

Panel on Public Affairs Meeting
October 7, 2011
529 14th Street, NW, Suite 1050, Washington DC

Members present:

R. Socolow, J. Dahlburg
W. Barletta, J. Davis, R. Falcone, A. Falk, F. Houle, R. Jaffe, G. Long, J. Onuchic, R. Rosner
(via phone), K. Schwab, R. Schwitters, J. Trebes, M. Turner

Guests:

Monica Plisch, Amy Flatten

Advisors/Staff present:

R. Byer, K. Cole, K. Kirby, J. Russo, F. Slakey

Members Absent:

B. Barish, V. Ehlers, M. Gunner, L. Krauss, P. Looney, S. Seestrom, E. Ulrich

Call to Order

J. Dahlburg called the meeting to order at 8:15 AM.

Welcome, Introductions, & Approval of Minutes

J. Dahlburg welcomed everyone and walked through the June minutes. She asked for comments.

Action: R. Socolow moved to approve the minutes of the June 2011 POPA meeting, as presented. W. Barletta seconded the motion.

The motion to approve the minutes passed unanimously.

Study Proposal Template - Discussion

J. Dahlburg began the discussion by laying out the two items that need to be addressed: (1) defining what a POPA Study is and (2) agreeing on the template we should use for all proposed study submissions. She introduced the draft "Study Proposal Template" and outlined the information that should be included in any study proposal brought before POPA. The response to the template was positive. It was agreed that a clear definition of what constitutes a POPA Study is needed. J. Dahlburg suggested that M. Turner continue to analyze what differentiates a POPA Study/Report from an APS Study/Report for presentation at our next meeting. She asked that a small, ad hoc committee of other POPA members collaborate to help him.

Commentary: M. Turner asked where we should include the approval process for a POPA Report. J. Dahlburg thought it should be included as part of the template. M. Turner also asked where we should include information about how POPA Reports are used to influence Congress. F. Slakey suggested that, wherever we include this

information, we should say “influencing policy,” not “Congress.” R. Socolow suggested the ad hoc committee look at defining the audience for each type of study/report and addressing how each is funded. F. Slakey reminded the group that the standard POPA contribution is \$25K. In the past, we have searched outside of POPA to raise funds. R. Jaffe said it’s important to define how additional funding can be ascertained, to avoid conflicts of interest. F. Slakey suggested that successful study proposals be included with the template, as examples. R. Jaffe said we have to define the scope of a POPA Study and set some boundaries. M. Turner requested an explanation of the approval process to begin a study. F. Slakey described how an idea for a study is first sent to the relevant subcommittee for approval, prior to being brought before POPA for a vote. At the end of the study, a report is approved first by the relevant subcommittee, then by POPA, and then by the APS Executive Board before its public release. The subcommittee doesn’t “review” the study; they read it and send it to POPA with, or without, their recommendation. There are external reviewers who conduct a detailed evaluation of the final report; this should be defined as well. M. Turner, F. Slakey, R. Jaffe, and R. Socolow agreed to sit on the ad hoc committee tasked with sorting out the details raised in this discussion.

Action: *M. Turner and his committee will (1) attempt to define the different types of APS and POPA studies/reports conducted and (2) establish the information key for inclusion in a POPA study proposal template. The committee will come prepared to review the issue at the February 2012 POPA meeting.*

Energy & Environment Subcommittee

Education Activity Proposal & Vote

R. Jaffe began by asking POPA to refer to the revised education proposal provided. Three POPA members have been serving as liaisons to this activity: R. Falcone, S. Seestrom, and M. Gunner. M. Gunner and R. Falcone provided feedback on the revised proposal to the E&E Subcommittee, prior to today’s meeting. The Subcommittee voted to proceed with recommending the proposal to POPA. Monica Plisch, APS Assistant Director of Education, said the new proposal is significantly refocused from that which was presented at the last POPA meeting. A decision was made to focus efforts on the greenhouse effect. Both students and teachers have a bad grasp of this concept and a number of the activities available to demonstrate the science behind the greenhouse effect get it wrong. A suite of education activities centered on the physics contributing to the greenhouse effect has been proposed. Supporting this initiative, the APS Outreach department is going to develop apps for mobile devices and a comic book that covers historical discoveries of the greenhouse effect. The hands-on activities can be completed with easy to procure materials. In terms of dissemination, teacher workshops will be held at national conferences such as the National Science Teachers Association, the National Association of Physics Teachers, and possibly at the American Geophysical Union’s conference to demonstrate the activities. All materials will be made available on the APS website and other logical sites.

