FORUM ON GRADUATE STUDENT AFFAIRS

AMERICAN PHYSICAL SOCIETY

The APS Forum on Graduate Student Affairs encourages a free exchange of ideas among graduate students and the greater scientific community by providing opportunities for meetings, electronic discussion, and access to a permanent archive of member ideas and programs.

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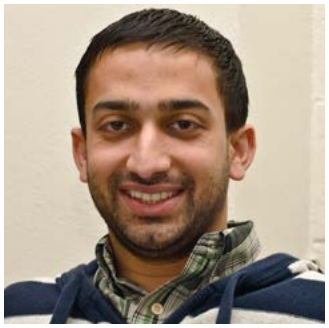
The articles in this issue represent the views of the Forum on Graduate Student Affairs (FGSA) and are not necessarily those of individual FGSA members or the APS.

NEWSLETTER
DECEMBER 2012



Greetings from the Editor

Vikram Singh Prasher

Dear FGSA members,

As we approach the final weeks of 2012, I can confidently say that it has been a remarkable year for the FGSA; we showed strong presence at various APS sponsored meetings throughout the year, as well as worked hand-in-hand with associated units. Most importantly, we reached out to the extended graduate community and expanded our status—gaining more members and therefore increasing awareness of the FGSA and its message.

As we all know, the FGSA provides numerous opportunities for graduate students- many of which are highlighted in this issue. Ranging from tips on career prep that can be applied to any graduate concentration to specific examples of post graduate occupational life, the FGSA newsletter provides unique insights pertinent to all of its diverse members. In particular, this edition discusses the experiences shared by a Congressional Fellow as well as a Mass Media Fellow that deal explicitly with science policy and its outreach.

On this note, I would like to extend a special thanks to Dr. Kate Kirby, executive officer of the APS. Dr. Kirby graciously agreed to share some of her personal experiences in the field, ranging from graduate life to the present. I appreciate her time and willingness to participate in the interview, and I am sure that our members will find these accounts both interesting and valuable as they move forward in their career paths. Messages like hers, as well as those made by all other contributors, are invaluable to this edition of the FGSA newsletter and I would like to thank everyone that participated and helped to make it great.

Finally, to update all of our members since the previous issue, I would like to conclude by mentioning that our Facebook page has received an overwhelming response from all over the globe reaching students as far away as Asia. As an added benefit to graduate students, we have begun posting a variety of physics jobs on this page to improve access to physics employment opportunities for FGSA memberships.

All in all, I believe that we have had a highly productive year, one that we can build off of to make our 2013 initiatives that much stronger. Here is hoping that you all have a restful and rejuvenating holiday, and a great start to the New Year! Cheers!

Thank you and kind regards.

Vikram Singh Prasher
Newsletter Editor and Member-at-Large
APS Forum on Graduate Student Affairs
HI-SPIN Research Lab
University of Massachusetts Lowell
Lowell, MA 01854
Tel: 978-934-4373, Fax: 978-934-3068

Opportunities for Involvement in the American Physical Society

Kyler Kuehn

If you receive the FGSA Newsletter, that means you are already involved on some level with the APS in general, and with the Forum on Graduate Student Affairs in particular. But there are many different ways to participate in the physics community--ways that can both serve your colleagues and advance your career. I have been involved in the Forum on Graduate Student Affairs and other aspects of the APS for a decade, so I will share some of what I have done for the APS, along with how that involvement has helped others and myself.

My initial involvement in FGSA was through participation in the Canada-America-Mexico (CAM) Physics Graduate Student Conference in 2003. CAM is a conference intended for (and organized by) graduate students, with the goal of bringing together early-career physicists from the three participating countries. After attending this conference and seeing how much benefit it could be to my own budding career, I decided to serve on the organizing committees for subsequent Conferences. After receiving my Ph.D., I also "consulted" on later Conferences, and worked to provide supplemental funding to CAM from my employer. When that funding was approved, I then participated as a recruiter at CAM for that employer--certainly a win/win situation for all the individuals and organizations involved!

Around the time I was finishing grad school, I also moved on from executive positions in FGSA to the APS Committee on International Freedom of Scientists (CIFS). This group monitors potential human rights violations of scientists throughout the world, and intervenes on behalf of those who are mistreated by their governments or other entities. While CIFS supports human rights for all scientists, the presence of a former FGSA Executive Board member on the Committee allowed CIFS to develop a special working relationship with FGSA that was particularly beneficial when situations arose involving the potential violation of the human rights of students. For example, CIFS has participated in dialogue with the FGSA on the topic of monitoring the rights of Palestinian students who have been prevented from furthering their education due to Israeli-imposed travel restrictions. CIFS and FGSA have also jointly advocated on behalf of Israeli students who were prevented from participating in international academic activities due to other countries' boycotts of Israel. Additionally, CIFS and FGSA together have kept a close eye on Omid Kokabee, a graduate student at the University of Texas who was imprisoned during a visit to Iran. CIFS also advised FGSA as the latter was developing a "Best Practices for Graduate Programs" document, particularly with regard to the goal of preventing international students from (intentionally or unintentionally) violating immigration visa or export restrictions in the course of their academic research at US universities.

