Panel on Public Affairs Meeting October 5, 2018 APS Washington Office of Public Affairs 529 14th Street, NW, Suite 1050, Washington, DC

Members present: M. Marder (Chair), J. Wells (Chair Elect), D. Dahlberg (Vice Chair), F. Houle (Past Chair), J. Adams, M. Barnett, S. Blessing, P. Bucksbaum, W. Collins, B. DeMarco, V. Grassian (*virtual*), L. Greene, C. Gutierrez (*virtual*), M. Hockaday, J. Jasinski, M. McNeese, M. Tamor, P. Taylor, E. Yablonovitch (*virtual*)

Advisors/Staff present: K. Cole, M. Elsesser, R. Falcone, K. Kirby, G. Mack, J. Russo, F. Slakey

Call to Order M. Marder called the meeting to order at 8:00 AM.

Welcome, Approval of Minutes A call for edits to the June 2018 minutes was made. Hearing none, a motion was introduced.

MOTION: To accept the June 2018 minutes, as presented.

(D. Dahlberg/L. Greene)

ACTION: The motion passed, unanimously.

Advocacy Update APS Staff (Greg Mack) discussed the FY2019 budget, the APS Bridge Program (Congressional Recognition Initiative), and Visa Advocacy.

Bridge Program students, along with OGA staff, took nine meetings on the Hill to explain the importance of the program and to share their personal stories with Congress. A bipartisan resolution, spearheaded by Representatives Castro (D-TX) and Comstock (R-VA), was developed and introduced in the House. H.Res. 988 specifically highlights the APS Bridge Program for its work toward increasing the number of underrepresented minorities earning physics doctoral degrees. It also highlights the importance of diversity in science, technology, engineering, and mathematics, acknowledging a necessity to increase diversity and representation within physics.

OGA has been advocating for F1 student visas to become dual-intent. IEEE, OSA, and ASME have joined APS in this effort. Currently, students have to prove they are going home after they finish their studies here in the U.S. Dual-intent would allow for a pathway to citizenship, an incentive that might reverse the decline in overseas applications to U.S. physics graduate programs that has been trending upward.

Physics & the Public Subcommittee M. Barnett shared the Subcommittee's recommendations for action on the following APS Statements:

Statement 03.1- Visa Rules and Government Procedures Hampering US Science and Technology

M. Barnett asked POPA to consider minor changes to APS Statement 03.1 – Visa Rules and Government Procedures Hampering US Science and Technology, which continues to allow APS to conduct F1 visa advocacy. MOTION: To accept the Physics & the Public Subcommittee's suggested revision and to recommend to the APS Council of Representatives that APS Statement 03.1 - Visa Rules and Government Procedures Hampering U.S. Science and Technology remain active, with modest edits as presented. (L. Greene/S. Blessing)

ACTION: The motion passed, unanimously.

03.1 VISA RULES AND GOVERNMENT PROCEDURES HAMPERING U.S. SCIENCE AND TECHNOLOGY

(Adopted by Council on June 6, 2003; Revision approved by Council on November 9, 2018)

National security and economic vitality critically depend on science and technology and strongly profit from contributions of foreign-born scientists and engineers. The American Physical Society calls on the United States Administration and Congress to maintain and implement appropriate and effective visa rules and government procedures that sustain science and technology. They must promote continuing international scientific and technological cooperation and ensure the flow of people and knowledge needed to guarantee economic strength and national security. The rules and procedures must also protect the nation against terrorism and espionage.

Background National security has many aspects that must be balanced in a modern and diverse society, one of which is maintaining leadership in science and technology.

Science is international: foreign-born scientists play a critical role in the nation's economic vitality, national security and quality of life. Some procedures and rules implemented to secure the nation's borders have resulted in long delays and denials of U.S. visas for many foreign scientists and students. These procedures impede global industrial and academic partnerships. U.S. national laboratories, even those not engaged in classified projects, now have rules that discriminate against scientists and engineers from certain countries. As a result, our partners are increasingly reluctant to participate in joint ventures. This isolation threatens irreparable damage to U.S. economic competitiveness and, ultimately, national security.

APS Statement 03.4 – Freedom of Scientific Communication in Basic Research B. DeMarco provided an overview of discussions conducted since the last meeting and provided advice.

MOTION: To accept the Physics & the Public Subcommittee's suggested revision and to recommend to the APS Council of Representatives that APS Statement 03.4 - Freedom of Scientific Communication in Basic Research remain active, with modest edits as presented. **(P. Bucksbaum/W. Collins)**

ACTION: The motion passed, unanimously.

03.4 FREEDOM OF SCIENTIFIC COMMUNICATION IN BASIC RESEARCH

(Adopted by Council on November 20, 1983; Revision approved by Council on November 9, 2018)

Restricting exchange of scientific information based on non-statutory administrative policies is detrimental to scientific progress and the future health and security of our nation. The APS reaffirms its 1983 statement that:

Whereas the free communication of scientific information is essential to the health of science and technology, on which the economic well-being and national security of the United States depend; and

Whereas it is recognized that the government has the authority to classify and thereby restrict the

communication of information bearing a particularly close relationship to national security; and

Whereas members of the American Physical Society have observed the damaging effects on science

of

attempts to censor unclassified research results;

Be it therefore resolved that the American Physical Society through its elected Council affirms its support of the unfettered communication at the Society's sponsored meetings or in its sponsored journals of all scientific ideas and knowledge that are not classified.