Commentary: J. Onuchic said he supports the proposal but is concerned about the negative connotation the greenhouse effect has when related to temperature/climate change. The lessons on the physics of the greenhouse effect are good, but we must take care not to delve into the topic of global warming. G. Long said she was delighted with

the proposal because she sees it as taking the first steps to understanding and learning about the greenhouse effect, removed from the emotional aspect of climate change. A. Falk said he thinks it is terrific. The most important message it sends is that this is science, not politics, and we will be glad to have sent that message. K. Kirby indicated she presented the proposal to the organizing committee for the Topical Group on Physics & Climate and they were very supportive of the endeavor. The project really talks about the physics of atmospheric processes. It's not focused on global warming or climate change. M. Turner had a few concerns: (1) the proposal is very ambitious, with many activities planned – can it be realistically done? (2) We don't want to make this political, but we should provide context for what makes the greenhouse effect interesting. M. Plisch said teachers would have 3-5 class periods for the projects; they are always looking for tools to help them teach what is required. While the current high school curriculum is full, many teachers will take the time to integrate these projects into their lesson plan for just that reason. R. Jaffe asked about some of the topics that would be developed for the curriculum. M. Plisch said there would be workshops to develop the ideas and experiments, including experts and teachers to help formulate the final curriculum. W. Barletta said he could see spreading this through the year and having it fit fairly easily into a high school physics class. These are basic physics experiments. As long as we distinguish this, it's a good plan. R. Schwitters agreed that it is an exciting program. He asked whether there would be a hotline/feedback line that teachers could call if they can't get something to work. Could APS provide volunteers to staff a hotline? M. Plisch said it is possible and a hotline would provide valuable feedback to her team. Background information will be provided to the teachers to help them get started with the projects. There will be an ongoing presence at national and regional meetings of physics teachers and opportunities to train them via workshops. We have a chance to improve on how physics is already being taught in the classroom. It's a good opportunity for APS members to help teachers get the science right and make those strong connections. J. Onuchic said teacher workshops will provide us with insight about the troubles encountered in teaching these concepts. We could create worksheets that include the common issues and misconceptions and make these available to teachers. A. Falk suggested further consideration of modularizing the concept.

Action: R. Schwitters moved to accept the proposal; J. Dahlburg seconded the motion.

The motion passed unanimously and will be sent to the E. Board with POPA's recommendation.

Possible Nuclear Energy Reactor Study

R. Jaffe began the discussion. The E&E Subcommittee considered several possible topics for a new study. The group demonstrated interest on a topic related to the future of nuclear power, but encountered difficulty narrowing the broad idea to a sub-topic that would fit the size and scope of a POPA study. R. Rosner, who drafted the proposal under evaluation, provided an overview. There is a general sense that the types of nuclear power plants currently operating are in their waning days. The existing technology has proven highly problematic in many ways. Are there other technologies that hold promise to change the way we approach nuclear power? POPA may be able to address this topic from a different perspective than other organizations or agencies more likely to take the role of proponent on such an issue. J. Dahlburg mentioned the upcoming

