	Jessica Sagers	Brindar Sandhu	Maria Genco
Peter Pellitier	Anna Ho	William Chen	Adam Carte
Rachael Alexandroff	Waylin Yu		
Shannon Moran	Christina Lebonville		
Kelsey Allen			

TABLE 5: Government	TABLE 6: Industry & Consulting	TABLE 7: Industry & Consulting	TABLE 8: Outreach
Experts:	**Experts:**	**Experts:**	**Experts:**
Ansje Miller	Jessica Yeager	Christine Loh	Ralph Bouquet
David Wright	Nathan Sanders		Laura Helft
		Attendees:	
Attendees:	**Attendees:**	Tariana V. Little	**Attendees:**
Madison Silverstein	Joyce Ni Zhu	Carla Dario	Jared Mondschein
Siddhartha Roy	Anirudh Rajaseshan	Genevieve Lind	Jacqueline Gamboa
Emily Gehrels	Cassandra Donatelli	Anneli Hoggard	Erin Satterthwaite
Maryam Zaringhalam	Elizabeth Bajema		Liz Albertorio
Anya Burkart	Akinola Oyedele		Rianna Murray
Monica Cook			Andrea Villanes

TABLE 9: Outreach	TABLE 10: Outreach
Experts:	**Experts:**
Suzanne Shaw	Perrin Ireland
Kevin McLean	Kishore Hari
Attendees:	**Attendees:**
Alison Caldwell	Kayleigh O'Keefe
Christin Monroe	Alex Generous
Kate Fehlhaber	Kelly Ksiazek-Mikenas
Kellie Vinal	Shelley Chestler
Anna Fagre	Amanda Friese
Mary Gearing	Mallory Nobles

Mock Interviews

In this session, you'll get expert advice and feedback on interacting with the media. We'll start by talking briefly about how to prepare for a media interview, including shaping clear, crisp answers, fielding difficult questions, and reinforcing your key takeaways. But learning about talking to the media is one thing; actually doing it is another. The bulk of the session will be dedicated to actually practicing your interview skills in front of a camera! During the session, you will work with other attendees in a small group led by a media expert. You'll complete a short (5-10 minute) video interview about your work and receive detailed feedback from the group.

Mock Interviews Moderators

Susanna Kohler is the editor of AAS Nova. She is an administrator and former author for astrobites.com and a founding organizer of ComSciCon. Susanna has pursued outreach in astronomy and physics for over a decade, both as a public speaker and as a freelance writer whose pieces have appeared in a variety of online publications. She is delighted to continue to share exciting astrophysics research with others now through AAS Nova.

@NidhiSubs

Nidhi Subbaraman (see Panel 1 above for bio)

@sciencequiche

Kishore Hari (see Panel 3 above for bio)

Mock Interviews Participants

Group 1 (BUNKER HILL ROOM)	Group 2 (CONSTITUTION ROOM)	Group 3 (LEXINGTON ROOM)
Interviewer:	**Interviewer:**	**Interviewer:**
Kishore Hari	Nidhi Subbaraman	Susanna Kohler
Attendees:	**Attendees:**	**Attendees:**
Ashley Villar	Christin Monroe	Kelly Ksiazek-Mikenas
Christina Lebonville	Anna Ho	Shelley Chestler
Jared Mondschein	Anirudh Rajaseshan	Peter Pellitier
Jacqueline Gamboa	Camila Robles-Oteiza	Carla Dario
Erin Satterthwaite	Elizabeth Bajema	Genevieve Lind
Savannah Jacklin	Alex Generous	Rachael Alexandroff
Maria Genco	Siddhartha Roy	Anneli Hoggard

Pitch Slam

The pitch slam will consist of an initial 30-minute Q&A between the moderator and the pitch slam professionals. The moderator will ask the panel to provide insight with respect to:

1. How to approach/find editors
2. The core components of a good pitch
3. Do's/Don'ts of pitching article ideas
4. Tips and tricks for selling your story

Breakout Pitch Sessions (5 groups of 6 attendees with an expert facilitator)

Each attendee will be given the opportunity to pitch ideas (about 3 minutes) and receive detailed feedback from the group.

