

# ComSciCon 18

A report on the sixth annual Communicating Science Conference for graduate students

## Table of Contents

Letter from the Organizing Committee	3
Organizing Committee Members	5
Executive Summary	6
Participants	9
Panelists	11
Special Sessions	13
Mock Interviews	
HHMI/Tangled Bank Film Screening	
Careers Mingle and Dinner	
Science Advocacy	
Improv Storytelling Workshop	
Write-a-Thon	15
Expert Review	
Accepted Pieces	
Write-A-Thon Expansion	
Poster Session	17
ComSciCon Franchises	18
Evaluation	20
Testimonials	22
Sponsors	

# Letter from the Organizing Committee



Dear Sponsors, Supporters, and other Members of the ComSciCon Community,

This past June, we hosted the sixth annual Communicating Science Conference Flagship workshop in Boston, MA. Our 50 graduate student attendees were hosted graciously by Emerson College and once again had the opportunity to hear from experts in a variety of arenas related to science communication, participate in hands on workshops to build new skills, and connect and collaborate with their peers to build exciting new projects for the future. We are excited to share a number of highlights from this year's program.

In 2018, we received nearly 900 applications for 50 spots in the workshop, a statistic that demonstrates ComSciCon's robust reputation as the premier workshop for graduate student science communication leaders in America. Thanks to new partnerships, for the first time ever, we were able to open our application to Canadian students, and received 127 Canadian applications alone. We are thrilled to be able to extend this opportunity to another community of students, and look forward to continuing to grow. The huge number of applications is also a testament to the increasing demand for professional development opportunities for early career researchers, and in particular the importance of and desire for communications training for the next generation of scientists. We were excited to work together for the first time with the brilliant communicators, researchers, and educators at Emerson College to host the event.

This year our team of all-graduate student organizers put together a program including popular events from previous ComSciCon workshops and new, innovative workshop opportunities for our attendees. Panel discussions on pertinent issues such as Diversity and Inclusivity in STEM and Science Journalism provided insight into vital areas of consideration for all scientists, while this year's special panel on Scientific Ethics discussed modern challenges and concerns facing scientists and the public alike. Liz Neeley of StoryCollider returned to give this year's keynote talk on the importance of finding your own voice and telling your own story, while hands-on workshops included a Write-A-Thon Expansion designed to help attendees translate their work into new digital mediums such as podcasts or videos. We were also thrilled to have Tangled Bank back again this year, this time with a special screening of their beautiful and educational upcoming film Serengeti Rules.

Beyond the flagship workshop, ComSciCon has continued to grow in myriad ways, providing more science communication training resources to early career researchers across the country. By the end of 2018, there will have been about 30 ComSciCon franchise workshops in more than a dozen locations, including Houston, Atlanta, San Diego, Ann Arbor, Chicago, and Boulder. We have also expanded our partnerships with professional societies to offer ComSciCon workshops and short training programs at annual meetings, creating opportunities for graduate student members to obtain training that may not be available at their home institutions. This year, ComScICon also



# Letter from the Organizing Committee

partnered with the wonderful Story Collider organization to operate with nonprofit status as a sponsored project.

In the follow pages, we have summarized the work done by ComSciCon during the last year, highlighting the value of our workshops for both the scientific community and the public. We are once again deeply grateful to our sponsors for making this work possible: the University of Colorado at Boulder, MIT, HHMI Tangled Bank Studios, the American Astronomical Society, Emerson College, the American Chemical Society, Institute of Physics Publishing, Harvard Medical School / Science in the News, the American Institute of Physics Venture Partnership Fund, AAAS/Science Careers, and many individual donors.

We are looking forward to another year of growth for ComSciCon. You can follow our progress at Comscicon.com.