APS Energy Research Opportunities Workshop

[<http://www.aps.org/meetings/march/events/workshops/energy/>], the topic of which will be energy, industry, and how to move forward in the green world. One of the opening talks will be given by Vic Reis, who wrote an abstract that she referenced. The abstract, titled “*A Strategy for U.S. Nuclear Power - Changing the Game with Small Modular Reactors: Is This a Sputnik Moment?*”, begins by asking the question, “Does the present confluence of events: climate change and the need for abundant clean energy, the recent nuclear disaster at Fukushima, the closing of Yucca Mountain geological storage site for spent fuel, and the present ongoing global economic crisis place our previous nuclear energy strategy and the hope for a nuclear energy renaissance in turmoil or does it lead to a potential Sputnik moment?” In discussion with F.Slakey prior to today’s meeting, the 1993 APS Statement on nuclear energy policy was brought to mind:

93.7 NUCLEAR ENERGY

(Adopted by Council on November 21, 1993)

The American Physical Society has a long-standing interest in the establishment of a technically sound national energy policy. Such a policy must include steps to decrease the heavy dependence of the United States on fossil fuels. Their use entails significant environmental costs, including possibly substantial changes in global climate with uncertain consequences for human well being. Moreover, since resources of oil and, less immediately, natural gas are limited, U.S. reliance on foreign sources creates economic burdens and military dangers. We therefore endorse increases in federal funding and general support for programs in conservation and in the development of renewable energy sources.

A balanced energy policy, however, also requires that the Department of Energy have strong programs to keep the nuclear energy option open, through: (a) the continued development of nuclear reactors which can be built, operated, and eventually decommissioned in a manner which is simple, safe, environmentally sound and cost-effective; (b) the development and implementation of programs for the safe disposal of spent fuel and radioactive wastes; and (c) the development of an effective public education program to allow a more informed debate on the strengths and weaknesses of nuclear power. The American Physical Society is deeply concerned that the current progress in these areas is inadequate.

It was suggested POPA consider carrying out a small workshop to determine whether the present confluence of events have given APS reason to withdraw its 1993 Statement. If the answer to that workshop is “no” POPA could develop an addendum strongly reaffirming the 1993 Statement. We could then consider a study, with more focused intention, that defines the way forward.

Commentary: R. Jaffe said the idea of conducting a workshop around the reaffirmation/denial of the 1993 statement would provide POPA with the opportunity to focus more clearly on what we would want to address in a future study on the topic. Not only is there the issue of what reactor design is essential, but there is also the question of

what issues are affecting public perception of nuclear power. There is major public misperception regarding the dangers of radiation. J. Davis said reaffirming the statement would highlight DOE's lack of progress on the topic. R. Socolow asked whether we would conduct a study about the Gen3+ /Gen4 reactors, smaller reactors, or both. J. Dahlburg reinforced the idea of stepping back to gain clarity on what we would address in a future study. W. Barletta said that we are looking for a reasonable nuclear energy study to conduct. Absent from any of this is a discussion of the biggest problem nuclear energy faces, which is cost. We must include representation from the economic community in any workshop we conduct. R. Rosner said the argument that Vic Reis makes in his abstract is that small modular reactors (SMRs) are the way to break the cost curve that the gigawatt-scale plants face. The upfront capital costs are much more modest with SMRs. J. Dahlburg said we should consciously broaden our view so that when we narrow it back down it becomes something that is extremely useful to the APS. R. Schwitters cautioned that we might come back with the opposite: a recommendation for APS to do a much larger study on the topic. M. Turner agreed and suggested that a workshop might create way too many ideas. J. Davis and W. Barletta brought a discussion to the table regarding the R&D and materials issues of extending nuclear reactor licenses from 60 to 80 years. No one is currently studying the topic. F. Slakey withdrew the idea for a workshop and suggested we move forward with writing a proposal for a study on the topic suggested by W. Barletta. R. Schwitters will take the lead on this action, with assistance from W. Barletta. R. Jaffe suggested that it would be good to consider the other ideas for studies that a workshop would likely produce. POPA agreed it would still be advantageous to consider holding a workshop to address the 1993 APS Statement on nuclear energy policy.

Action: R. Schwitters, R. Rosner, and F. Slakey will come back to the February meeting with a proposal for a study on the ramifications of licensing currently operating nuclear reactors to the 80-year mark.