Pitch Slam Moderators

@ellenclegg

Ellen Clegg is executive director of communications for The Boston Globe. Ellen joined the business side of the paper in 2012 after a 30-year career as a senior editor in the newsroom and a three-year stint in science communications at the Broad Institute of MIT and Harvard. Before joining the Broad, Ellen spent three decades in The Globe's newsroom, where she held numerous editing positions. Most recently she was deputy managing editor for news operations, overseeing Page One and running the newsroom at night. Before that, she held a similar role as deputy managing editor for The Boston Sunday Globe. She also served as The Globe's standards editor on style and ethics.

She is the author of ChemoBrain: How Cancer Therapies Can Affect Your Mind (Prometheus Books, 2009), which was recognized as the consumer health book of the year by the American Journal of Nursing, and co-author with neuroscientist Kenneth Kosik, M.D., of The Alzheimer's Solution: How Today's Care Is Failing Millions (Prometheus Books, 2010).

@amandayarnell

Amanda Yarnell, is a chemist by training and a journalist by passion, Amanda works for Chemical & Engineering News, a daily website and weekly newsmagazine that delivers the latest in chemistry news. She was an undergraduate at Johns Hopkins before doing her graduate work in chemistry at MIT, where she studied the mechanism of action of the cancer drug cisplatin. It's also where she discovered the world of science journalism, which inspired her to merge her fascination with the power and beauty of chemistry with her long-time love of telling stories. Soon thereafter she joined the staff of C&EN, where she has held various writing, editing, and leadership roles over the past 14 years. Today she runs C&EN's day-to-day editorial operations (and a staff of 39 writers and editors) from her home office in Somerville.

@astrolisa

Lisa Grossman (see Panel 1 above for bio)

@chrisberdik

Chris Berdik (see Panel 1 above for bio)

@wroush

Wade Roush (see Panel 1 above for bio)

Pitch Slam Participants

All take place in the main room.

Group 1

Editor
Lisa Grossman

Attendees:
Eleanor Lutz
Anya Burkart
Jessica Sagers
Kate Fehlhaber
Andrea Villanes
Monica Cook

Group 2

Editor
Chris Berdik

Attendees:
Liz Albertorio
Waylin Yu
Alison Caldwell
Cassandra Donatelli
Rianna Murray
Adam Carte

Group 3

Editor
Wade Roush

Attendees:
Kelli Vinal
Madison Silverstein
Anna Fagre
Joyce Zhu
Amanda Freise
Akinola Oyedele

Group 4

Editor
Amanda Yarnell

Attendees:
Emily Gehrels
Shannon Moran
Tariana V. Little
Brindar Sandhu
Agnieszka Mika
Mallory Nobles

Group 5

Editor
Ellen Clegg

Attendees:
Eva Mutunga
Juliet Lamb
William Chen
Maryam Zaringhalam
Kelsey Allen
Kayleigh O'Keeffe
Mary Gearing

Video Screening by HHMI Tangled Bank Studios

HHMI is the leading private supporter of scientific research and education in the United States. Its scientists have made trailblazing discoveries that advance both human health and our fundamental understanding of how life works, and have garnered 16 Nobel Prizes. Its BioInteractive division produces and provides educational media to millions of students across the globe, and its grants program aims to transform science education in universities and colleges into a creative, interdisciplinary endeavor that reflects the excitement of real research.
HHMI Tangled Bank Studios is a production company established and funded by HHMI as an extension of its longstanding science education mission. Dedicated to the creation of original science documentaries for broadcast, theatrical and digital distribution, the company's award-winning programs address important contemporary issues and capture compelling stories of discovery across all branches of scientific inquiry.

We will be joined by Laura Helft and Kevin McLean from HHMI who will be hosting the screening.

tangledbankstudios.org @Tangled_Bank_

Poster Session Abstracts

(in alphabetical order by presenter)

Aggie Mika (Session 1, Screen 1)
Science Buffs: a STEM research blog run by grad students at the University of Colorado Boulder

Science Buffs is a STEM research blog at CU-Boulder run by graduate students who love science and have a thing for science journalism (check us out at sciencebuffs.org). We aim to engage the general public in the incredible research at CU-Boulder as well as promote topical science news, issues, and policy. Regular posts include features on recent CU publications and multipart series on topics like bad science reporting, the health benefits of exercise, and the importance of science-driven issues in the current presidential election. We also profile CU graduate students with our popular "Grad Student Snapshot" series, where we highlight students' eclectic and extraordinary interests in academics and beyond. We're looking to cultivate a stronger social media presence and find new ways to further engage our local community, as well as audience's state and nationwide. As we grow, we hope to connect with a greater group of science communicators so as to share ideas on how to effectively inform and excite the public about all things STEM.