Sincerely,

The ComSciCon 2018 Organizing Committee





# Organizing Committee Members



#### Local Organizing Committee

Ben Cook, Chair (Harvard)

Harshil Kamdar, vice-chair (Harvard)

John Lewis, vice-chair (Harvard)

Amber Medina (Harvard)

Chani Nava (Harvard)

Dana Boebinger (Harvard)

Gabriela Serrato Marks (MIT)

Ian Weaver (Harvard)

Olivia Ho-Shing (Harvard)

Tarraneh Eftekhari (Harvard)

## Program Organizing Committee

Alison (Alie) Caldwell, Chair (University of California, San Diego)

Sarah (Sadie) Witkowski, Vice-Chair - Northwestern University

Christina Sauer (Montana State)

Eric Earley (Northwestern)

Jaye Gardiner (U. Wisconsin, Madison)

Liz Bajema (Northwestern)

Mike Zevin (Northwestern)

Ryan Venturelli (U. South Florida)

Will Chen (U. of Washington)







# **Executive Summary**

ComSciCon is a professional development workshop organized by graduate students, with the goal of providing other STEM graduate students with the skills and resources required to communicate their science clearly and effectively with a wide array of audiences. Our sixth annual flagship workshop, ComSciCon18, saw 50 graduate student attendees selected from nearly 900 applicants coming together for three days to learn from experts in science communication and from each other.

#### **Continued Growth**

In 2018, ComSciCon celebrated the conclusion of its sixth annual national leadership workshop, and by the end of the year will have hosted 20 franchise workshops in 9 different locations throughout the U.S. It marked the fourth year of local ComSciCon franchises in Chicago, Cornell, and the Research Triangle; third local franchise in San Diego; and the second local franchises in Houston, the Pacific-Northwest, and the Rocky Mountains. It also saw the first workshops in Atlanta, GA and Ann Arbor, MI, and our first joint initiative with a professional society at ComSciCon-ESA! The Leadership Team works to sustain our flagship national workshop and to promote the growth our franchise programs throughout the US. In 2019, we will continue to expand, providing more training opportunities to more students.

### **Graduate Student Attendees**

The graduate students who sought to attend our 2018 workshop were among the most qualified and accomplished group of applicants we have seen yet, making for a very challenging application review process. Throughout the workshop, the line between these outstanding young science communicators and the invited experts they conversed with seemed constantly blurred, and attendees indicated finding a great deal of value in connecting with one another as well as with our invited experts.

#### **Partners**

As in past years, graduate students from around the country applied to attend our national leadership conference, and many of those students have gone back to their home institutions to develop their own ComSciCon franchise workshop. By the end of the year, we will have provided training to over 1600 students. We view this level of demand as a testament to the exceptionally valuable and high quality programming made possible through the phenomenal support of ten wonderful sponsoring institutions and many individual donors.



## **Invited Experts**

Across our four panels and six workshop sessions, ComSciCon18 was honored by the presence of 28 invited experts. This group included academics who also work to promote public communication of science, such as Christine Casatelli and John Craig Freeman of Emerson College, science journalists such as Nadja Oertelt of Massive Science and Wade Roush, and individuals who work to provide resources to those underrepresented in STEM fields like Ralph Bouquet of NOVA PBS and John Johnson of Harvard University. Other talented speakers include creative communicators such as Adnaan Wasey of WGBH and Matteo Farinella of

# **Executive Summary**





Columbia University, hands-on advocacy training from Danielle Fox and Shreya Durvasula from the Union of Concerned Scientists, and conversations in bioethics with experts such as James Hamblin of The Atlantic and Kelly Hills of Rogue Bioethics.

Write-A-Thon

One of the most integral pieces of the ComSciCon program is the Write-A-Thon, wherein each attendee produces an original piece of science writing or multimedia during the workshop. During the session, each student received one-on-one feedback on their writing from professional writers and editors—our invited experts—and from their peers. With the help of ComSciCon organizers, attendees are now seeking publication for their work at local and national outlets in print and online. Past ComSciCon attendees have now published more than 100 pieces written at our events!

#### ePoster Presentations

At ComSciCon, the poster session is not just a time for attendees to broadcast the status of their work, but more importantly it provides opportunities for connections to be made and new collaborations to begin. As in past years, we deployed a suite of electronic displays to facilitate our fifth annual attendee poster session. Attendees used the displays to showcase the websites of science

outreach organizations they've founded at their universities, educational videos they've produced, interactive science games they've created, infographics and designs, and more.