R. Rosner and J. Dahlburg will work on a proposal for a possible workshop addressing the 1993 APS Statement on nuclear energy policy to the February meeting.

Both proposals should be reviewed by the E&E subcommittee in early January, well in advance of the February POPA meeting.

Past Chair's Departing Comments

R. Socolow addressed the group.

It has been a privilege to be associated with the Panel on Public Affairs (POPA) for the past four years. This remarkable unit has no counterpart in other professional societies. It is a product of the 1960s and 1970s, a time when physicists were particularly inclined to scrutinize their motivations for being physicists. Our first answer was that we hoped to discover a few of nature's secrets. But many of us, nearly as much, hoped to use our specialized knowledge to address social problems. We had a broad agenda, starting with but going beyond nuclear weapons and nuclear power. The slogan was "science for the people."

I was a physics major at Harvard when sputnik raced overhead in October 1957. Immediately, President Eisenhower summoned scientists to Washington to explain this new accomplishment. From Cambridge came James Killian, George Kistiakowsky, Norman Ramsey and one of my teachers, Edward Purcell. Late in the afternoon, Purcell and Ramsey would return to the physics building, after having written pamphlets about why a satellite can't fall straight down, and after working out the implications of sputnik for strategic weapons delivery systems. To those of us who were hanging around doing problem sets, they said: "Somebody has to do this full time." Twelve years later, after seven joyful years with quarks, I acted on their advice. In my generation, many did.

Numerous institutions designed to encourage "science-based decision-making" emerged in the following two decades. Among the important ones still with us are the President's Council of Advisors on Science and Technology, the Council on Environmental Quality, the Natural Resources Defense Council, the Environmental Defense Fund, and our own POPA.

During the past four years, APS and POPA have been reexamining their communication strategies. A Hegelian process is under way: Thesis, Antithesis, Synthesis. Consider the incautious 2007 APS Statement on climate change, with its famously ill-chosen word, "incontrovertible." The Statement produced a bitter minority response; then, two years ago, a moderate Commentary; and then, still under way, the codification of a tightened process for producing Statements. The deep message we can all extract is that physicists care passionately about what their society tells the world. However, passions inflamed can destroy an institution. I am proud of how APS, and POPA, preserved themselves while encouraging debate and producing a credible Commentary.

At the level of studies rather than statements, an APS study, [*Direct Air Capture of CO₂ with Chemicals*](#), which I co-chaired, is generating its own Hegelian process. Some POPA committee members and staff did not find the report congenial. A principal concern was that the report does not make recommendations to governments. Like the original APS statement on climate, in the aftermath of an adversarial process POPA and APS are now codifying the kinds of studies POPA should and shouldn't conduct.

For both APS statements and POPA reports, in my view, the danger during the current Synthesis stage is too much codification. Be careful not to suppress the lively interloper.

When I became Vice-Chair of POPA four years ago, I exhorted POPA members to invent studies in which they were willing to invest serious time. It seemed to me that POPA then was less committed to conducting studies and producing reports than it had been. I argued that studies and reports are the principal reason for POPA's existence, a statement that I think is not controversial now. POPA meetings are now mostly about studies.

The questions I brought with me onto POPA were: 1) What kinds of studies are professional societies in general -- and POPA in particular -- well suited to conduct? 2) What kinds of studies does the broader society need *somebody* to conduct?

Technology assessments constitute one important class of needed studies. In 1972 the U.S. created the Office of Technology Assessment (OTA) within Congress to do such studies. OTA was shut down in 1995. The needs OTA filled are not being filled to this day. Studies are sorely needed, in particular, that address the world's future energy system. The energy system over the next few decades may well be traded in for another one -- with lower carbon intensity and with

new strategies related to transport. Both the public and policy makers need help as they contend with a discourse riddled with self-interest. Who will provide independent advice about the promise of new technologies, such as batteries, geothermal energy, and small nuclear power plants?