Alison Caldwell (Session 1, Screen 2)
Using YouTube For SciComm: It's Not Rocket Surgery, It's Brain Science!

Social media is a new and emerging avenue ideal for science communication across a broad variety of formats. In particular, streaming video services are extremely popular, with the success of platforms such as Vine, YouTube, Periscope, and Facebook Live drawing millions of viewers engaging with content every day. To take advantage of this popular format, we have developed Neuro Transmissions, an educational YouTube channel dedicated to breaking down neuroscience for a broad audience. Through the use of concise, clear explanations and simple but accurate animations, we aim to engage the public on a variety of subjects. Since launching in September of 2015, we have amassed over 1,000 subscribers and have added Spanish subtitles and closed captioning to enhance the accessibility of our videos. Topics we have covered thus far include Neuro 101, highlighting concepts like "What is a Neuron?" and "How Do We See?", and pop culture topics like "The Science of Jedi Mind Control". As the channel grows, we hope to expand our topics to discuss neurological disorders and higher-level cognition, as well as answering questions submitted by our viewers. Through these efforts, we hope to get members of the public interested in and excited about the brain.

Amanda Freise (Session 2, Screen 1)
Creating SciComm Opportunities at UCLA and Beyond

SciComm Hub, a collection of resources about careers in science education, outreach, writing, policy, and more, was created to help PhD students interested in jobs outside the traditional career path. In an effort to build community locally, we organized a student group, SciComm Hub @ UCLA to build on the resources offered by the website and hold events and trainings about science communication skills. Most notably, we produced an 8-week scicomm workshop series, inspired by past ComSciCon and Alan Alda Center for Communicating Science trainings in addition to our own research, which was well-received at UCLA. Our other community-building effort, the @IAmSciComm twitter account, has become a well-known forum for engagement and discussion about science communication. Finally, in an effort to provide young scientists with an opportunity to practice writing for a lay audience (a critical skill that is often not recognized by graduate training programs), several UCLA students created Signal to Noise Mag: a nonprofit online publication that utilizes a peer editing process to encourage scientists to share their science with the world and improve their writing and communication skills.

Anna Fagre (Session 2, Screen 10)
Microphile: A collaborative blog on infectious disease

Microphile is a collaborative blog focused on infectious disease news and research comprised of entries by graduate students and scientists passionate about sharing science with the general public. Writing an entry for Microphile is a great way to practice your hand at communicating science in lay terms and also to promote your own research. The blog is

broken up by categories: Spillover, From the Field, Microbytes, and Transmission. “Spillover” contains personal research summaries, providing a broken down explanation of contributor’s research projects including methods, results, and importance. “From the Field” is for the lighter side of things – jokes, anecdotal narratives, or horror stories from your work (for example, that crazy disease you got while doing field work in the Amazon while collecting data for your PhD). “Microbytes” features infectious disease discoveries and updates in the media today. Is there something newsworthy happening that you’d like to summarize for us? Submit it here. Lastly, “Transmission” is a message board to promote and facilitate networking and communication between visitors. Contact microphileblog@gmail.com to get involved today! [www.microphile.org]

Anya Burkart (Session 1, Screen 6)
Synapse: the MIT Biotech Report

Synapse: the MIT Biotech Report is an online news source developed by graduate students to inform students and young professionals about the biotechnology industry and entrepreneurship in this sector. Launched in April, the report releases a new interview with a successful founder or CEO of a biotech startup every other week. Future expansions of coverage include providing resources for young people starting biotech ventures as well as profiles of recently IPO-ed companies looking to hire. Synapse has gained great readership since its founding and seeks to connect bio-oriented students to the broader biotech industry.

(Victoria) Ashley Villar (Session 1, Screen 4)
Taking a Bite out of Your Science

Astrobites is a daily “Reader’s Digest” of astrophysics research written by graduate students in astronomy which has been operating since 2010. Our goal is to present one interesting paper per day in a way that is accessible to undergraduate students — especially those who are just beginning their studies. In addition to current research, we also write on academic life, graduate school and how to excel in astronomy research which provides readers with a unique source of guidance through the world of academia. Astrobites has inspired the creation of several sister sites in other scientific fields, include oceanography (Oceanbites), particle physics (Particlebites) and chemistry (Chembites). These efforts bridge the gap between classroom work and research in any field, and we’re happy to help anyone create their own Sciencebites!