Though I was primarily motivated by the benefit these activities provided to other scientists, my involvement in APS activities through both the FGSA and CIFS has also significantly benefitted my own career. The CAM Conferences gave me the opportunity to present my Ph.D. research in a low-stress setting, where I was surrounded by my graduate student peers rather than a potentially more intimidating audience of faculty and senior researchers. The opportunities for networking at the Conferences also led to many professional contacts with more established senior scientists, some of whom have been in a position to write letters of recommendation for me or offer other career advice as I applied for postdocs or even tenure-track and permanent research positions. And I continue to interact professionally with former FGSA members I met nearly a decade ago at the first CAM Conference. Some of these colleagues have been research collaborators, while others have offered valuable insight into the choices I have faced as new employment opportunities have arisen. For example, one friend and colleague was a summer student many years earlier for a researcher who recently wanted to hire me as a postdoc, so she could tell me all about what it was like to work for this person. I have also used my organizational experience honed during my time in FGSA to start an "Early Career Scientists" group within my own large international research collaboration, which has increased my network of professional contacts even more.

For those of you seeking ways to participate further, the APS Forum on Graduate Student Affairs is a great place to start, and can provide opportunities to explore other activities that your professional society undertakes. I encourage you to pick a topic that interests you and get involved! Again to use my own experience as an example, if you want to become more involved with the Committee on International Freedom of Scientists, start by exploring their website:

http://www.aps.org/about/governance/committees/cifs/index.cfm

They offer an email listserv that will allow you to keep informed on the Committee's current activities and other ways for you to participate (including spreading the word about CIFS). And every year, the Committee seeks new members to replace those whose time on the Committee has ended. At the time I joined, I was the youngest member of CIFS ever; perhaps you can be the newest, and youngest, CIFS member in the coming years! Even if the area of

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"Political" Science: aka, What I did on my science "vacation"

Laura Berzak Hopkins

In the interest of full disclosure, this article's title isn't entirely accurate – by "vacation", I actually mean my first position as a newly-minted Ph.D., but the transition was certainly as big a change as what the grade school essay of a similar title was meant to describe. I like to joke that within a month's time I transitioned from spending the day operating high current, pulsed power supplies to operating my Blackberry. This isn't exactly the typical change when graduate school is at last complete, but thanks to the unique opportunity provided by APS, I moved from the Princeton Plasma Physics Laboratory to Washington, DC as a Congressional Science Fellow. During this transition, I received a range of advice—both requested and wholly unsolicited. While I am grateful to my graduate advisors who were completely supportive, I also heard comments such as "well, if you go to DC, I hope you realize this is the end of your research career." Well, I'm happy to report that while I relished every moment of my year and a half in DC, I am currently a member of the research staff at Lawrence Livermore National Laboratory. It turns out that serving as a scientific advisor in Congress did not, in fact, herald the end of my research career.

Approximately thirty scientists sponsored by various scientific societies (including APS) travel each year from their laboratories and offices to Washington, DC for an extensive orientation followed by a deep dive into life as a Congressional staff member on "the Hill". Congressional Science Fellows share their scientific knowledge and ability to find answers and solve problems with a range of offices for Democratic and Republican members of Congress in the House of Representatives and the Senate. The daily tasks of a Congressional staffer are decidedly different than those of a scientist, and my time as a Congressional Fellow ran the gamut of tedious to fascinating. Job responsibilities ranged from responding to at-times peculiar constituent inquiries and meeting with interest groups of all sorts to drafting legislative solutions to society's problems. I have to admit that writing random memoranda to satisfy the quickly forgotten whims of a rude member of Congress did not exactly thrill me. However, observing federal budget discussions from the inside during the debt ceiling crisis was eye-opening, and assisting with drafting comprehensive energy legislation was inspiring.

Accepting the risk of sounding melodramatic, the Congressional Science Fellowship is truly an unparalleled opportunity, and I am thankful to APS for providing this opportunity to me. The American Association for the Advancement of Science (AAAS), the society under which the Congressional Fellowship is organized, uses the statistic of "1/3, 1/3, 1/3"—approximately 1/3 of fellows stay on the Hill in a political capacity, 1/3 of Congressional Fellows return to their previous positions/career, and the final 1/3 use the fellowship as a career transition point. I suppose I fall somewhere in the middle; while I have returned to research, I now plan to stay involved with policy issues and to steadily grow that involvement.