Not long ago, one could presume that the general public, as well as decision makers, welcomed the engagement of scientists. We were regarded as uniquely able to conduct impartial and authoritative studies. Right now, it seems to me, any such special standing is in jeopardy. Think hard about Governor Rick Perry's mental model that led him to invoke Galileo in the way that he did in a debate last month. He associates the current science establishment with the 17th century Catholic Church – and himself with those who, like Galileo, challenge established wisdom. In places like POPA, we scientists need to examine that charge, not write it off. He is giving us a wake-up call.

What *are* the similarities between the current scientific enterprise and an established church? We scientists are remote, we believe we deserve deference, we extract considerable financial resources from the general population to run our affairs, and we intrude on people's lives with conclusions about evolution and the vulnerability of the planet that many people don't want to hear.

We must not underestimate the threat now looming in the form of a growing public disenchantment with the scientific enterprise. Scientists believe that the scientific way of knowing is privileged relative to other ways of knowing that are rooted in myth. We must not take for granted that others do. Over the next decade, the highest priority for the APS and POPA is to retain the public's trust by demonstrating the worth to society of the fundamental values of science.

The second P of POPA stands for "public." It has two meanings: the government and everybody. Be careful not to forget the second meaning, especially now. This is never easy for an organization based in Washington.

I will close with thanks to the POPA staff all the POPA members I have worked with. The commitments of time and energy and the resulting creativity emerge from deeply personal commitments to connect physics with public service. POPA is a force for good in this world.

National Security Subcommittee

Non-proliferation Workshop Proposal & Vote

J. Davis began the discussion. The Subcommittee would like to propose conducting a workshop with CSIS that would analyze the technical and policy challenges associated with reducing the non-strategic nuclear weapons (NSW) currently deployed in Europe and Russia. This topic has been chosen because it is the "rock in the road" to the next arms control treaty and the educational component is quite large. The workshop would aim to review the policy background on day one and spend day two focusing on technology issues. CSIS will be approached to contribute \$80K and the workshop will be executed by spring of 2013. J. Davis & J. Trebes would like to visit with Ellen Tauscher, Under Secretary for Arms Control at the State Department, if POPA recommends moving forward. J. Trebes commented that the problem

itself is vast – a reason for it’s not being researched before now. By bringing in member societies, and possibly some from other countries, you take an impossible problem and make it solvable. F. Slakey introduced Amy Flatten, APS Director of International Affairs. A. Flatten emphasized the Society’s commitment to expanding its global engagement. The International Union of Pure and Applied Physics (IUPAP) General Assembly will be held in November. This will provide a chance to gently introduce the workshop idea to colleagues and suggest the prospect of continued discussions in the near future. The Russians should be in attendance at the IUPAP General Assembly. J. Davis asked if a Chinese counterpart would attend. He suggested that by de-coupling the Asian issue, we make this project more approachable for the Russians. J. Davis also indicated the Subcommittee would be willing to move forward with this project even if all that comes from it is an educational package.

Commentary: M. Turner asked if this was a proposal for a study or a workshop. F. Slakey clarified the two goals: (1) a report/summary tying together the insights captured in the discussions at the workshop, including expert papers presenting the most up-to-date set of perspectives on the challenges and value of NSW reductions and (2) a list of technical steps to enable NSW reductions. The key deliverable will be a list of technical efforts that must be accomplished internationally, and preferably collaboratively. M. Turner asked if Bill Colglazier (Science & Technology Adviser to the Secretary of State, physicist) needs to play a part in this. J. Davis said we can certainly have the conversation with him.

Action: J. Dahlburg moved to approve (1) the promulgation of this proposal to obtain additional funding and (2) having Amy Flatten begin to make key connections with individuals from different countries (many of whom will be at the upcoming IUPAP meeting) that we may include down the line.

The motion was unanimously approved. The Subcommittee will report back at the February 2012 meeting on their progress.

APS Code of Conduct Ethics Statement - Discussion

J. Trebes made a presentation about the current APS Guidelines for Professional Conduct and asked POPA to consider whether modifications, addressing responsibility as it pertains to a physicist’s code of conduct, are needed.