Carla Dario (Session 1, Screen 5)
Making Waves: "A Glass of the Sea" Traveling Exhibition on Marine Biodiversity

A Glass of the Sea is an immersive and interactive traveling exhibition on the astounding discoveries of the Verde Island Passage within the Coral Triangle. Recognized as the apex of marine biodiversity the Verde Island Passage is located in the Philippines, home to approximately 540 species of coral (out of the world’s 600 coral species) and about 2000 species of fish (out of the world’s 6000 species of fish). The exhibition was inspired by a study published in the 2014 PLOS One journal entitled Using Environmental DNA to Census Marine Fishes in a Large Mesocosm where a small sample of ocean water provides a picture of biodiversity (specifically for fish) in an area. A Glass of the Sea is a project of The Mind Museum (Manila, Philippines) in collaboration with USAID and The California Academy of Sciences who have shared their research on documenting biodiversity in the Verde Island Passage.
The exhibition invites you to experience the narrative of the sea, the beauty of the science behind it, and your role in its protection and conservation. Bringing the sea into the city, the exhibition has traveled to 5 cities in the Philippines catering to over 50,000 people thus far.

Carrie McDonough (Session 2, Screen 12) – External Organization
Oceanbites.org: Oceanography Research for Broad Audiences

In 1876, the HMS Challenger completed the world’s first oceanic research expedition, bringing back news that the deep seas were teeming with life, and characterizing the ocean’s complex currents and chemistry for the first time. Oceanography has captured the public imagination ever since. While broad audiences are interested in ocean research,

studies often make their way to the public in short, oversimplified snippets, leaving many readers hungry for more information. Finding out more about a study can be challenging; journal articles are often extremely detailed and full of jargon that can be difficult even for other scientists to parse. Inspired by astrobites, oceanbites provides explanations of cutting-edge oceanography research aimed at an audience with a high school science education. The site was founded with two goals in mind: to make new research more accessible to the non-expert public and to provide graduate students with the opportunity to practice honing messages for broad audiences. Currently, about 20 grad students from 10 universities around the world contribute regularly to the site. We publish one article per weekday, as well as occasional posts on science communication and popular media related to marine sciences. We are currently working to increase the involvement of undergraduates in producing content for the site by collaborating with summer undergraduate fellows at URI to produce blog posts about their research in oceanography.

Christin Monroe (Session 1, Screen 3)
Princeton ACS STEM Outreach and Professional Development

We have designed a unique STEM outreach program that will bring together selected high school students and teachers, graduate students and professional scientists from the triad of academia, industry and government. This program will expose all students to the vast array of opportunities that exist in STEM fields, stimulate entrepreneurship, and will be composed of professional development workshops and career seminars, including Shirley Tilghman, president Emerita of Princeton University, to prepare students for these careers. The program will culminate with a one-day trip for the high school students to the Fall 2016 National ACS Meeting in Philadelphia. A meeting with Donna Nelson, ACS President is planned. The high school participants will also put together a final presentation describing a significant discovery in Chemistry taken from primary literature, with help from their graduate student mentor. Our marquee event will feature Bassam Shakhashiri, the 2012 ACS President, well known for his “Science is Fun!’ chemical demonstrations. The event will be followed by a networking dinner. Workshop topics include: 1) networking strategies, 2) interview strategies, 3) advice on resume building/ LinkedIn profiles, 4) menteeing and mentoring, 5) navigating primary literature and presentation strategies and 6) scientific entrepreneurship.

Eleanor Lutz (Session 2, Screen 7)
Bite-Size Biology: Sharing science with animated GIFs

Some of the most interesting science topics are concepts we can’t visualize easily: gravity, evolution, or even global warming. It’s a challenge to explain these complex ideas, and I think it’s important for researchers to try creative techniques in communicating science. Tabletop Whale is a blog that illustrates biology using animated infographics. I think that GIFs are great for showing complicated changes through space and time. For example, so far I’ve animated respiration cycles, embryo development, muscle contraction, and 3D virus structures. Because short, animated GIFs are fun and easy to share on the internet, I’ve been able to share my science animations with many people and amass half a million hits on my website. I’m always looking for fun collaborations, so please email me at tabletopwhale@outlook.com if you’d like to chat! I’m also happy to help if you’d like to learn how to make science animations of your own.

