Panel on Public Affairs (POPA) Meeting Minutes June 2, 2023 Time: 9:30 am EDT - 3:00 pm EDT

Committee Members in-person attendance: Marty Baylor, Member, Brian Demarco, Member, Sarah Demers, Member, Laura Grego, Representative, Forum on Physics and Society, Lisbeth Gronlund, Member, Young-Kee Kim, Advisor, APS President-Elect, Don Lamb, Chair-Elect, Eric Mazur, Chair, Clyde McCurdy, Past-Chair, Patricia Rankin, Member, Bob Rosner, Advisor, APS President, Washington Taylor, Member

Committee Members in attendance via Zoom: Jim Adams, Representative, Forum on Industrial and Applied Physics, Ian Coddington, Member, Dana Dattelbaum, Member, John Doyle, APS Vice President, Frances Hellman, Chair, Physics Policy Committee, Raymond Jeanloz, Member, Clifford Johnson, Member, Brad Marston, Member, Kristen Pudenz, Member, Marion White, Member

APS Staff Present in person attendance: Jonathan Bagger, CEO, APS, Nico Hernández Charpak, Federal Relations Senior Associate, Mark Elsesser, Director of Government Affairs, Jessica McCullough, Office Operations and Programs Manager, Francis Slakey, Chief External Affairs Officer

Guest Presenter - Tim Atherton, Associate Professor of Physics and Astronomy, Tufts University

Chair Eric Mazur welcomed those committee members in attendance in person and via Zoom. He began committee business by asking for a motion to approve the minutes of the February 2023 meeting.

ACTION: The Motion to approve was called by McCurdy and seconded by Lamb. The roll call vote was taken by McCullough. The motion passed with 17 in favor, and 0 opposed.

Mazur then welcomed Tim Atherton. Atherton is the Associate Professor of Physics and Astronomy at Tufts University. He spoke with POPA on the Status of the LGBTQ+ climate in Physics

Mazur and the committee thanked Atherton for their dynamic presentation and vowed to continue the discussion.

Physics and the Public Subcommittee Update (Sarah Demers)

Demers began the update by outlining the work of the subcommittee and explained that there are nine statements on the 2023 P&P Agenda:

Voted on by P&P and full POPA, APS member comments needed:

- Statement on Preparing Physics Students for a Wide Range of Careers
- Statement on the Status of Women in Physics: out for member comments

For Renewal, Reworking, or Retirement:

- Diversity in Physics
- K-12 Access to Physics and Teacher Preparation
- Promoting an Inclusive Workplace
- United Nations

Proposed New Statements:

- Statement on the Status of Gender and Sexual Minorities in Physics
- Statement on Teaching Evaluations
- Statement on Public Engagement

Demers started with the Statement to the United Nations 98.1.

The American Physical Society declares its support for the rights and freedoms in the Universal Declaration of Human Rights for all people, everywhere.

This Statement was originally crafted in recognition of the 50th anniversary of the universal declaration of human rights in 1998. At the time, there were no "presidential statements" or "board statements", and it was likely done with archiving in mind. This broad statement is duplicative of more narrow statements such as the "Protection Against Discrimination" statement.

Protection Against Discrimination (00.4)

The Council of the American Physical Society affirms the commitment of the Society to the protection of the rights of all people, including freedom from discrimination based on issues such as, but not limited to, sex, gender identity, national and ethnic origin, religion, sexual orientation and other protected characteristics. This principle will guide the Society in the conduct of its affairs, including the selection of sites of meetings of the APS.

The P&P Subcommittee voted unanimously to suggest that POPA archive this statement. McCurdy provided more context in support of the subcommittee's determination from his time as chair of the P&P Committee.

ACTION: The Motion to archive the statement was called by McCurdy and seconded by Lamb. The roll call vote was taken by McCullough. The motion passed with 19 in favor, and 0 opposed

Demers moved to the Statement on Promoting an Inclusive Workplace 88.1.

This statement was originally titled: Displays in the Workplace of Graphic Material Depicting Demeaning Images of Women. The title and text were updated in 2018, and the individuals who worked on that update were also involved in crafting the APS Guidelines on Ethics. The subcommittee seriously considered the options to renew, expand, or archive the statement. The subcommittee voted unanimously to recommend the statement be archived, as the content is now addressed by the APS Guidelines on Ethics (19.1), also linked from the APS Statements page. The subcommittee wanted to avoid duplication and the potential inconsistencies that could come with it.

