

2014 AAAS SCIENCE AND ENGINEERING MASS MEDIA FELLOW

KARA MANKE

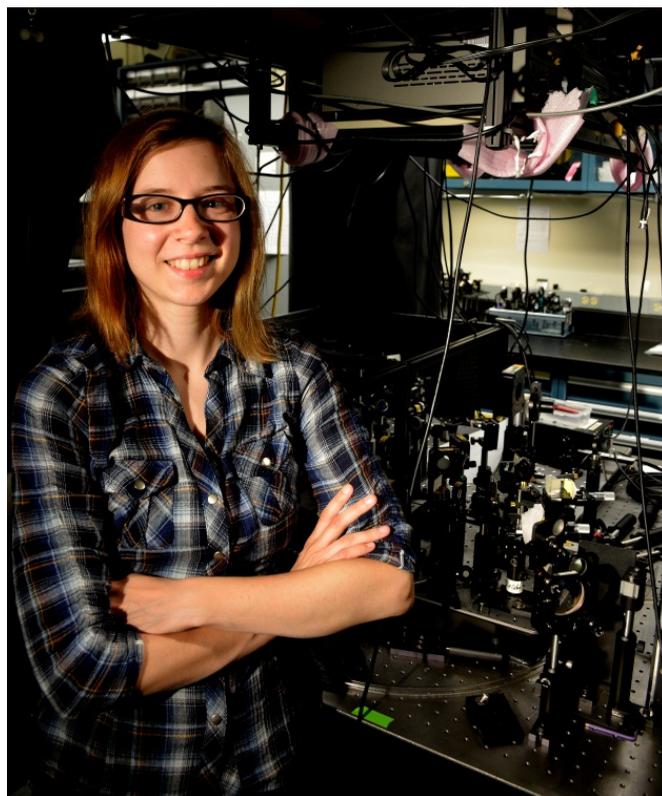
DEGREE: PH.D. CANDIDATE, CHEMISTRY
SCHOOL: MASSACHUSETTS INSTITUTE OF TECHNOLOGY
SPONSOR: AMERICAN CHEMICAL SOCIETY
MEDIA SITE: NATIONAL PUBLIC RADIO

Research Focus: Relaxation dynamics in supercooled liquids

Translation: Did you pour honey on your yogurt or oatmeal this morning? If so, you had the opportunity to observe a supercooled liquid first hand. A supercooled liquid is a liquid that has been cooled below its freezing temperature without forming a solid (the freezing temperature of honey is ~ 110 °F). Like normal liquids, supercooled liquids can move and change their shape; however, they do so at a much slower rate, and the physics underlying their movements is not well understood. In my research, I use very short laser pulses (less than one trillionth of a second long!) to study the motions of supercooled liquids at the molecular level.

What are your goals for the summer?

I want to learn how to transform an interesting idea into a story, and how to tell that story in the most captivating way possible. I hope to do this by writing as much as possible, and absorbing all that I can from the great editors at NPR.



What are you most excited about?

I have been a huge NPR fan since high school – I even listen during the pledge drives. I cannot believe that I will have the opportunity to work alongside the same writers and reporters that I have admired for so many years.

Why are you passionate about science communication?

Writing about science has rekindled my love of the field and my interest in my own research. I also believe that encouraging more scientists to communicate directly with non-scientists will benefit the public's understanding of the field, and will help improve the quality of scientific research by forcing scientists to think more critically about their own work.

Who is your favorite science communicator?

Probably Jad Abumrad and Robert Krulwich from Radiolab. Listening to their show is like having a conversation with a really interesting friend. They make science communication sound effortless.

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

Here is a story I wrote on capturing the wasted light energy in your computer screen:

<http://www.energyfrontier.us/newsletter/201305/designing-displays-recycle-light>

“... encouraging more scientists to communicate directly with non-scientists will benefit the public's understanding of the field, and will help improve the quality of scientific research by forcing scientists to think more critically about their own work.”

Describe your dream job.

I always find myself torn between my two great loves, writing and scientific research. I think my dream job would allow me to do both, and also spend time encouraging other scientists to communicate with the public. Can we just make the day twice as long so I have time for all three careers?

Tell us about something you do outside of the lab.

I love biking so much that I do it year round, even in the middle of the freezing Boston winters. I also foster cats from the local animal shelter and spend way too much time watching animal videos on the internet.

Anything else you'd like to share?

My favorite Bowie song is “A New Career in a New Town,” and I look forward to listening to it when I arrive in DC this summer.