#### **Special Sessions**

As our Program Organizing Committee continues to innovate, we've not only brought back elements of previous ComSciCon workshops, but also added short hands-on workshops focused on academic presentations, communicating through sketching, and integrating short videos into social media. Perhaps the most popular event was a longer hands-on workshop led by Story Collider, which helped the attendees craft and share science stories.





# **Executive Summary**



## **Keynote Address**

We were thrilled to have Liz Neeley of StoryCollider return this year, this time in the of keynote speaker. Liz brought her experiences as an academic scientist-turned-communicator to her talk titled "Fight the Hype: Find Your Story, Tell It Your Way", encouraging attendees to use their personal stories to inform how they share their science. Our attendees enjoyed her presentation immensely, with several calling it their favorite portion of the program and one attendee commenting, "It is clear that she has honed her communication skills to an impressive degree and I will attempt to apply what she talked about to my own presentations in the future." Another stated, "I LOVED the Keynote Address by Liz Neeley, it made me reflect on my

own science-based presentations and really critique how I am delivering a story. From only being present during her address, I learned so much and believe I grew slightly in the way I present information."

## **Organizing Committee**

This year nineteen graduate students (and recent graduate students) from around the country volunteered thousands of cumulative hours to make ComSciCon18 the successful event that it was. Their contributions are critical to the operation and quality of ComSciCon, instrumental to its future, and a key outcome of the alumni community we have sought to create.

# **Participants**





50 graduate students from around the United States and Canada convened in Cambridge for Com-SciCon18. Our attendees came from a wide array of backgrounds and had diverse research interests, but all have demonstrated exemplary dedication to science communication in their careers to date and at our event. These profiles provide a survey of the interests, motivations, and accomplishments of our attendees:



## Carlo Altamirano-Allende

is a PhD candidate in Human and Social Dimensions of Science and Technology at Arizona State University. His research explores the societal implications of

large-scale energy systems change. He writes a science and technology column for a well-known Mexican magazine, Este Pais, and has dedicated his scicomm work to a Spanish-speaking audience.

#### Anicca Harriot

is a PhD student in Biochemistry and Molecular Biology at University of Maryland School of Medicine. Her research focuses on mechanotransduction, which is how physical forces, like gravity, affect cell signaling. She plans to become an astronaut someday. She writes social media and blog content for VanguardSTEM, a science diversity initiative. Her unique work bridges the gap between identity as a scientist and as a marginalized individual to convey a complete narrative.

## **Evelyn Valdez-Ward**

is a PhD student in Ecology and Evolutionary
Biology at the University
of California, Irvine. Her
research focuses on the
effects of climate change
on the interactions between plants and their soil



microbes. She is a DACA recipient who has been vocal about her personal experiences while also working to amplify other people's voices, especially



# Participants

those of undocumented and underrepresented minority scientists.

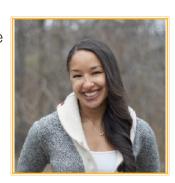
Nick Thieme is a researcher and freelance reporter whose work focuses on Al regulation, cybersecurity, and pharmaceuticals. He created Statsbites, a statistics communication blog for the American Statistical Association that is part of the 'bites family of



sites. He feels that by making cutting-edge statistics approachable and entertaining, it is possible to assuage fears that lead to doubt.

### Cylita

**Guy** is a PhD candidate in Ecology and Evolutionary Biology at the University of Toronto. Her research examines why bats often carry viruses that can be shared with humans, but rarely get sick them-



selves. Outside of research, she works at a science museum and started a Junior Bat Biologist program.

## **Panelists**



Science communication experts from a broad range of backgrounds joined us at ComSciCon17, sharing their expertise on panels and facilitating interactive sessions. Read about some of our expert speakers below.