One of the biggest "take home" messages I carried back from the Hill is that there is absolutely a role for scientists in each aspect of the political system; in fact, we as a society need more scientists to take part in politics, particularly in areas of science policy and policy for science. Policy for science is the perhaps more familiar concept and includes all-too-familiar laboratory budgets and government grants. Science policy, though, is policy which has significant technical and scientific aspects, such as waste management regulations or arms control treaties. These are areas where both technical expertise and research problem-solving skills are exceptionally important and where more scientists would clearly be beneficial.

However, as scientists, we are too frequently caught up with the grand and minutiae of our research problems and too often feel like politics are remote, irrelevant, or boring. The truth, though, is that politics and policy affect all of us both as citizens and as scientists, and it is our right and our responsibility to step up to the challenge and demonstrate that scientists have a voice and perspective. We as scientists can and should contribute to ongoing political discussions; there is no better time than now to speak up and apply our expertise to the policy issues at hand.

We as scientists also must recognize the privilege and responsibility of utilizing federal grants (i.e., tax dollars) to pursue our research. Nearly every research program is indebted to all U.S. citizens for the contribution of their hard-earned tax dollars. We need to better reflect our recognition of this fact, and we need to make more effort to communicate to the general public what we do, how we do it, why we bother to do it, and why people should care. The public outreach component of grants is a too-oft overlooked aspect, and let's admit it – we frequently only do the bare minimum. If we want the general public to be excited about and support science, we must make the effort to describe why what we're doing is exciting with far-reaching implications and applications. As a Congressional staff member, I was pleasantly surprised to see how many people from various backgrounds were motivated to learn about science and eager to be able to ask a scientist their questions. They were genuinely excited to hear scientific research patiently described in relatable terms, and I was more than happy to try to fill this role.

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From Benchtop to Press Conference: The AAAS Mass Media Fellowship

Meeri Kim

My editor stormed into my office in a huff. The first rapid at-home HIV test had just been approved for over-the-counter sales, he said, and could I cover the story? And oh by the way, the company is holding a teleconference in 10 minutes.

As the teleconference began, my neck started to cramp as I held the phone with my shoulder and typed notes frantically. The first question came from a reporter at CNN. Followed by someone from the Wall Street Journal. Then ABC News. Don't get intimidated, I told myself. I took a deep breath and pressed *1 to signal that I had a question.

"Okay, now next up we have a question from Meeri Kim of the Philadelphia Inquirer," the moderator announced. "Meeri?"

That moment has frozen itself in my memory. Who would guess that, among reporters from the nation's most respected news outlets, a lowly physics graduate student would be speaking at a breaking health news teleconference? How did this happen, you ask?

Late last year, I had enough luck to stumble upon the American Association for the Advancement of Science's Mass Media Science & Engineering Fellowship. Although the AAAS Science & Technology Policy Fellowship Program is larger and more widely known, I strongly urge physics grad students to explore what the mass media program has to offer. Graduate and post-graduate level students are placed at such prominent organizations as National Public Radio, Scientific American, and the Chicago Tribune where they cover science-related news. Opportunities exist for invaluable connections and portfolio material, not to mention truly unforgettable experiences and a wealth of journalism knowledge.

About four months after I applied, I received a call from the AAAS program director saying I had been placed at the Philadelphia Inquirer. I felt an overwhelming sense of excitement, but also anxiety since this marked my first time working in print journalism. Prior to the Inquirer, I had worked for a year at WHYY-TV, a PBS affiliate in Philadelphia, on a show about local art and food. Through that internship, I picked up both video production skills (where surprisingly my experimental physics background helped me learn new technology and software quickly) and a love for the complex process of creating video.

So for the fellowship, I mostly looked forward to creating web videos, but also to accept the challenge of writing newspaper stories. Like most science grad students, I hadn't written much other than academic articles during the last several years of my life, so I walked into the Inquirer newsroom fresh.

And there I found a wonderful mentor in my editor, Karl Stark. Karl has shaped and improved my writing so much, as well as my view of what makes a story newsworthy. Despite his forever crazy schedule, he always had time to sit with me and thoroughly go over my stories, edit-by-edit.

By summer's end, my portfolio contained an additional 20 print articles and 3 web videos from a major metropolitan newspaper. I had found a new mentor in Karl, who continues to give me freelance assignments and wise words of guidance to this day. The journalists I met this summer – the other 12 AAAS fellows as well as the established Inquirer staff reporters – I hope will serve as a long-lasting network of mutual support.