Commentary: J. Lieberman mentioned how this has an interesting impact on the “brain drain” problem and she wondered if these kinds of statements have been used to that regard. J. Trebes said that Randy Murch touched on that in his presentation at the last POPA meeting. M. Turner reminded the group of the Boston physicist who was planning to deploy drones fitted with bombs on the Capitol building just recently. We don’t currently have a statement that says “physicists should do no harm.” J. Onuchic said this is complicated because we are aiming to determine “good guys” from “bad guys” with a code of ethics. A. Falk questioned how to determine who should have access to certain kinds of power and who shouldn’t; that’s a very political statement. He doesn’t think the code of ethics is the place to make that kind of a statement as a Society. K. Schwab said our code of ethics should just be specific to our work – nothing more. M. Turner said

that given the special skills, knowledge, and high profile physicists have in society, this lends itself to special responsibilities as well. F. Houle, who chaired the first APS Ethics Task Force, said the language of the current APS statement is a result of events that happened in 2002 and was put together ad hoc to address very specific issues. At the time, APS had no credible statement on ethical behavior and even what the Task Force put together faced much resistance because it was viewed as an attempt to address morality. There seems to be room to find language that asks physicists to do their work to the best of their ability, without harming others. You have to be thinking about what you are doing and how your research will be used. K. Schwab said we could say something like, “The APS encourages our members to think responsibly about the impact of their work.” R. Jaffe said no matter if we say something or we don’t, we will be drawn into the moral quagmire. R. Falcone said we have a responsibility because we use public money in research. K. Schwab asked if you are a self-made billionaire, are you exempt? M. Turner said we should phrase this from the perspective of science as opposed to physics and it should be decoupled from the question of funding. J. Trebes said he recommends doing nothing. M. Turner said he thinks this is more of a guideline – probably read by the youngest members of our community. R. Schwitters asked what we are trying to solve. F. Slakey referenced the presentation given at the last meeting. Randy Murch said there is value in having a code of ethics in the bio community because it creates a culture of concern and makes nefarious activity more apparent. Can APS stimulate that same culture of concern by amending our code of conduct? R. Schwitters said he thinks the current statement is really good. A. Falk said if the goal is to cleave through acceptable/unacceptable activities – we couldn’t do that. If it’s to raise consciousness, a vague statement could serve us. F. Houle said she thinks we should proceed with some kind of amendment and review of the current statement.

Action: W. Barletta moved to drop the issue of amending the current APS Guidelines for Professional Conduct entirely. R. Schwitters seconded the motion.

6 voted to approve abandoning the issue. 7 voted against such action. The motion did not pass.

R. Falcone moved to transfer the responsibility of reviewing the issue of amending the current APS Guidelines for Professional Conduct from the POPA National Security Subcommittee to the POPA Ethics Subcommittee. A. Falk seconded the motion.

It was agreed, by consensus, to table the discussion of this issue until the February 2012 POPA meeting, when the Ethics subcommittee is repopulated.

The APS Education & Diversity Department will be invited to the February meeting to speak about ethics training initiatives.

International Collaboration Subcommittee

R. Schwitters began the discussion by introducing Amy Flatten, APS Director of International Affairs. She described activities the APS is currently involved with on the international front and provided an overview of the evolution of her department's goals. International Affairs began as a more ambassadorial outreach department. Today, the department manages a suite of ongoing, sustainable programs that cut across all aspects of the Society and they are heavily involved with the APS Committee on International Scientific Affairs (CISA). Industry, research, and education all have international components; companies are multinational, research is moving overseas, and there is competition for the best and brightest students/scientists at institutions of higher education globally. International projects can be hindered or helped by U.S. policy. The question APS faces now is how to best serve the international physics community and our own members. 25% of non-student APS members live outside of the U.S. CISA has begun to set up a network of fellows, currently in 50 cities, where there is a reasonable concentration of APS members. CISA could be a resource to POPA when international matters arise.