ACTION: The Motion to archive the statement was called by McCurdy and seconded by Lamb. The roll call vote was taken by McCullough. The motion passed with 19 in favor, and 0 opposed

Demers then moved to the Statement on Preparing Physics Students for a Wide Range of Careers.

She reported that this statement was edited by the P&P subcommittee, voted on positively by full POPA and the APS Board, and sent out for member comments. The results of the member comment process came back overwhelmingly positive with only four of the 45 comments expressing negative views about the statement. After taking a closer look at the text based on the comments, the subcommittee became concerned that a particular statement was inaccurate and recommended amending it.

ACTION: The Motion to approve the statement and to forward to the APS Board for final comments before approval by APS Council, as per the APS process for new statements after membership comments was called by McCurdy and seconded by Lamb. The roll call vote was taken by McCullough. The motion passed with 19 in favor, and 0 opposed

Demers then moved to the Statement on Diversity in Physics.

The framing of this statement draft for committee consideration had evolved:

- The current public statement (08.2) has a fully utilitarian framing, with motivation for diversity needed for "a productive future for science and technology in the US", "the health of physics", and notes that we have "a largely untapped intellectual resource" from a "growing segment of the U.S. population."
- The new statement additionally emphasizes our responsibility "improving access to opportunities in physics" in the first paragraph and has other tweaks like "productive" -> "robust".

The edited statement has a list of recommended actions for members of our community:

Demers then posed the thought that these topics are largely covered in the APS Ethics Guidelines, but this statement goes on to make statements beyond our community.

The subcommittee received comments from the Committee on Minorities, the Forum on Diversity and Inclusion, and the Committee on the Status of Women in Physics and a number of edits are reflected in the full statement.

The committee worked together on wordsmithing the statement and Demers and Mazur fielded additional comments and suggestions from the committee.

ACTION: The Motion to approve the statement and to forward to the APS Council, as per the APS process for statements that do not change in scope was called by Demarco and seconded by McCurdy. The roll call vote was taken by McCullough. The motion passed with 18 in favor, and 0 opposed

Demers thanked the subcommittee for their work in between committee meetings and the committee for their attention and contribution to this statement.

National Subcommittee Update (Brian Demarco)

Demarco began the subcommittee update on two statements:

03.1 Visa Rules and Government Procedures Hampering U.S. Science and Technology which was last revised in 2018. In assessing this statement, the subcommittee realized it was important within the framework of supporting the work of Government Affairs. With that in mind, the subcommittee concluded that the statement did not require significant revision.

ACTION: to approve the statement and to forward to the APS Council, as per the APS process for statements that do not change in scope was called by Demers and seconded by Rankin. The roll call vote was taken by McCullough. The motion passed with 17 in favor, and 0 opposed.

Demarco moved to the new Statement on Assessment of Strategic Missile Defense Capability and presented the statement to the committee.

Demarco explained that he and the subcommittee received a great deal of feedback and suggestions and that there was debate and final discussion to get to the statement being presented. After discussion, POPA moved to the motion.

ACTION: Motion to approve the statement and to forward to the PPC for comments, as per the APS process for new and significantly revised statements was called by McCurdy and seconded by Grego. The roll call vote was taken by McCullough. The motion passed with 18 in favor, and 0 opposed.

Government Affairs Advocacy Update (Nico Hernandez Charpak)

Hernandez Charpak welcomed the committee back from lunch and provided an update on what the policy priorities are for this current congressional session and how they relate to the work of POPA. He noted that Government Affairs is using a strategic approach to advocacy to make

tangible progress on all of APS policy priorities.

Energy and the Environment Subcommittee Update (Wati Taylor)

Taylor began his update with a review of subcommittee activities. The subcommittee has met three times since the last POPA meeting and have formed two sub subcommittees to handle two statements that they will work on.

Taylor moved to the Statement of Perpetual Motion Machines 03.3.

When this statement was established, APS felt the need to comment on a misrepresentation of these machines in society. The subcommittee felt unanimously that there was no need to renew this statement at this time.