The AAAS Mass Media Fellowship allowed me to gain firsthand experience in science journalism, and most importantly, the confidence to pursue it as a career. ■

This article was written in November 2012 by Meeri N. Kim, a Ph.D. candidate in Physics at the University of Pennsylvania who was a 2012 AAAS Mass Media Science & Engineering Fellow. You can contact Meeri at meeri@alumni.upenn.edu.

Preparing Yourself for Career Success

Christine Kelly

Graduate students in physical sciences face more challenges finding employment than did their advisors, and even compared to students who graduated five to ten years ago. There are fewer positions in academe and government labs and industry jobs in research and development have declined. Many are discovering too late that their PhD program did not offer the professional development opportunities they need to be well prepared for career options other than the professoriate. As a result, graduate students find it challenging to find information about how to prepare for a broad range of career options. The best way to ensure career success is to take charge of your career development by creating a solid plan. A career plan has four basic steps that require setting goals and priorities and reassessing as those goals and priorities shift throughout your program and career.

Assess your skills

Make a list of what you know how to do, identify your strengths and weaknesses and be realistic. I've met many PhD's who tend to undervalue many of their skills because they are not an "expert" in every area or because they really haven't thought about all that's involved in what they do. For example, many describe teaching in terms of grading papers and writing exam questions, rather than exploring the communication, presentation, and mentoring skills they developed as a teaching assistant. Once you have a solid understanding of your skills, you need to identify your areas for skill development. In conversations I've had with employers they say PhDs commonly are lacking in business acumen and "soft" skills, such as interpersonal communication, team work, leadership/management and oral presentation skills. A PhD program is not designed to help develop skills in these areas, and due to the often solitary nature of your research, your soft skills may even degrade as you go through your program. You can take initiative and develop your skills by becoming more involved on campus. I've worked with students who were on the finance committee of the graduate student association which helped them develop some basic business and bookkeeping skills. You can also start reading business magazines, newspapers and websites, to become more familiar with business principles and terminology. Or join a committee that focuses on event planning and outreach to develop your communication skills. If you look around, you can find ways to build your skills.

Identify careers of interest

As you are completing your skills assessment, start thinking about how your skills connect with different careers. If you don't see any connections go to http://www.onetonline.org/ click on advanced search, and you can search career options by abilities, interests, knowledge and skills. Or talk to people you know, tell them what skills you want to use on the job and ask them what careers come to mind. See what information your department has about past graduates. Once you have some occupations of interest, find some resources to learn more. "Onet" is a career dictionary, so you can start there. I'd also suggest finding people in your career(s) of interest and talking to them. Informational interviews with people in target careers can provide a more realistic picture of the career and allow you to meet and interact with people in that field. It is an excellent way to discover what a job is really like and to develop valuable networking connections. And you'll learn how to effectively market yourself when applying to jobs in that field. You may also hear about some of the stereotypes people outside of academe have of PhD's: we don't know how to work with others, we'll correct everyone's grammar, and we're hard to manage. The reality is that not everyone sees the value of having a PhD, but knowing these perceptions will provide you with valuable information you can use to counter these objections throughout your job search process. LinkedIn is a great resource for finding people, so set up a profile and learn how to use it effectively. Finally, if you meet someone you think would make a good mentor, ask her or him. Someone who is in the profession can help you navigate the territory. When you're plotting a new path, it's always helpful to have a guide.

Analyze your career readiness

Once you've identified viable career options, reassess your skills and again identify areas for skill development. Earlier I mentioned ways you can build skills at your university, but you may need to go outside. Industry tends to value experience over education. Internships will give you the business skills employers want and will show you know how to operate effectively in a non-academic environment. It will also give you an opportunity to try out the workplace in a less risky way. Think about both the tasks you want to do and the environment in which you'd like to perform them. As you are contemplating your move to a non academic environment it may be helpful to consider what aspects of the academic environment, you want or don't want in your career. For example, the number one reason I hear faculty say their career is the best is because they're their own boss, but is that what you want. Many internships lead to offers of full time employment, but even if you don't begin your career at the place you did your internship, you'll have a much easier time landing a job if you've had an internship.