## Matteo Farinella Neurocomic

Matteo Farinella is a neuroscientist, cartoonist and illustrator. After completing a PhD in neuroscience Matteo combined his scientific expertise with a lifelong passion for drawing and started making edu-

cational comics, illustrations and animations. He is the author of Neurocomic (Nobrow 2013), published with the support of the Wellcome Trust, Cervellopoli(Editoriale Scienza 2017) and The Senses (Nobrow 2017). In 2016 Matteo joined Columbia University as a Presidential Scholar in Society and Neuroscience, where he investigates the role of visual narratives in science communication. Working with science journalists, educators and cognitive neuroscientists he aims to understand how this new medium may affect the public perception of science and increase scientific literacy.

## Maimuna Majumder

MIT

Maimuna (Maia) Majumder is an Engineering Systems PhD candidate at MIT and computational epidemiology research fellow at HealthMap. Before coming to MIT,



she earned a Bachelors of Science in Engineering Science (with a concentration in Civil and Environmental Engineering) and a Masters of Public Health in Epidemiology and Biostatistics at Tufts University. Her research interests involve probabilistic modeling, data mining, and "systems epidemiology" in the context of public health. She also enjoys exploring novel techniques for data procurement, writing about data for the general public, and creating meaningful data visualizations.

#### John Johnson

Harvard-Smithsonian Center for Astrophysics

John Johnson is a Professor of Astronomy at the Harvard-Smithsonian Center for Astrophysics. In 2012, he was awarded the Sloan Foundation Research Fellowship, the David & Lucile Packard Fellowship, the Feynman



Teaching Prize, and the AAS Newton Lacy Pierce Prize for "for major contributions to understanding fundamental relationships between extrasolar planets and their parent stars." In 2013, he was named one of Astronomy Magazine's "Ten Rising Stars" in astrophysics. In addition to papers in professional journals and conferences, his work has been featured in the magazines Sky & Telescope, Astronomy, Discover and New Scientist



## **Panelists**

## Nadja Oertelt

Massive

Nadja is a founder of Massive, a science media company that aims to engage the public and scientists in new ways. Massive trains researchers to write for the public using an editorial media



framework and brings the science curious public into the process of science and scicomm. Nadja formerly worked as a senior video producer at Mashable and was once a science producer at Buzzfeed and Vice. She worked at HarvardX for three years producing The Fundamentals of Neuroscience with hundreds of thousands of global students as well as artists, scientists, museum professionals, doctors and researchers. She graduated from MIT in 2007 with a BS in Neuroscience and worked in labs at MIT, Harvard and Cambridge University. Shev co-produced and co-directed a

feature length documentary that premiered in 2013 called Unorthodox.

#### Kelly Hills

Rogue Bioethics

A software test engineer before she returned to school for bioethics, Kelly utilizes her expertise in these fields to consult on emerging ethical issues in technology for



both non- and for-profit companies. Her academic research sits at the intersection of personal autonomy and consent vs conceptions of the public good. Kelly's ethics-focused commentaries have appeared in The Guardian's Comment is Free, Quartz, and Nature: Medicine. She is a principal of Rogue Bioethics, a boutique bioethics consulting firm.



# Special Sessions



During each annual ComSciCon workshop, attendees not only hear from our expert invited speakers, but also participate in a number of unique, hands-on workshops to learn new skills in science communication.

#### **Mock Interviews**

During this year's mock interview session, 13 ComSciCon attendees had the opportunity to work one-on-one with expert journalists. This session gave attendees a crash course in live interviews as well as a chance to put their new storytelling skills to work. At the beginning of the one-hour session, Doug Dollemore (ACS) gave the attendees the run-down on what to do and what not to do in an interview. From there, attendees broke into three groups in which they were interviewed, on film, in front of their peers. They received immediate feedback and had a chance to discuss the experience before the end of the session.

## HHMI/Tangled Bank Film Screening

We were excited to welcome back Howard Hughes Medical Institute's (HHMI) Tangled Bank Studios to wind down the first day of the national conference with a screening of their new feature-length documentary film, Serengeti Rules. Their sponsorship of this session allowed our



attendees to be exposed to creative approaches towards science filmmaking and topical discussions at the border of science and society from a leading scientific foundation. HHMI Tangled Bank Studios has produced award-winning scientific programming that addresses contemporary issues as part of HHMI's science education mission.

