

# Andrew McAllister

*Doctorate in Applied Physics, Science Communicator*

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McAllisterSci  
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## Summary

- Goal** A career that helps bridge the communication gap between scientists and non-scientists through writing, audio, video, and in-person engagement efforts.
- Science Communication** Throughout my PhD I have sought out training and experiences presenting to, writing for, and working with diverse audiences. I relentlessly pursue context in making science understandable, interesting, and relevant for audiences.
- Self-Starter** Started the Students of Applied Physics project to get more experience shaping stories written about science for a general audience.

## Education

- Expected:** **PhD in Applied Physics**, *University of Michigan*, Ann Arbor, MI.  
Sept. 2018
- 2012** **B.S. in Physics**, *Rensselaer Polytechnic Institute*, Troy, NY.  
Magna cum laude, dual major in mathematics

## Writing and Editing for a General Audience

- Using LEDs to Tell Plants What We Want From Them [Link]**, *Science in the News Blog*, 2018.  
Worked with the "Friends of Joe's Big Idea" program by National Public Radio.
- Senior Editor**, *Students of Applied Physics*, *Applied Physics Student Council*.  
I work with PhD students to develop understandable and engaging articles about research in the applied physics department. [Example article \[Link\]](#)
- Atomistic Calculations Predict That Boron Incorporation Increases The Efficiency Of LEDs [Link]**, *University of Michigan Materials Science & Engineering News*, 2017.  
Press release for research group. Picked up by the Department of Energy, National Energy Research Scientific Computer Center, and Semiconductor Today.
- How Gecko Feet Will Make Your Next Move Easier [Link]**, *Michigan Science Writers*, 2017.  
I also work as a content editor for Michigan Science Writers, where I provide feedback and help develop a rough draft developing of a piece by another graduate student.

## Communication Training

- August 2017** **ComSciCon Chicago [Link for more information]**, *Chicago, IL*.  
Attended a conference based on science communication.
- 2016** **Researchers Expanding Lay-Audience Teaching and Engagement (RELATE) Workshops**.
  - Over 3 months, worked on crafting messages and narratives, considering different audiences and making visual aids.
  - Developed and produced a [YouTube video \[Link\]](#) highlighting my research.

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## Awards

- 2014 National Science Foundation Graduate Research Fellowship Program
- 2012 [Nadia Trinkala Service Award \[Link for Verification\]](#), Rensselaer Physics Department
- 2010 [Founder's Award of Excellence \[Link for Verification\]](#), Rensselaer Physics Department
- 2008 Boy Scouts of America, Eagle Scout

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## Public Engagement

- 2018 **Engaging Scientists in Policy and Advocacy.**  
Volunteer for "Ask a Scientist at Art Fair", where I spoke to adults interested in science at a large local event in an informal setting.
- 2018 [Skype a Scientist \[Link\]](#).  
Volunteered for the Skype a Scientist program, where I skyped into multiple high school classrooms to talk about science, becoming a scientist, and other topics. More information on my blog, [here](#). [\[Link\]](#)
- 2017 [Nerd Nite \[Link\]](#) **Ann Arbor Talk.**  
Gave a 20 minute talk about my research at a local bar to an audience of mostly non-scientists. A recording is available at: [LED Light Bulbs: Why Do They Cost an Arm and a Leg? \[Link\]](#)
- 2013-2016 **American Society for Engineering Education.**  
Organized and ran a table at K-Grams Kid's Fair – an elementary school visit to University of Michigan. At the table, I helped demonstrate some concepts of signal analysis by using a laser to transmit music through open air.
- 2008-2012 **Society of Physics Students.**  
Organized and ran multiple outreach events at local schools and on campus. A large project that I was involved with was organizing a full-day program on light and solar cells for the Harlem Academy's visit to Rensselaer with my advisor, Peter Persans.

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## Leadership

- 2018-Present **Organizer**, *ComSciCon Michigan*, Ann Arbor, MI.  
Work with other graduate students to organize, publicize and run a conference devoted to science communication in Ann Arbor Michigan.
- 2017-Present **Senior Editor**, *Students of Applied Physics Project*, *Applied Physics Student Council*, Ann Arbor, MI.  
I work with PhD students to develop understandable and engaging articles about research in the applied physics department. [Example article \[Link\]](#)
- 2014-2015 **President**, *Local Chapter of American Society for Engineering Education*, Ann Arbor, MI.  
Organize and run meetings, ensure that skill workshops have teachers, plan future workshops based on the needs of University of Michigan students.
- 2009-2011 **President**, *Local Chapter of Society of Physics Students*, Troy, NY.  
Organize meetings and social events, foster a community of physics students, act as intermediary between faculty and students, help organize and run engagement events in local area.

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## Professional Memberships

American Association for the Advancement of Science  
American Physical Society  
American Society for Engineering Education  
Materials Research Society  
Society for Social Studies of Science