Elizabeth Bajema (Session 1, Screen 7)
Analytical Chemistry Meets Citizen Science

The Paper Analytical Device (PAD) project brings together an urgent public health need with hands on science outreach. The urgent public health need? Counterfeit medicines. Believe it or not, up to 30% of medicines sold in developing countries are expected to be counterfeit. To compound the problem, those same areas of the world often lack the scientific resources and personnel to analyze medicines. With this need in mind, PAD project researchers set out to develop a low cost, user-friendly analytical device to screen medicines. Once a prototype was developed, a need arose for large scale analytical validation. Thus, a major outreach project was initiated in which members of the public could analyze a “pill” sample with a Paper Analytical Device, given only simple instructions. The outreach project enabled researchers to determine the analytical accuracy and ease of use of the PADs. The non-scientist participants, who ranged in age from middle schoolers to senior citizens, contributed to a science project that meets a real world need.

Erin Satterthwaite (Session 2, Screen 4)
Experience, Engagement, and Excitement: Promoting ocean literacy and observational skills through "Marine Scientist for a Day" K-12 outreach program

Experiential education uses active engagement in the process of learning to make education exciting and memorable. Graduate students at UC Davis Bodega Marine Laboratory (Bodega Bay, CA) developed "Marine Scientist for a Day" outreach program to promote marine stewardship and develop observational skills in K-12 students. We use hands on activities, field notebooks, inquiry-based experiments, student led presentations, and field trips to teach students about the importance of observation in marine science and develop ocean literacy. We believe that connecting people to the ocean through interactive, hands-on, place-based environmental education experiences are important to foster marine stewardship. What ways have you promoted ocean literacy or environmental education and stewardship? What environmental and science skills do you think are most important to teach students? We welcome new ideas, suggestions, and discussions around experiential education and environmental/marine stewardship.

Jacqueline Gamboa (Session 1, Screen 8)
Electrons, SCAPING, and Magic!

This poster will feature various approaches taken to develop science outreach programs for the university and local communities. The Big Electron is a science radio show that started in Spring 2013 at Mizzou's student radio station KCOU. It airs weekly during the spring and fall semesters and it has expanded to podcasts available online. SCAPE (Science Communication and Public Engagement) is a student organization on campus that focuses on training graduate students to become science communicators. SCAPE collaborates with the Life Sciences Division to host Science Café, a monthly event that brings speakers to talk about science in a casual setting and it's open to the public. Magic of Chemistry is an outreach program that brings graduate students and girl scouts troops from the Mid-Missouri area to a daylong workshop where girl scouts do hands-on chemistry experiments. These are some of the ways graduate students can get engaged in science outreach and communication, showcasing the work that is being done at the university and engaging the community of all-ages.

Jared Mondschein (Session 1, Screen 9)
The Penn State Science Policy Society

The Penn State Science Policy Society is a graduate student-run organization founded in 2014 with a mission to help graduate students engage elected officials and teach them how to be advocates for their science. To date, we have successfully accomplished this goal via the following ways: (1) we have held events where graduate students directly engaged an elected official (or their surrogate), (2) we have hosted (and/or have scheduled) several speakers with careers in science policy, including science advocacy, budget analysis, public relations, etc., and (3) we have sent 3-4 students to Washington D.C. for a science policy workshop/Congressional Hill Day in conjunction with the National Science Policy Group (NSPG) and the American Association for the Advancement of Science (AAAS). Follow us on Twitter @PSUSciPolicy and on Facebook!

Jessica Sagers (Session 2, Screen 3) – External Organization
Science in the News: a model for graduate student training and effective public engagement

Science in the News (SITN) is an organization at Harvard with a goal that is two-fold: (1) to bridge the communication gap between scientists and non-scientists and (2) to effectively train the next generation of scientists to be able to communicate their research and engage with people of all backgrounds. SITN is the largest student-run science outreach group at Harvard, providing over 30 events per year including a Fall and Spring lecture series, science cafes called Science by the Pint, various school outreach events, regular publication of articles on our online blog, and various social media engagement events. In 2015, we launched a day-long science conference for the general public and are producing our second annual event this spring with expected attendance of over one hundred members of the public. Last fall, we launched our monthly podcast series entitled "SIT'N Listen" exploring topics ranging from GMOs, allergies, and women in

science. Each of our events is entirely prepared and executed by graduate students, and covers topics spanning most scientific fields. Our model of peer-peer feedback, in conjunction with our large-scale engagement of members of the public, allows graduate students to evaluate and hone broad communication skills. We believe Science in the News is a model for student science outreach that could be expanded to other institutions.