We were joined by Alex Duckles, Science Education Fellow, who hosted the screening of Serengeti Rules, a film about five unsung heroes of modern ecology, which recently premiered at the 2018 Tribeca Film Festival.

## Careers Mingle and Dinner

This year we had nearly 30 guests from a diverse range of science communication fields join us for a short "speed-networking" event to share their career paths, which were then extended into more in-depth conversations over dinner. Experts represented careers in writing and publishing, academia, public outreach, the science of science communication, data science, and policy, and included individuals from the Union of Concerned Scientists,





# Special Sessions



American Academy of Arts & Sciences, and the Frameworks Institute (to name just a few!). This event provided opportunity for students to learn about potential careers related to science communication and facilitated connections between attendees and experts.

### Science Advocacy

Shreya Durvasula and Danielle Fox from The Union of Concerned Scientists offered their time and expertise in a 1.5 hour advocacy workshop. Specifically, attendees learned new approaches to science advocacy messaging and how to identify key audiences for enacting change. After a presentation about the current policy framework, attendees worked in groups on case studies. The case study exercise allowed them to identify key talking points. stakeholders, and timeframes for delivering messages. One attendee's most memorable takeaway from ComSciCon was "that scientists can be advocates and still respected in their fields." Overall, the workshop taught realistic, usable skills that attendees can bring back to their own communities to begin advocating for science-informed policy.

CTo help attendees practice hands-on skills, Neil Bardhan led a workshop focusing on using improv to improve communication skills. Neil, a PhD in Cognitive Science, draws his science communication work draws on storytelling principles, including coursework with Kevin Allison, collaborations with First Person Arts, and a Story Collider performance in New York. Attendees learned how to construct and perform stories based on their scientific research. At the end of the workshop, several attendees volunteered to present to the group in order to get feedback and help each other practice these real-world skills. According to one attendee, "the entire storytelling workshop with Neil was the most memorable event at the workshop." Another attendee told the organizers, "the approaches to storytelling and [the] engaging audience really appealed to me and showed me things that would make my own scicomm more approachable and more impactful."

## Improv Storytelling Workshop

## Write-a-Thon



A core segment of ComSciCon, the Write-a-Thon gives attendees the opportunity to practice science writing and receive guidance on translating complex subjects into engaging media for general audiences. Weeks before the conference itself, each attendee creates a short article, podcast, or video. From then through the end of the conference, students receive feedback from peers as well as from distinguished science communication experts.

## **Expert Review**

While at ComSciCon, attendees sat with expert reviewers in groups of 3 or 4. Expert reviewers are conference panelists, invited guests, or ComSciCon organizers with a background in publishing, writing, editing, or media, including such notables as Nadja Oertelt (Massive Science), Shraddha Chakradhar (Nature Medicine), and Liz Neeley (Executive Director of The StoryCollider). In addition to providing feedback and tips on writing, pitching, and publishing, the expert review session promoted networking in a smaller group setting. One attendee said that "It gave me confidence in my writing [...] after working with an expert reviewer, I felt that my work actually belonged somewhere."

## Accepted Pieces

After the workshop, attendees pushed forward to publish their Write-A-Thon pieces in publication outlets around the country partnered with Com-SciCon organizers, including Scientific American and North State Public Radio, as well as local and personal outlets. Below are a selection of these publications following ComSciCon 2018:



The Floor is (Usually) Not Lava, a blog post by Arianna Soldati:

https://blogs.scientificamerican.com/observations/the-floor-is-usually-not-lava/

Traveling to Exoplanets, a radio broadcast by Sheryl Hosler:

http://www.mynspr.org/post/blue-dot-106-traveling-exoplanets#stream/0

Call Me George, a comic by Reyhaneh Maktoufi: https://reyhanehmaktoufi.wordpress.com/2018/06/30/call-me-george-uranus-journey-from-royal-to-rectal/

On the Table, Episode 1: Setting the Table, a new podcast by Sanae Ferriera:

https://soundcloud.com/dr-sanae-ferreira/on-the-table-episode-1-setting-the-table-why-does-it-matter-what-kids-eat

