3559 Burbank Drive
Ann Arbor, MI 48105
732-275-5051
mcala@umich.edu
www.mcallister.science
McAllisterSci
McAllisterSci

Andrew McAllister

Doctorate in Applied Physics, Science Communicator

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: Sept. 2018 — **PhD in Applied Physics**, *University of Michigan*, Ann Arbor, MI.

2012 — **B.S. in Physics**, *Rensselaer Polytechnic Institute*, Troy, NY.
Magna cum laude, dual major in mathematics

Writing and Editing for a General Audience

1. **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.
2. **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]
3. **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.
4. **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 rought 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**, *Ann Arbor, MI*.

- 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.

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

Public Engagement

2018 **Engaging Scientists in Policy and Advocacy**.
Voluteer 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.

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.

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

3559 Burbank Drive
Ann Arbor, MI 48105
732-275-5051
mcala@umich.edu
www.mcallister.science
McAllisterSci
McAllisterSci

American Association for the Advancement of Science
1200 New York Avenue NW
Washington, D.C. 20005

August 6th, 2018

Dear hiring team,

Communicating why science is important, interesting and relevant to society is vital to have continued support for science. By making complex subjects understandable to non-experts, there can be two-way dialogue between the experts and non-experts, facilitating democratic science that is for the public good. I am excited to bring my skills and experiences to the AAAS and help write about the ways that science is a part of everyone's life as a Science News Writer Intern (Requisition ID : 1269). My PhD has given me communicative, technical and social abilities that would be valuable for this position.

Throughout my scientific training, I have sought out experiences to develop and practice my communication skills in various mediums and to various audiences. My experience with the Researchers Expanding Lay-Audience Teaching and Engagement (RELATE) program at the University of Michigan was particularly productive. Over 3 months I worked on crafting messages and narratives, considering different audiences and making visual aids. Ultimately these experiences lead to a YouTube video and a talk at a local bar about my research.

My attached writing samples will show my experience in writing for a broad audience. But I also have editing experiences that speaks to these skills. As the senior editor of the Students of Applied Physics project, where I work with PhD students to develop understandable and engaging articles about research in the applied physics department. These students have various prior experiences writing for a broader audience, and helping them craft their own narratives and get their articles together has been valuable.

A vital part of completing my PhD was learning how to quickly find, read, and see the big picture behind modern research.This skill is valuable as a science news writer as I work to report and understand scientific results quickly in a way that engages a diverse audience. The ability to understand other scientists in writing extends to speaking to scientists in-person. As a computational researcher, I frequently collaborate with other researchers from different fields. Being able to ask questions and understand the science that they are studying is necessary for a fruitful collaboration and would also be relevant to this position.

Over the past year, in my spare time, I have published my writing on science for a general audience at the University of Michigan, Harvard's Science in the News Blog, and on my personal blog. Working on publicizing my blog has also given me an (admittedly small) set of experience with working on social media. Given the opportunity to put my main interest of science writing first, rather than on the side, is what really excites me about finishing my PhD and moving forward with my career. I am excited to discuss my skills and experiences with you and can be reached at mcala@umich.edu or at 732-275-5051.

Sincerely,

Andrew McAllister

Attached: Resume (online), three writing samples (following this letter)