Kate Fehlhaber (Session 2, Screen 6)
Knowing Neurons: A creative neuroscience education website by young neuroscientists

Today's students use the Internet to clarify complicated topics and explore newsworthy developments. Unfortunately, brain research is often misrepresented in the popular press, and few online resources explain fundamental neuroscience concepts. Knowing Neurons is a neuroscience education website that encourages anyone to learn about the brain in a creative, curiosity-driven format. Articles at Knowing Neurons feature recent neuroscience discoveries and summaries of basic neuroscience ideas in ways that are easy to understand and aided by powerful visuals.
Scientists have a responsibility to communicate their work to the general public in a way that is accurate without being dry, uncomplicated without oversimplification, and exciting without exaggeration. Few graduate programs offer their students any opportunities to practice science communication, a skill that is becoming increasingly important as social media more directly connects scientists to the public. Knowing Neurons aims to give young (graduate student and postdoctoral scholar) neuroscientists the opportunity to hone their communication skills by educating people about the brain. Using diverse formats, ranging from blog-style posts and poster-size infographics to podcast-style interviews and animated YouTube videos, contributors have the creative freedom to create content that casual learners and professional educators can use at home or in the classroom alike.

Liz Albertorio-Saez (Session 2, Screen 11)
Science at your fingertips: Developing an educational platform for science centers to engage and train scientists to communicate current scientific research.

Science at your Fingertips aims to create interactive platforms to promote the collaboration between science centers and universities. These interactive platforms will provide science communication training to graduate students and researchers. We have successfully designed a series of workshops aimed to familiarize scientists with the concept of Informal Science Education (ISE). These interactive workshops are based on training protocols developed by the Portal to the Public (PoP) network, a National Science Foundation funded initiative from the Pacific Science Center to help connect public audiences with the science happening in their communities. We have impacted over 20 graduate students and post-docs who created several hands-on demonstrations for the general public at the Rochester Museum and Science Center.
The goals of the interactive platforms are: (1) provide professional development in science communication to graduate students and researchers, (2) recruit graduate students and researchers to communicate their current research findings to the science center's public audience, and (3) provide a physical forum to create and complete outreach programs and broader impact activities.
Our long-term goal is to catalyze the adaption of this model in more science centers and higher education institutions across the United States.

Mallory Nobles (Session 1, Screen 11)
The Code for Success in Engaging Young Female Students in Tech

Two years ago, I started a computer science club for female middle school students at Pittsburgh Public School's Science and Technology Academy. The club meets for two hours a week and over thirty students have participated in the club since its inception. Our club has covered curriculum developed by Girls Who Code & Technovation. Girls Who Code is a national non-profit whose goal is to bridge the tech gender gap by showing girls the accessibility, relevance and diversity of computing related jobs. Technovation is an international competition that prompts girls to develop apps that address needs in their community. My poster will document how these activities have positively impacted the club members' views of computer science and other tech related subjects and careers. I will report results from an end of year survey given to the students and cite quotes from the participants about their experiences in the club. I will also discuss challenges I encountered while leading the club and best practices I discovered for our club. Finally, the poster will cover future plans for the club.

Maryam Zaringhalam (Session , Screen)
Using podcasting to engage in policy & advocacy from the Ivory Tower

Science Soapbox is an online resource at the intersection of science, policy, and advocacy. The project is the brainchild of three graduate students from the Rockefeller University coming from scientific backgrounds spanning addiction, chemical biology, and infectious disease. Collectively, we realized that there are few voices raising awareness of the impact policy has on the progress of the scientific endeavor — from funding mechanisms that make research possible to creating collaborative connections among practitioners of science across the globe. As graduate students working within the confines of our own institution, we were faced with a conundrum: how can we create a direct channel outside the Ivory Tower to thinkers influencing the affairs of our own community and country? And how can we disseminate that information to our community and beyond? This inspired us to create Sciencesoapbox.org, launched last year to provide both a centralized resource for federal funding of science research and podcasts with thinkers working at the policy-science junction. Here, we focus on Science Soapbox's podcast, as we believe the platform presents an ideal forum for academia's trainees like ourselves to engage in conversations around policy, research, and advocacy, and to broadcast those conversations beyond our own community.

