

# 2013 AAAS SCIENCE AND ENGINEERING MASS MEDIA FELLOW

## ELLIS ROBINSON

**DEGREE:** 4<sup>TH</sup> YEAR PHD STUDENT,  
CHEMICAL ENGINEERING  
**SCHOOL:** CARNEGIE MELLON UNIVERSITY  
**SPONSOR:** AAAS  
**MEDIA SITE:** ASPEN PUBLIC RADIO

**Research Focus:** Mixing Interactions of Organic Particulate Matter

**Translation:** I study how different types of organic particles interact with one another in the atmosphere. What types of particles do I mean? One example are those stemming from human activities like diesel combustion or wood-burning (think: dirty tailpipes, smoke, etc.). Another prominent class are secondary particles, which are formed from oxidation chemistry of organic gases in the atmosphere. Take the smell of pine trees: those molecules that are the source of pine tree smell get attacked by oxidants (like ozone) in the atmosphere, and turn into particles ("pine tree particles" are actually a significant global source of organic particulate matter, believe it or not) So, what happens when you have particles from buses or fires in the same air as secondary particles? That's the question I am trying to answer.

### What are your goals for the summer?

Write, write, write (and: record, record, record!--as I will be working in radio). I can't wait to focus on getting better at hooking readers, developing and explaining ideas, and translating science. Being out of the lab for a few months to practice writing---and having an editor---is going to make me a much

better communicator, which was my goal in applying to the AAAS MMF program.

### What are you most excited about?

I am nervous, anxious, and beyond excited to be making something, day in and day out with my name on it.

### Why are you passionate about science communication?

Science is awesome, it's not much more complicated than that for me. I've found that I like talking, writing, and thinking about it's place in our



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pop culture as much as I do "doing it" in the laboratory.

### Who is your favorite science communicator?

Probably Robert Krulwich. He's razor sharp, but is unabashed in asking "why?" and "OK, explain that to me, I didn't get it." Those traits shine in everything he does, and bring you into the fold of his own learning process, which is the key to why Radiolab is so cool.

### Do you have a link to an article you'd like to share?

I make a science podcast --- [www.iwonderpgh.org](http://www.iwonderpgh.org).

### Describe your dream job.

Hah, a question I love to ask others, and cringe when it's asked to me. My dream job is one where I get to discuss ideas about science, the environment, and cities (among other things) with other engaged people every single day. Vague, but hopefully in a good way.

### Tell us about something you do outside of the lab.

My favorite thing to do is bike travel with a group of friends. It's a great way to see the world, exercise, and step outside your normal perspective.

### Anything else you'd like to share?

Favorite state: Ohio. If they exist, I'd love to grab a burrito with someone who eats Chipotle as much as I do.