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Preparing for Career Success

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Prepare for your job hunt

Turn your CV into a resume, or a hybrid resume/CV depending on the job and based on what you saw and heard in your informational interviews. Ask your new network for feedback on your resume. The biggest mistake I see in graduate student resumes is they still look too much like a CV and the content is still too academic. You have to learn the language of the profession you want to enter and you need to use that language in your resumes, cover letters and interviews. Being a good interviewee requires preparation and practice. There are many valuable resources on the web to help you prepare for common interview questions. Be careful of advice to answer the question about your weaknesses by taking a strength and turning it into a weakness. The most popular suggestion is to say you work too hard and are often too demanding of yourself and others—a perfectionist. If you say that, I guarantee the interviewer will roll her or his eyes. The point of the question is to discover if you are self-reflective, so giving a canned answer is not useful. See if your Career Center offers mock interviews. It will give you the opportunity to practice and get feedback about content and performance. And when you are interviewing, remember that they already like you, and they want you to be successful. The interview is the first step in building a relationship with your future co-workers. The main question any interviewer is really trying to answer is, do I want to spend at least eight hours a day working with you? And that is the question you should be thinking about too: is this the right place for you? Finally, join an appropriate professional association. Every field has one and by attending their meetings, you'll increase your networking contacts. They also tend to have specialized job boards which will make your online search process easier.

One last piece of advice, remember to set long term goals. I've met too many graduate students who spent their graduate careers focused on getting the degree and failing to plan for the next step. The degree is only one step along your career path, as will be your first job after graduate school. So once in that job, revise your career plan and begin preparing for the next job. Professional development is not a one time event, it is a life-long process. Your career success begins with you, so take the first step today and create a career plan. ■

This article was written by by Christine Kelly, PhD. She is currently a Career Consultant for Graduate Students at UC Irvine Career Center.

Updates from FGSA

Laura Boon

I want to start by congratulating our newly elected FGSA Executive Committee Members. They are:

Chair-Elect: Brock Russell, *University of Maryland*

Secretary: Katie Davis, *Purdue University*

International Affairs Officer: Maria Longobardi, *University of Geneva*

Members-at-large: Alexis Knaub, *Boston University*; Kelly Reidy, *Kent State University*

Thank you to everyone who was nominated and voted.

Abstracts are due and sessions are planned for the APS March and April meetings. As Chair of the Program Committee I have had the opportunity to be involved in the planning of various events for graduate students taking place at each conference. The main focus of the committee has been to organize the FGSA sponsored invited sessions, and work with the Membership Department to plan the student reception at each meeting. In addition to the invited sessions and reception there will be events planned by other groups with the focus on graduate students. To get more information on these events be sure to check out the Special Edition newsletter available at the meeting.

For the March meeting we have invited three speakers and three panelists to talk about their experience and journey in government careers as scientists in the session 'Physics Careers in Government and Science Policy'. The invited speakers include; John Looney, Chairman on the Sustainable Energy Technologies Department at Brookhaven National Laboratory, Laura Berzak Hopkins 2010-2011 APS Congressional Fellow and APS Director of International Affairs, Amy Flatten. The session will include a panel discussion to allow audience members to ask questions not addressed in the invited talks. In addition the Membership Department has planned a reception for graduate students. At the reception our travel award winners will be recognized, and you will have a chance to meet some of the FGSA executive board.

For the April meeting the Program Committee teamed up with the Forum on International Physics (FIP) to bring you a joint invited session called 'Science Diplomacy'. From multiple perspectives

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Our Students and Postdocs are the future of Physics and of the APS!

Dr. Kate Kirby

This interview with Dr Kate Kirby, executive officer of the APS, was conducted via email by Vikram S. Prasher.

VIKRAM Dr. Kirby, from graduate student to post doctoral and beyond, you must have had some interesting academic experiences and challenges throughout your journey. Are there any that stand out that you feel might benefit or inspire our members?

KATE I have certainly had a number of challenges in my career, as well as exceptional good fortune. The biggest challenge occurred early on. My first child was born during my second year in graduate school. This was well before "the women's movement" and before the availability of good day care. My husband was a 3rd-year medical student at the time and therefore was not able to be very helpful with child care. I was able to piece together some child care situations, but it was not totally satisfactory. I was just fortunate that my graduate advisor was very supportive, AND that I had a 3-year NASA traineeship, awarded by the University of Chicago. So I effectively had my own money—$300/month—which we used for rent, food and babysitting expenses! I was able to finish my PhD in four and a half years and to obtain an excellent postdoctoral position at the Harvard College Observatory. This experience showed me early on the importance of learning to juggle the demands of family (child care) and research. This was a very valuable lesson, as I went on to have three more children (for a total of 4!) later in my career. Also, the importance of having a supportive research advisor should not be underestimated!

VIKRAM For a long while you served as Associate Director at the Harvard-Smithsonian Center for Astrophysics as well as Director of the Institute for Theoretical Atomic, Molecular and Optical Physics. Do you feel your PhD in Physics has benefited you in an executive/managerial position? How so?

KATE My PhD in Chemical Physics certainly did not train me for an executive or management position. However, it gave me outstanding opportunities to participate in team efforts and to step into various leadership roles. These experiences allowed me to develop managerial skills.

VIKRAM You have had a long career with APS, from serving on various committees to finally excelling to Executive Officer. What prompted you to first become involved with APS? Did you find the transition from academia difficult?