Rachael Alexandroff (Session 2, Screen 2)
Johns Hopkins University Public Outreach: Teaching Physics and Astronomy in Baltimore City Classrooms

Over the past five years the Johns Hopkins University Physics and Astronomy Department has created a dedicated outreach program targeted at supporting STEM education in Baltimore City public and charter schools and staffed entirely by graduate student volunteers. Our goal is to provide underserved student populations in Baltimore City with hands-on physics and astronomy demonstrations and activities by harnessing the resources of the department. We believe students from any grade level and any background should be able to see themselves in science careers and we aim to inspire that vision. Additionally, we want to provide insight into the physical world for students with varied interests enabling them to understand physics phenomena in their daily lives. Our program includes physics lectures and demonstrations as well as shows with two portable planetaria built in coordination with the World Wide Telescope Ambassadors effort at the Harvard-Smithsonian Center for Astrophysics with funding from an Ignite Baltimore grant and the Johns Hopkins Alumni Association. Original planetarium shows are written and recorded by members of the department and made available online. As graduate students, we are in a unique position to straddle the line between student and scientist helping to make this program effective.

Rianna Murray (Session 2, Screen 5)
Volatile organic compounds and particulate matter in childcare facilities in the District of Columbia: Results from a pilot study

Many young children in the U.S. spend a significant portion of their day in child care facilities where they may be exposed to contaminants linked to adverse health effects. Exposure data on volatile organic compounds (VOCs) and particulate matter (PM) in these settings is scarce. We conducted a pilot study in which we characterized indoor concentrations of select VOCs and PM in 14 urban child care facilities in Washington, DC. We also administered a survey to collect general health information on children attending these facilities, information on general housekeeping practices and proximity of facilities to potential contaminant sources. We detected six of the seven VOCs in the majority of child care facilities with detection frequencies ranging from 71% to 100%. ICCs for the VOCs measured ranged from 0.32 to 0.75. Child care facility median concentrations for PM2.5 and PM10 were 20.1 mg/m3 and 26.3 mg/m3, respectively. Given that exposures to environmental contaminants during critical developmental stages may have long lasting impacts on children's health, larger studies are needed to characterize and identify sources of exposures to these and other indoor contaminants to develop exposure mitigation strategies.

Shelley Chestler (Session 1, Screen 12)
ENGAGE: hands-on science communication training for graduate students

ENGAGE is a program at the University of Washington that puts on a seminar each year that trains graduate students to talk about their science in a way that it both engaging and accessible to the general public. Topics included in the ENGAGE curriculum include storytelling, distilling vs. dumbing down ideas, and audience consideration. After taking the course, our partnership with Town Hall Seattle allows students to give a talk about their research as part of the ENGAGE Science Now speaker series. The special thing about ENGAGE is that it is a program for graduate students, organized by graduate students. It was started by a group of students in the UW Astronomy department who realized that communication training was a gap in their graduate student education. Each year, the instructor for the course is chosen from the previous year's students. In addition, the instructor is supported by a Board of Directors who assist with curriculum changes and in-class activities such as improv games and giving feedback on student practice talks.

Stephanie Sasse (Session 1, Screen 10) – External Organization
The People's Science: A three-pronged approach to improving the relationship between research and society

The People's Science (TPS) is a research-driven organization dedicated to improving the relationship between science and society. Prior literature has characterized contemporary barriers between researchers and the public as threefold: (i) lack of a public service- and communication-orientation in scientific culture, (ii) lack of public understanding of the nature of science, and (iii) lack of 21st century information literacy skills education. By synthesizing relevant theories and data, leading workshops and focus groups with researchers and citizens, and piloting potential platforms, TPS has designed a suite of initiatives to dismantle these barriers. Particularly relevant to the ComSciCon community, we have designed three open platforms. The first, **The Field,** is an interface for researchers across disciplines to share lay summaries of their work with the public, and for the public to track and interact with labs and individual scientists. The second, **#ShareYourScience**, is a catalog of freely available training tools and outreach opportunities, as well as a campaign to increase the visibility and accessibility of outreach efforts in science. The third, **Jiminy,** is a curated site where researchers rate pop resources and create lists of their recommended resources within neuroscience and psychology, so that the general public has an insiders' look at the content they can trust. These initiatives work in tandem with our public skill development and STEM education efforts to build sustainable infrastructure in service of responsible application of knowledge. We continue to critically evaluate our programs and iterate based on new research, feedback, and public needs.