## Write-A-Thon Expansion

To complement the traditional Write-a-Thon, this year we introduced the Write-a-Thon Expansion, giving attendees a unique opportunity to learn the tools of the trade from experts in five different areas. Program organizers Alie Caldwell, Christina Sauer, Sadie Witkowski, and Eric Earley shared their knowledge and experiences in using the unique strengths of videos, virtual reality, podcasts, and websites to communicate complex scientific topics. Local experts Erin Winick and Cátia Bandeiras taught attendees to effectively engage the

## Write-a-Thon





public through social media, and BiteScis founders Shannon Morey, Erica Kimmerling, and Stephanie Keep worked with attendees to develop lesson plans for K12 education.

For many attendees, the Write-a-Thon Expansion was their first foray into a completely new medium, and offered a chance to learn something completely new. One attendee in the Video and VR sessions was thrilled to, "discover a whole new world of 3D video and VR," and thought that, "continuing to

promote this would be a great idea." With experts representing all of these different media and communication styles, many also expressed a strong desire to attend more than one session. As one attendee offered, "It was hard to choose just one. If there was some way to be able to attend multiple [sessions], that would be amazing."



## Poster Session

ComSciCon's poster session, coming on the final day of the workshop, is a showcase for and celebration of the remarkable science communication projects that our attendees have initiated and led around the country and online. We featured a select group of 22 initiatives across two back-to-back sessions, and profile just a few of them here:



Arianna Soldati (@ariannasoldati), founder of

Science on Wheels, builds trust between science and citizens by bringing scientists to rural communities so that you can meet the person behind the science. Having met with success in Missouri, she hopes to see this drive go national.



And Section 1

Reyhaneh Maktoufi (@ TheCosmicRey) shares how she uses her artwork and weird interviews to not only teach but also make an emotional connection to her audience. Each comic or interview combines science and story

to provide a broader understanding of the science and what it is to be a scientist.

Cylita Guy (@CylitaGuy) is bringing bats down to earth for kids with the Junior Bat Biologist program, where she teaches kids how scientists track and study bats, and send them out to collect their own real data. Kids love



it, and parents to as it not only provides facts but also real science methods.

Charles Xu (@Charles-CongXu) is working with graduate students at McGill University and the Redpath Museum to promote diversity in STEM+Medicine fields through interviews and activity books. Their very successful "Draw Yourself as



a Scientist" coloring book has been picked up for use at other institutions as well.

Kate Lachance is working with an interdisciplinary team of scientists on the Oklahoma Science

Project to create free interactive computational science lessons that teach science and programming to high-schoolers who do not have adequate access to STEM education



## ComSciCon Franchises



Since its launch in 2013, ComSciCon has directly served 300 graduate students from around the country through its annual flagship event, the national leadership conference that takes place in Cambridge, MA. But in a major milestone, by the end of 2018, we will have provided training to over 1500 early career scientists through our local franchised workshops.

By the end of 2018, we will have had ComSciCon workshops in nine different locations, including inaugural workshops Ann Arbor, MI and Atlanta, GA, as well as continuing workshops in Chicago, upstate New York (Cornell), the North Carolina Research Triangle, San Diego, Houston, the Pacific Northwest, and the Rocky Mountains. Planning is already underway for additional local workshops to be held in 2019.

Here we're including vignettes from three recent ComSciCon-local events:



#### Houston

For the second ComSciCon-Houston workshop, co-chair applicants were interviewed and four were selected representing Rice University and University of Houston, two of whom had been ComSciCon-Houston 2017 organizers. This year, more than 80 researchers applied for 30 spots (27 attendees at the conference), in addition to some applicants who were not graduate students or postdocs, but still were interested in learning science communication. We later invited these individuals to sit in on the conference as observers. Most participants came from Rice University (11), with the rest coming from University of Houston, Baylor College of Medicine, UTHealth Graduate School of

Biomedical Sciences and School of Public Health, and Houston Methodist Research Institute.