KATE: My first experience with APS was as a postdoc, attending a divisional meeting to give a short talk. I found the Division of Atomic, Molecular, and Optical Physics (DAMOP, formerly DEAP) to be a very welcoming community, and my research in molecular structure, spectroscopy, and atomic and molecular collision processes in astrophysics was very much aligned with the topical areas of interest in the division, at that time. Back then I probably stood out as one of the few women in the field, and as the collective consciousness got raised regarding the underrepresentation of women in physics, I had opportunities to participate in organizing meetings, sorting abstracts, etc. These activities, done well, give one recognition in the community as someone who has good judgment, works hard, and takes responsibility. My first major "job" as a volunteer in APS was as Secretary/Treasurer of DAMOP. This position requires lots of work, but gives one excellent recognition within the leadership of a unit. It increases one's network of colleagues beyond just those who are working in the same research areas.

My transition to APS from the academic environment of the Harvard-Smithsonian Center for Astrophysics has been facilitated in several ways: first, APS is an organization with a large academic membership, so I feel very comfortable within the community; and, second, I knew the organization well, having been an active volunteer within APS—most recently, in 2003 - 2006, serving on the APS Council and then elected to the Executive Board.

VIKRAM I read that your research interests vary from theoretical atomic and molecular physics to astrophysics. Do you still find time to keep in touch with these interests? Do you sometimes miss the lab and academic atmosphere?

KATE I certainly try to read a lot in order to keep in touch with what is going on in atomic and molecular physics and astrophysics. And I still attend DAMOP meetings as well. But as Executive Officer there is just no time to be active in research. And yes, I do miss it on occasion. But I find that there are so many challenges in helping to lead the APS that there is very little time for regrets!

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Interview with Dr. Kirby

VIKRAM: What do you see as the challenges and opportunities for APS in the next four to six years ?

KATE: The strategic planning process that we went through during 2011 resulted in a road-map for 2013-2017, which outlines challenge, opportunities, and goals for the organization. One of the big challenges is to keep our publishing enterprise strong and financially healthy. Our journals not only serve the physics community by disseminating the best physics research, but in addition the small excess of revenue over costs in our publishing enterprise helps to support many of the good things in education and outreach, for instance, that APS does for the physics community and society at large. The Open Access movement, to make all journal articles describing research supported by tax-payer money freely available, poses a definite challenge for APS's financial model of publishing, which is based on institutional subscriptions.

Another challenge (which also means an "opportunity") is to serve physicists in industry much more effectively, and to raise the profile of industrial physics within APS. Making our industrial physics community much more visible to graduate students and postdocs is very important, as most physics PhD recipients do go on to work in the industrial and technology sector.

VIKRAM: Currently, the APS is involved in a range of initiatives. Are there any specific initiatives you would like to share that directly involve the graduate students?

KATE: One of our high-priority areas resulting from our strategic plan discussions is serving our early-career physicists better. We have established an Early-Career Physicist Task Force and they are charged with developing some recommendations that we can act on. Our students and postdocs are the future of physics and of the APS, and we need to identify ways to help them learn about career options and take their place within the broader physics enterprise. This could involve enabling more participation of Early-Career Physicists in the activities and governance of the APS, helping to provide more career and job information. Many members of the Early-Career Physicist Task Force have been in the leadership of FGSA, so I think that FGSA concerns will be reflected in the recommendations

VIKRAM: The FGSA is only a small percentage of APS. Do you feel there is anything in particular FGSA could be doing to more greatly benefit the APS as a whole?

KATE: I hope that FGSA will play an integral role in helping to implement recommendations that come from the Early-Career Physicist Task Force. I look forward to working with the FGSA community in the future.

VIKRAM: As a graduate student myself, I feel the most beneficial question I could ask would be is there any advice you feel would be advantageous to graduate students as they draw ever closer to completing their journey?

KATE: I think one of the most valuable activities you can engage in as a graduate student (beyond doing outstanding research and writing a great thesis!) is networking—i.e. increasing the circle of physicists (or scientists in general) whom you know and who are aware of your work and your interests. Building your list of contacts allows you to become aware of many more opportunities and to broaden your horizons. It is hard to appreciate when you are young how valuable your connections from graduate school can be—even decades later. Becoming involved in APS activities is a natural way to increase your connections beyond just your own institution or research area. ■

Opportunities for Involvement

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human rights is not your primary passion, many other APS Units have (or want to have) student representatives on their executive committees, while others can benefit from young, enthusiastic, and energetic participants even among their more general membership. The APS website should provide you with all the information you need to get started. I sincerely hope that many more of you become involved in the APS for the benefit of the Society, your colleagues, and yourself. ■

This article is written by Kyler Kuehn (Ph.D). He is a Postdoctoral Researcher in High Energy Physics Division at Argonne National Laboratory. You can contact Kyler at kkuehn@anl.gov.