William Chen (Session 2, Screen 8)
Using games to overcome the challenges of climate science communication

Anthropogenic climate change is one of, if not the greatest threat facing human societies today. Yet, the general public's understanding of climate change is limited. One study from Yale reports that only 8% of Americans have a good understanding of climate change and its impacts. The reality is that climate change is a complex issue that is difficult to communicate properly. What if we could communicate these complex ideas through a medium that is easier to understand? Today, over a billion people around the world play games in some capacity. Earth Games UW is a group of scientists, game developers, educators, and students based out of the University of Washington who seek to take advantage of the immersive and interactive qualities of games to raise awareness about the impacts of climate change in ways that traditional science communication avenues cannot. Our goal is to inspire and motivate action on environmental issues.

Venues

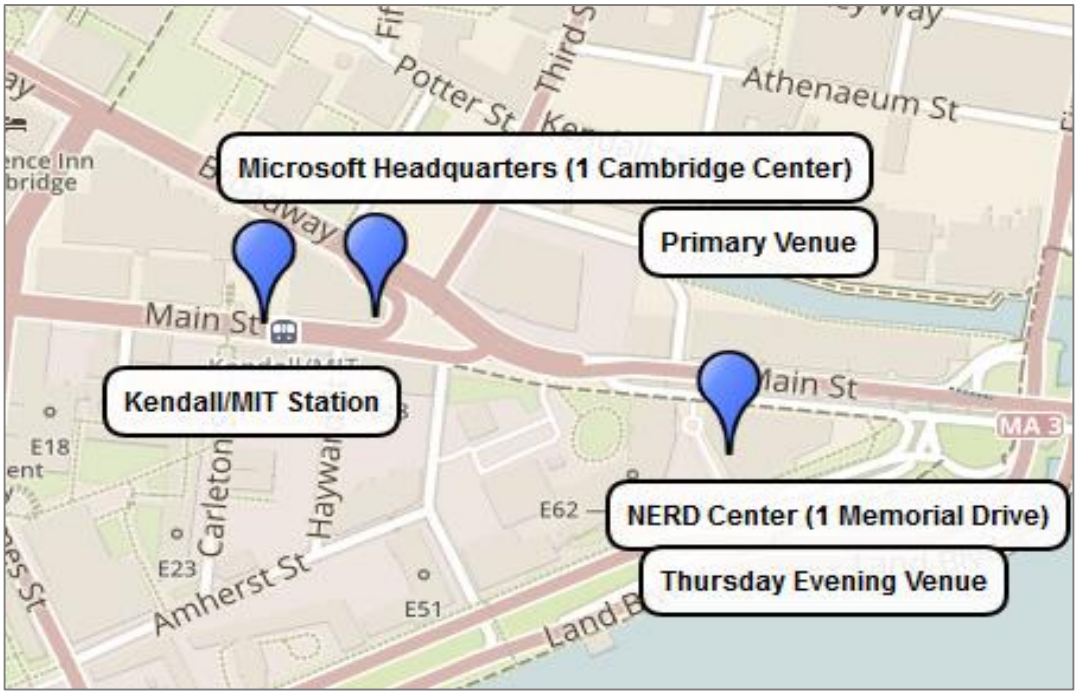
Conference Venue

ComSciCon16 is being held at the Microsoft Headquarters, located in Kendall Square:

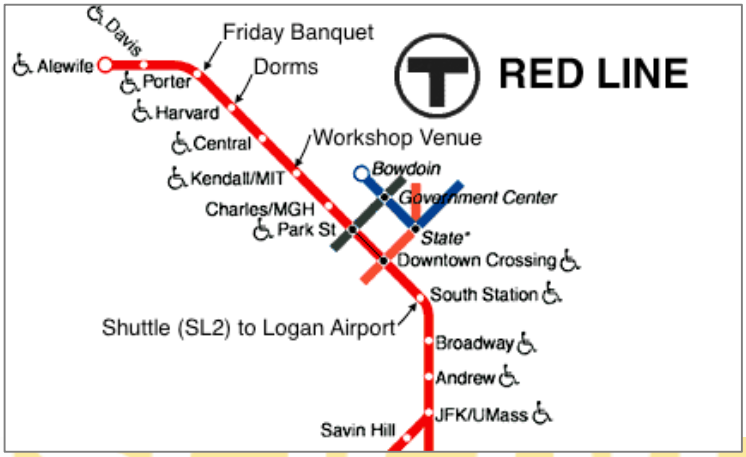
1 Cambridge Center (also 255 Main Street)
Cambridge, MA

All attendees are required to bring government-issued photo ID in order to enter the facility.

Workshop Venues & Kendall Square Map



Red Line Map



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