ACTION: Motion to archive the statement was called by Grego and seconded by Rankin. The roll call vote was taken by McCullough. The motion passed with 17 in favor, and 0 opposed.

Taylor moved to the Statement on the Protection of the EM Spectrum.

This statement has been brought to the committee on numerous occasions and Coddington has been leading the sub subcommittee working on getting this statement to be ready for a vote by the full committee. This statement hopefully supports how physicists work in this subject and additionally, the subcommittee suggests that we think about an international body that oversees this. There was additional committee discussion on the vast usage of the EM Spectrum in the science field.

ACTION: Motion to authorize the subcommittee to make edits to the statement and to forward to PPC for comments was called by Rankin and seconded by Gronlund. The roll call vote was taken by McCullough. The motion passed with 17 in favor, 1 abstention and 0 opposed.

Taylor moved to the Statement on Nuclear Energy 93.7 and invited Rankin, who is working with the sub subcommittee, to present on this statement. Rankin began by stating that the subcommittee agreed that this subject needed a new statement to start in line with current practices. There was a significant discussion over if the statement should change tone and, if so, how Nuclear Energy has many issues and may not help significantly to reduce carbon emissions by 2050. Rankin explained that Nuclear Energy will be essential to reducing carbon emissions and should work on advancing technology. The subcommittee agreed that it was better to move slowly and develop consensus. They also needed more input from the broader subcommittee and the full POPA committee.

The sub subcommittee identified the following concerns and problems:

- Proliferation
- Waste repositories

- Accidents
- Terrorism
- Regulatory background
- Expensive to develop new technologies
- Can technology be safely exported to other countries (global applicability)

Rankin then outlined the specific areas that the sub subcommittee would like input:

- Leaving aside some niche uses (military) can we articulate reasons to continue to pursue a nuclear power program other than clean energy/climate?
- Can we/will we be able to reach carbon reduction goals without nuclear energy?
- Coalescing around "all hands on deck" in this situation how does nuclear impact the trajectory for carbon reduction?
- Does improvement merit taking the risks?
- How well do we understand the risks of other approaches?
- How do we encourage thoughtful, holistic, balanced policy making?

A discussion amongst the committee regarding the next steps on this statement will continue.

POPA Report on Carbon Direct Removal - Wati Taylor

Taylor updated the committee on the POPA Report on Carbon Direct Removal (CDR). A lengthy and robust discussion amongst the committee continued. Taylor and Mazur asked the committee to reach out to Taylor and the subcommittee with further questions and suggestions.

New Business

POPA Report Discussion:

Rankin discussed science literacy and how we might "redo" the routes into physics. There has been a reduction in the number of physicists who teach physics and if physics is taught, especially in the socioeconomicly disadvantaged communities, it may not be taught by a physicist. Mazur says he fully supports a report that would look at the obstacles involved in these issues. There is a general consensus that there should be a focus on physics education, especially at the high school level where the foundation for college level physics is established. Kim suggested partnering with AAPT on this subject regardless of whether there is a study done to work together on this topic. Mazur noted the importance of focusing on high school teachers in Physics and how we must elevate these teachers as they are on the front lines of physics.

Marston noted the growing interest in Solar Radiation Management and that the POPA committee may, at some point, be approached to work on a study regarding this issue.

Lamb and Rosner noted the improvement needed in the training of teachers.

Proposal for a guide to statements structure:

Hernandez Charpak then moved to the initiative started by Adams and former POPA member Eric Gawiser to create a template for POPA statements. Hernandez Charpak informed the committee that APS is creating a style guide and inevitably the statements will need to meet the style guide criteria. He asked that if anyone was interested in working on this process, to reach out to him.

Open Discussion

Mazur spoke about the focus we should have on who the audience is for our statements and whether they reach the global audience and membership we have. Bagger noted that CISA has been working on communicating that APS is a welcoming global hub for physicists and agreed that Mazur was intune with the concepts that are being explored among other APS committees.

Hernandez Charpak and Mazur thanked the committee for their participation and commitment to POPA and the APS for guiding and advising the committee. Mazur said he looked forward to seeing everyone at our next meeting on October 13, 2023.

The meeting adjourned at 2:59pm EDT.