Updates from FGSA

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the invited speakers will discuss the role of science diplomacy. The speakers include Marco A. Raupp the Minister of Science and Technology of Brazil, Nicholas Suntzeff, TAMU and State Department and William Colglazier the Science and Technology Adviser to the Secretary of State. The details are still being worked out for a Career Panel and Networking Session, so be sure to check out the Special Edition Newsletter available at the conference for more information.

Thanks to the help from the entire program committee, Hamilton Carter, Megan, Comins, Abhisek Kumar, Hassan Masoud, and Vikram Prasher. We look forward to seeing everyone at the APS March and April Meeting. ■

Message from the APS Membership Department

Trish Lettieri

By the Numbers

Membership growth continues in 2012 as it appears APS will once again be over 50,000 members at the end of the year when official counts are taken. All membership category totals reflected growth last year, which hadn't happened in over 10 years. APS has over 14,000 student members with almost 80% of those listed as Graduate Students. Of that student population, there are over 4,600 who are also FGSA members.

APS Task Force on Early Career Physicists

The 2013-2017 APS Strategic Plan includes the formation of a Task Force on Early Career Physicists. There is a strong FGSA connection with the recently formed Task Force with four current and past officers participating. Brad Conrad, Assistant Professor at Appalachian State, is chairing the group that includes Megan Comins, 2012 Past FGSA Chair, Ambur Stuver, Past FGSA Chair and APS Councillor, and Meghan Anzelc, Past FGSA Chair. The charge to the Task Force is the following:

The APS Task Force on Early-Career Physicists is charged with identifying opportunities for APS to serve more effectively physicists in the early stages of their careers. Focusing on physicists in graduate school, postdoctoral appointments and first professional jobs, the Task Force should examine the needs of this cohort for career information, job and internship postings, networking opportunities, and suggest additional ways to foster this member segment's involvement with the APS. The objective is to help early-career physicists take their place in the physics enterprise, to facilitate stronger connections of this group to the APS physics community, and to encourage greater engagement of these members as volunteers.

The Task Force met in College Park on Monday, October 15th. Three areas were identified for further discussion and subcommittees will work on proposals to address improved services and communication. These areas include possible graduate student/early career chapters, meeting enhancements and looking at the physics culture to find ways to keep physicists engaged with APS no matter what career path is chosen. If you have any comments or feedback regarding the Task Force, please email me at lettieri@aps.org.

Membership Benefit Spotlight

Funding Opportunities – APS and its Units have worked to create opportunities that help fund student research and travel to meetings. These awards and funding opportunities strive to recognize exceptional young scientist and promote their work and dedication. For more information, go to http://www.aps.org/membership/student.cfm and click on the "Physics in Your Future" document on the lower right of the page.

APS Weekly Newsbrief – Members may opt in to receive a weekly email that highlights stories from assorted media outlets along with convenient links to Physical Review and APS Meeting Abstracts where possible. For more information and to sign up, visit http://www.aps.org/membership/services/newsbrief.cfm. Please note that you will need your APS member username and password to opt in for the Newsbrief.