Commentary: A. Flatten suggested a joint statement might be a good first activity to work on. Policy studies might also be commented on by CISA, not as an approval role but for international perspective. R. Schwitters said the consistent message he received back from colleagues he polled was their concern regarding how to explain their role in large international collaborations to Congress. The Subcommittee also discussed how untenured faculty and students have a hard time working in international collaborations. A large concern is what the United States' role will be at CERN in the long run. These are all issues this Subcommittee might want to take up. A. Flatten made a few observations: it's important to stay connected with the International Affairs Department and with CISA; she would welcome being a part of discussions regarding U.S. policy that affects our international collaborations and international policy that affects access on the part of U.S. scientists. R. Jaffe said this discussion strikes him as not the business of POPA and more the business of PPC. When we initially talked about international participation in POPA, we were debating on how to bring an international perspective into our public affairs discussions. There is no international membership on POPA. The question being asked now seems to be, "How do we use POPA to solve problems with international activities of physicists?" A. Flatten said that CISA could help us find an international representative for POPA. J. Dahlburg said that facilities such as CERN and ITER have a life that includes public affairs. R. Jaffe said POPA could have a role in issues of American research policy that affect the common availability of resources internationally. R. Falcone asked about the U.S. investment in ITER and whether a discussion of this issue would fit here. R. Schwitters said the Subcommittee is trying to find its way; some of what we are talking about today may not be appropriate for POPA.

Action: J. Dahlburg said the Subcommittee should come back to the February meeting with their charter and proposed activities; they should also be ready to discuss whether we should include an international representative as a member of POPA.

National & International Research Policy Subcommittee
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Possible Study on Role of Federal Standards

W. Barletta led the discussion. He indicated that PPC has asked POPA to look into the science-backed standards issue, and to consider conducting a POPA study/report on the subject. He shared questions that were raised during the PPC discussion. If POPA decides to proceed with such a study, a concrete proposal must be created and brought forth to the group at an upcoming meeting. W. Barletta said he is willing to help write up a proposal, but there needs to be someone to carry the flag forward since he is rotating off POPA.

Commentary: A discussion of possible federal and state standards POPA could research ensued. Some POPA members questioned why this research would be POPA's job. A. Falk said the list of possibilities being kicked around doesn't seem very physics-based and anything we take on must be done in engagement with other societies. He agreed that it didn't seem like a topic for POPA to tackle. If we do decide to move forward, we will need to drill down and find a "killer app" and a volunteer to champion the study. J. Dahlburg asked for a volunteer to take on this issue.

Actions: *This item was shelved until the February meeting, to allow new members a chance to take this issue on in 2012.*

W. Barletta will follow up with M. Turner, F. Slakey, and V. Ehlers to determine whether PPC has a specific issue in mind that is both timely and focused.

Physics & the Public Subcommittee

Tabled Statement: Healing Energy - Discussion

R. Jaffe provided an overview of two proposed statements regarding the public misuse of physics. The Statement on Healing Energy, which was brought to POPA by the APS Division on Biological Physics (DBP) in early 2011, is furthest along. The original proposed statement was reviewed, revised, and approved by POPA, then sent to the APS Executive Board for approval. The E. Board sent it back to POPA with questions and suggestions for future submissions. POPA took time to create a template for all future statement submissions, in an effort to provide an ideal climate for having statements considered and approved by the E. Board. Now that the template is in place, R. Jaffe suggested we contact DBP and let them know we would be happy to review any new materials associated with the statement at our February meeting. DBP should prepare their proposal to answer the questions posed by the E. Board. The Division has the option to present their request to POPA in February as either a Division Statement or as an APS Statement. If they opt for the latter, they need to make a powerful case that this should be an APS Statement.

It was agreed that the second proposed statement, on the Misuse of Quantum Physics, should be handled within the Subcommittee; the Subcommittee should decide whether to bring an amended proposal back to POPA for a second look.