This year, Dr. Neal Lane delivered the keynote address, where he discussed his time at the NSF and his time at the White House, and how different situations call for different ways of communicating. We reduced the number of panels to allow time for the Writeathon, which the participants particularly enjoyed. Some of the speakers we hosted included returning panelists Dr. Susan Marriott and Jade Boyd (Science Editor and Reporter at Rice University), Laura Beil (freelance science writer), Dr. Andrew Boyd (contributor on Engines of Our Ingenuity radio program), Dr. Peter Hotez (Dean of the National School of Tropical Medicine and Professor



## Franchises

at Baylor College of Medicine), and Kyung-Hee Bae (Associate Director at Center for Academic and Professional Communication at Rice University). Of the interactive workshops and panels, the attendees really enjoyed the keynote speaker, the Writeathon expert review session, and the poster design workshop led by Kyung-Hee Bae. Com-SciCon-Houston 2018 was successful in creating an environment where the attendees could bond through peer review sessions (within the Writeathon) and more time to interact with one another. Photo by © Hussain T. Hijazi, Pella Gallerie

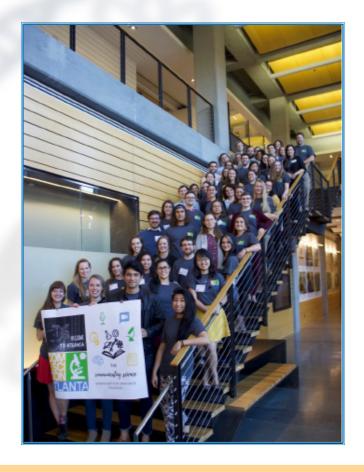
Atlanta

ComSciCon-Atlanta kicked off its first annual workshop in March 2018. Attendees came from universities throughout the Southeast - Georgia, of course, Florida, Alabama, and Tennessee - and represented a wide range of disciplines. Together, they attended panels on reaching beyond the ivory tower, scicomm in creative outlets, the importance of interdisciplinary collaboration and thinking, and science writing. They also chose specific breakouts on storytelling, featuring a local acclaimed playwright, on humor in scicomm, featuring two Georgia Tech faculty who regularly perform science standup, and on data visualization, in which attendees experimented with VR headsets, 3D printers, and games. Dr. Nicole Sharp, of popular fluid dynamics blog FYFD fame, led a group discussion on successful data viz.

The keynote speaker, however, stole the show for our attendees: Dr. Joe Hanson, of PBS Digital Studios. During the first evening, Joe shared his favorite (and least favorite) Youtube videos, discussing both fundamentals of what makes an engaging video as well as how the process itself works. Said one attendee, "Hearing from a PhD who has made a successful living doing something other than academia was really encouraging." His keynote

lecture focused on the power of storytelling, that "hope lies where we can counter stories with other stories."

As an organizer, I could see this idea stand out and resonate with the attendees, and it was amazing to see them light up as they connected with each other and with our panelists throughout the workshop. For many grad students (pre-Com-SciCon), it can be lonely if scicomm isn't valued in your program; said one attendee, "It was really great to meet other graduate students interested in SciComm. This is such a valuable workshop and needs to continue. It made me feel like I found my scientific voice!" Another student said, "I've been telling everyone I know that it was the most useful conference I've ever been to. I loved it. Everything was engaging."



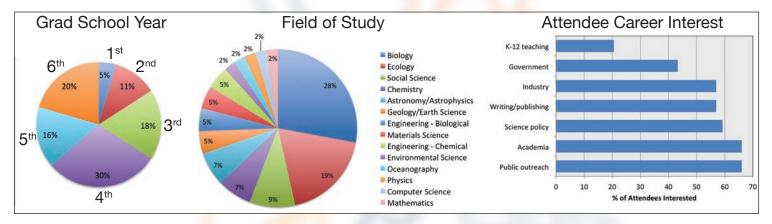
## Evaluation



To better understand the state of science communication training in STEM fields and the impact of ComSciCon on attendees, we surveyed attendees before and after the workshop. Below are just a few results from attendee survey responses, which we are now working to combine with data from 5 years of ComSciCon workshops in a peer-reviewed publication exploring the impact — both short-term and

#### Attendees' Backgrounds and Career Interests

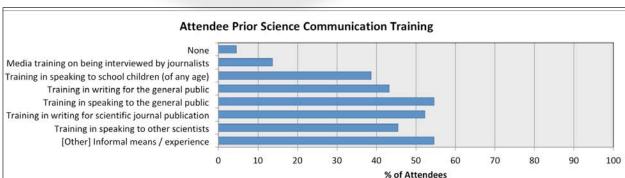
ComSciCon 2018 attendees came from various stages in their graduate career, a wide range of fields of study, and home institutes from across the nation. Attendees' future career interests also spanned a broad range of possibilities.