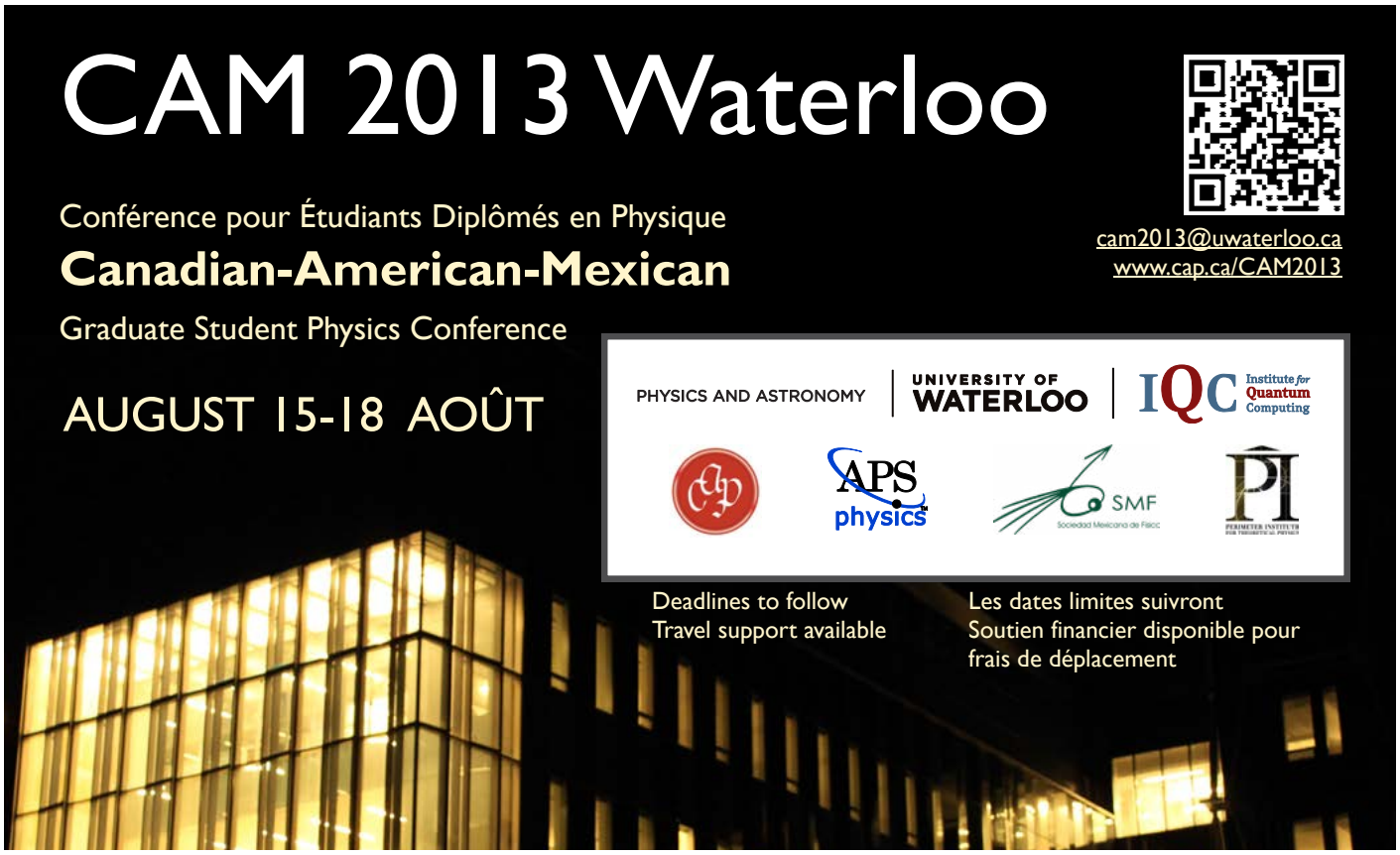
APS Careers Website – There are a number of resources available on the APS Careers Website at http://www.aps.org/careers/index.cfm. There is a physics job center, listing of meeting & networking events, statistics and information on upcoming and archived webinars. Explore the options today!

APS Meetings – Many of the APS National, Divisional and Section meetings are coming soon. Students and Early Career/Post-doc who are members are usually eligible for significant registration discounts. There are also a number of activities focused on networking and career assistance at these meetings.

The APS Meetings Calendar is available at http://www.aps.org/meetings/calendar.cfm.

If you have any questions regarding APS Membership and benefits, please contact me, Trish Lettieri, *APS Director of Membership,* lettieri@aps.org. ■

CAM 2013



"Political Science"

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Inspired by these experiences as a Congressional Fellow, I have founded a science outreach project called Why-Sci. Through our website, www.Why-Sci.com, we seek to increase and improve communication between scientists and the public. We are pursuing this goal by collecting and publishing research "snippets" – brief responses to four basic questions about the what/how/why of a research project accompanied by one associated image. These "snippets" are gathered on the Why-Sci website and presented in an approachable and easily searchable manner. In doing so, Why-Sci aims to provide an outlet for scientists to gain experience communicating their research to the public and to build a venue where non-scientists can learn about and gain an appreciation for scientific research.

I would encourage you to visit our site and submit a research snippet; share your research! Each small step we take as scientists can and will make a significant difference toward bringing science to the public and demonstrating why what we do is important, valuable, and a good investment for our country.

My experience as a Congressional Fellow was a truly unique learning opportunity. I certainly better understand and appreciate how our political system operates, for better or worse. Moreover, I've seen that we as scientists can and should take a more active role both in informing policy decisions and in developing new policy. Whatever role you decide to take, from running for Congress to writing scientific news articles for local publications, we have important contributions to make both inside and outside the laboratory, and it's high time that we stand up and show it. ■

This article was written by Laura Berzak Hopkins. She is currently a physicist at Lawrence Livermore National Laboratory, where her research focuses on inertial confinement fusion. She received her Ph.D. in Plasma Physics from Princeton University in 2010, and from 2010-2011, she held an American Physical Society Congressional Science Fellowship.

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NEWSLETTER

DECEMBER 2012

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