Action: R. Jaffe made a motion to send the Executive Board's comments and the new statement proposal template to DBP, requesting that they prepare to present an amended proposal at the February 2012 POPA meeting for review as either a Division or an APS Statement. J. Dahlburg seconded the motion.

The motion passed unanimously; J. Russo will correspond with representatives of DBP prior to the next meeting, as denoted above.

Old & Ongoing Business

ECE Lobbying Update

R. Jaffe spoke about the ECE lobbying process. Currently, there are two bills in the Senate, one introduced by Senator Lisa Murkowski and one by Senator Mark Udall, that sit with the Subcommittee on Energy & Natural Resources. They were both introduced as amendments to the Trade Bill, currently under discussion on the Senate floor, but will most likely remain in the Subcommittee. There is a compromise bill (written by Allyson Anderson, Senate Staff Member) that contains the best elements of both of these bills and it has a fair shot of moving forward. In the House, R. Jaffe & F. Slakey wrote a bill and managed to have it introduced by Representative Randy Hultgren of Illinois. Hultgren's bill is stuck in the Subcommittee of Natural Resources, chaired by Representative Doug Lamborn; the Lamborn bill coming out of the Subcommittee is the kind of bill that the ECE report would speak against. We are hoping provisions of the Hultgren bill can be added as an amendment to the Lamborn bill. F. Slakey gave credit to R. Jaffe for shaping Senator Udall's bill, directly affecting the compromise bill that Senator Bingaman supports, and making the Hultgren bill possible through his continued input. F. Slakey reminded POPA about a phrase in the ECE report – a reiteration on the APS position on helium. About four months ago, R. Jaffe had the opportunity to make recommendations to committee staff on what they should consider when drafting a bill on helium. Congressional Staff are now close to presenting a helium bill, which has been drafted and re-edited several times with R. Jaffe's contributions.

Update on RICHES Study

J. Dahlburg provided an update on the Physics Policy Committee's (PPC) RICHES study. The study committee has the draft report approximately 90% finished. It is slated to provide five recommendations.

Commentary: M. Turner said the last three recommendations J. Dahlburg shared with POPA sound too similar. R. Falcone mentioned Pat Dehmer, Associate Director of the Department of Energy's Office of Science. She gave a talk at a recent Basic Energy Sciences Advisory Committee (BESAC) meeting where she explained the re-working of the Office of Science's workforce training and how DOE is considering modifying workforce preparation overall, moving forward.

[See <http://science.energy.gov/bes/besac/meetings/#0928> for presentation]

J. Davis said the use of the phrase "expand the role of the federal labs" sounds a bit self-serving. R. Schwitters said there should be a mention of priorities. F. Houle said that her experience is that a lot of fundamental science goes on in industry but the motivation is different than people are used to in the national labs. Broadening out the inspiration for fundamental science to include technological problems should be an expanded role for the national labs. Corporations have walked away from workforce development and aren't willing to develop and re-educate their own employees anymore. It is a serious problem.

Action: *J. Dahlburg will informally send the draft set of recommendations she read to those POPA members who have commented today. Written comments should be sent back to J. Dahlburg, who will transmit them to Jim Roberto, Chair of the RICHES study.*

New Business

R. Schwitters brought up the recent issue of the closure of several physics departments in Texas; several schools have cut their departments because they have grown small enough as to be considered negligible. He asked how the APS plans to respond to this action. M. Turner explained that the APS Executive Board & Council are both aware. Where the Society can make a difference, it will try to intercede on behalf of the schools slated to lose their departments. In many cases, it is too late. Where APS can work with universities to shore up their departments and help save physics curriculum, they will be doing so. K. Kirby said the APS Education & Diversity Department is also drafting a letter from the Society's President, Barry Barish, to be sent to the Texas Higher Education Coordinating Board.

Next Meeting

The date for the next POPA meeting will be Friday, February 3rd, 2012.

Adjournment

Action: W. Barletta moved to adjourn the meeting. A. Falk seconded the motion.

J. Dahlburg adjourned the meeting at 2:28 PM.