

CSWP & COM Gazette

Vol. 32, No. 1

Spring 2013

Newsletter of the Committee on the Status of Women in Physics & the Committee on Minorities of the American Physical Society

INSIDE

*Guest Editorial:
Defensive Driving
at Work*
1

*Physicists in Science
Education &
Outreach*
1, 4-8

*APS Receives NSF
Grant to Help
Minorities Pursue
PhDs*
2

Blewett Fellowships
9

ORCID
10

*Women Named to
Fellowships, Prizes,
Awards*
11

MGM Awardee
14

*Events at March/April
Meetings*
15

*Bouchet Award
Winner*
16

*Communication Skills
Session*
17

*Women Physicist of
the Month*
17

Guest Editorial: Defensive Driving at Work

Kathy Prestridge, Los Alamos National Laboratory and CSWP Member

When you plan a road trip, you carefully plan your route, where you will stop, what you will see, and you ensure that your vehicle is ready for the trip. You may even load up your phone or gadget with music, books, and podcasts to help make the ride more enjoyable. Commuting to work each day, you know your route, and you watch the behavior of others carefully. If there is road work, you try to get around it, and you are prepared for detours. Even though these course changes are annoying, you take them in stride and are able to get to your destination. So why is it that when faced with an obstacle at work, we often get so discouraged that we give up or let it stop us from achieving our goals? Why would it seem silly to pull your car over and cry because of a roadblock, but seem perfectly reasonable to get extremely upset and frustrated by a similar obstacle at work?

I get angry when I'm driving and I see people talking on the phone, texting, not signaling, weaving, and doing other dangerous or illegal behaviors. I actually make it into a game with my kids, and we guess the distraction and try to confirm it as I am executing passing or other avoidance maneuvers. This serves to relieve my tension, to get us on our way safely, and is a lesson for the kids in their pre-driving years. At work, it is also reasonable to be angry or upset about a bad situation. However, it is not okay to let those legitimate feelings paralyze you so that you cannot take action to help yourself. Although you cannot always get around

the people exhibiting bad behaviors at work, you can make sure that you keep going. In an extreme case, your direct supervisor or close coworker will have a horrible, intolerable behavior. In the best case, your direct supervisor, all of your coworkers, and you, have implicit biases that don't allow people to realize their full potential (Moss-Racusin et al., "Science faculty's subtle gender biases favor male students," Proc. Natl. Acad. Sci., Sept. 17, 2012). A defensive driving metaphor can help: try to avoid the really bad situations and people by carefully choosing your route.

Despite your best efforts, sometimes your route will intersect with a black hole of awfulness. Let's figure out how to deal with the awfulness and achieve our work goals in the same way that we might take a road trip. We must be able to avoid the pitfalls and bad drivers so that we can get to our destination safely and empowered. What are the keys to success? 1) Set a destination; 2) Figure out your route and backup route; 3) Define some rules of the road.

1. Set a Destination

You should have both short-term and long-term career goals. Many of us in research have no problem planning out a project, but when it comes to our career goals, we don't take the time or maybe think that excellent research and publications will make everything else fall into place. I often remind my postdocs that

continued on page 3

Physicists in Science Education & Outreach

By Deanna Ratnikova, APS Women & Education Program Administrator

In the recent Strategic Plan released by APS, the Society expressed its dedication to increasing public appreciation of and excitement about physics and its importance to society. The Society also addressed its commitment to increasing diversity within the physics community.

I believe science outreach is a way towards both of these goals. Science outreach plays a key role in the recruitment of future physicists and it can help excite and engage underrepresented members of the science community at an early age. Outreach can show that

physics is the most basic and fundamental science and that physics leads to great discoveries—discoveries that can change our lives!

This feature showcases five female and/or minority physicists who are striving towards the goals of both increasing appreciation of and excitement about physics and also serving as role models for underrepresented members of the physics community. Their dedication to science education and outreach is inspiring and motivational, and I hope that readers find their stories a source of hope for the bright future of physics.

continued on page 4

Envisioning & Implementing Effective Educational Programs

Stephanie Chasteen



Stephanie Chasteen

Specialization is useful in many careers, but in Stephanie Chasteen's case, diversification has played a key role. Dr. Chasteen works as a consultant and contractor on various projects aimed at improving science education through research, evaluation, writing, and creating educational activities.

While a physics graduate student at the University of California – Santa Cruz, Chasteen started considering a career in science journalism and was awarded a prestigious fellowship with the AAAS Mass Media Science & Engineering Fellows program. She was placed at the science desk at National Public Radio in Washington, DC, and here, Dr. Chasteen notes she “learned the high standards of excellence of national science reporting and developed a deep love for audio production.”

Upon graduation, Chasteen diversified her portfolio even more and took a departure from traditional science journalism by joining the Exploratorium Museum of Science, Art, and Human Perception as a post-doctoral fellow. She created hands-on activities and workshops for K-12 teachers, and the opportunity helped her discover her passion for science education. Her experience in writing was not in vain, however, as she notes “writing is one of the tools I carry in my kit toward creating effective education programs.”

Dr. Chasteen then joined the Science Education Initiative (colorado.edu/sei) at the University of Colorado at Boulder to work on transforming undergraduate science classes using research available on effective science education. Chasteen brought her experience in journalism to the physics education research group creating videos and podcasts for teachers about effective educational techniques, and in return, she received training in the methods and literature of science education.

Today, Dr. Chasteen still works with the Science Education Initiative as their outreach director, helping to spread the word through videos and workshops about research-based teaching techniques. She has also started her own consulting business (www.sciencegeekgirl.com). Through her business, she works on a variety of projects including directing videos to highlight the best use of the PhET Interactive Simulations (phet.colorado.edu/), reviewing K-12 student activity booklets, serving as an external evaluator for educational programs, and writing press releases about physics education research results to promote the field in the popular media.

She notes that her networking and volunteer work helped get her to this point, and for those interested in getting involved in science education and outreach, she advises them to approach networking “with a sense of genuine curiosity and interest in people.” Opportunities such as presenting at a science book club, auditing a writing course, and judging science fairs have led to job opportunities and helped shaped Chasteen's career path.

Chasteen also credits her interest in diverse areas with leading her to create the specialization that she is now known for within the physics education research community. She notes that she was never sure of where her interests would lead her, but she just continued to follow what sparked her passion. “I think it's so important to explore the things that we find fascinating, because that exploration can lead to great things.” ■

APS Physics Outreach Grants are designed to foster innovative ideas and new approaches, particularly those that have potential to lead to sustained activities.

The deadline for applying is in early January.

www.aps.org/programs/outreach/

Connect with
Women and Minority Physicists

Find us on **LinkedIn!**
 Search: APS Physics–Women in Physics and Minorities in Physics

Sign up for
the Women in Physics Email List!
www.aps.org/programs/women/email-lists/