The number of ComSciCon attendees who report having received formal science communication training prior to the workshop continues to grow every year, providing hope that more training opportunities are being made available to young scientists. Even so, a quarter of ComSciCon 2018 attendees indicated that they had received no prior formal training in communicating with people other than scientists, underscoring the need for programs such as ComSciCon. As ComSciCon attendees are selected for their exemplary science communication

experience, we can expect these numbers to be much lower among the general graduate-student population.





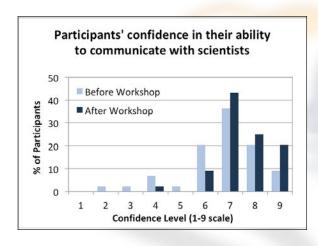


## Evaluation

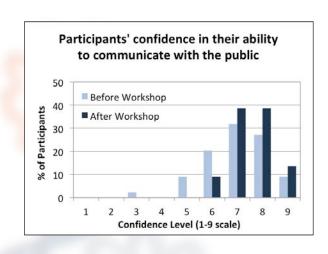
#### Impacts of ComSciCon 2017

After the workshop experience, attendees reported increased confidence in communicating with the public, communicating with other scientists, and submitting their writing to a popular-science publication.

"I gained resources and connections with experts that I would have never otherwise encountered. The most memorable part for me was meeting a network of scicommers at different stages who I was able to learn from and build a greater support network with. Also, the panels were an incredible opportunity for me to understand just how vast the application of science communication can be."

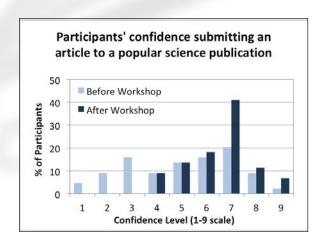


"I absolutely loved this experience, and thought it was one of the most valuable pieces of my graduate school training. The experience was fun and put together extremely professionally. I couldn't be more excited to have been part of this experience. I look forwarding to finding ways to further the comscicon name at my own institution."



"It was an amazing opportunity and experience to meet many like minded and inspiring colleagues as well as learn about many different forms of science communication.

I am excited to use the new skills I have learned and stay part of the ComSciCon network!"



## Testimonials



# What was the most memorable thing you learned or best piece of advice from ComSciCon 2018?

"That scientists can be advocates and still respected in their fields"

"There are so many different ways to effectively communicate science - just pick one and start creating content!"

"Science is not something we have to trick people into liking."

"The most memorable thing I learned is that science communication needs to be entertaining. Not many people read science communication pieces simply to learn science, they read to learn science while being entertained."

"I think the most memorable thing I learned was from Liz Neely's keynote when she talked about how we are not all qualified to tell all stories. We should find people whose voices we can amplify."

## Anonymous attendee feedback:

"Whenever I'm encountering barriers or need advice I now feel empowered to use the resources I gained and reach out to a network of people I met during ComSciCon. I'm also excited to share my new knowledge with peers back home who haven't had this opportunity and access to any of these resources. "

"Loved it! Thank you so much for all the energy and effort you guys put into hosting this event. It was an amazing way to spend a weekend!"

"Thank you! This was amazing and one of the best conferences I've attended. Superseded my expectations. "

"ComSciCon is an amazing workshop, I feel blessed to have been selected to participate. I never imagined I would learn so much or meet so many amazing people in only 3 days! Com-SciCon is a workshop that every graduate student should get the privilege of experiencing "

# Sponsors

## Thank you to our sponsors!

ComSciCon18 was generously supported by:











University of Colorado Boulder









American Institute of Physics