Guest Speaker – Physics GRE A proposed statement on the use of the Physics Graduate Record Exam in graduate admissions was brought before POPA in June. To better inform POPA's consideration of the statement, Casey Miller, Associate Dean for Research & Faculty Affairs, College of Science, Rochester Institute of Technology was invited to provide guidance, based on his research surrounding the validity of the Physics GRE as a predictor of preparation for graduate school. (See "New Business" section of minutes.)

National Security Subcommittee HEU Report Update Study Chair, J. Wells and APS Chief Government Affairs Officer, F. Slakey, provided an update on activity surrounding the report's release. The report has been well received and considered very timely and useful for the health of science in the U.S. Management at NIST and NAS have been receptive and supportive. NAS in particular was receptive to the idea of a conference and/or study to push for and recommend new reactor designs. Copies of the published report were presented to all in attendance.

Stockpile Stewardship Activity Discussion M. Hockaday indicated that the timing isn't right for activity on stockpile stewardship. With the 2018 release of the Nuclear Posture Review, would we be looking forward or would we be looking back after a year? P. Bucksbaum thought it might be good to come up with a notion of what kinds of activity we could be involved with or what kind of recommendations we might lend expertise to. The idea of

weighing in on the balance between DOD's science portfolio vs. non-science portfolio was floated. It was agreed that these conversations aren't really happening right now. This activity is tabled until APS participation becomes necessary.

Update on Stockholm Security Conference J. Wells attended and provided an update. The conference drew people from around Europe, European Parliament and Swedish Parliament. The highest concerns for the European community were the issues of nuclear weapons, proliferation, and verification.

Autonomous weaponry is on the rise, as well as very short-range ballistic missile defense systems.

Technology gains within industry are outpacing government. A portion of Sweden's army is dedicated to assessing threats through and to technology. Soldiers are now enlisted to work on computers. There is an interest in having the APS combine with the EU and international societies to discuss these concerns, as well as cyber threats and AI.

ACTION: The National Security Subcommittee will continue considering how APS and/or

POPA can be involved and what actions can be taken.

Ethics Subcommittee F. Houle provided an update. At the Board Retreat and within the Council Steering Committee, the statement text was reviewed and there was a fine-tuning of the language. Concerns were raised over the implicit bias section, with the purpose of conveying the necessary message in a way that will be heard. The next step is to send the statement to the APS membership for

review and comment. Membership commentary will be considered, and a final draft of the statement will be brought back to POPA in February for discussion and vote.

Guest Speaker – Ethics Activities at AGU Billy Williams. Vice President, Ethics, Diversity, and Inclusion at the American Geophysical Union addressed POPA on the responsibilities of a professional societies to promote and codify professional behavior, enforce sanctions tied to code-of-conduct and policy, educate and support members, and create positive incentives for a changed culture. AGU has implemented several initiatives since the September 2016 NSF Workshop, "Sexual Harassment in the Sciences: A Call to Respond." These include: updated ethics policy implementation, the SafeAGU Program and workshops expansion, an annual ethics summary report sent to all members, a professional conduct self-disclosure process, and the development of the AGU Ethics and Equity Center. Key changes to AGU's ethics policy include an expansion of the definition of scientific misconduct (to include misconduct towards others in the form of harassment, bullying, etc.), inclusion of code of conduct implications for honors, recognition, and AGU governance participants, and addition to the policy related to member misconduct that harms another AGU member or may bring harm to AGU's mission or reputation.

Energy & Environment Subcommittee GhG Investment/Divestment Strategy Discussion & Vote D. Dahlberg reviewed a list of action options POPA could consider recommending to the APS Board of Directors regarding APS financial holdings in GhG related investments. These options include:

(1) Engagement with investment managers to promote climate change-related shareholder resolutions. (2) Divestment from any mutual funds that have large holdings in fossil fuel companies. (3) Experiment with engagement, then try divestment if engagement doesn't work. (4) No recommendation

Discussion ensued on the merits and pitfalls of each option. P. Taylor pushed for divestment. F. Slakey said OGA has no particular view on which strategy to pursue. He provided information on how APS, in

said OGA has no particular view on which strategy to pursue. He provided information on how APS, in partnership with a coalition of societies, might be able to promote climate change-related shareholder resolutions. K. Kirby assured POPA that APS has asked its investment managers to look carefully at socially responsible funds.

MOTION: To forward the following option related to the APS investment portfolio to the APS Board and APS Investment Committee for consideration. (M. Barnett/P. Taylor)

• POPA recommends to the APS Board to end all financial investments in companies that generate the majority of their revenue from the production of fossil fuels.

ACTION: The motion failed. (2 in favor; 8 opposed; 4 abstained)

D. Dahlberg suggested tabling the discussion until the APS Investment Committee has considered the issue more thoroughly. K. Kirby or F. Slakey will report back.

Climate Change Activity C. Gutierrez and W. Collins provided an update on continued polling of undergrad students regarding a national competition focused on addressing energy challenges. Gutierrez suggested polling the 60-90 students who will be involved in GERA's Energy Workshop at the 2019 APS March Meeting. They are a captive audience with an interest in energy and climate change issues. POPA suggested that the competition's goals/theme/topic and funding for a prize be better defined before polling the students.

ACTION: Gutierrez and Collins will speak with the Chair and Past Chair of GERA regarding

polling at the upcoming Energy Workshop and will nail down a value proposition.

E&E/Climate Statements – Comprehensive Review After a review of the current E&E/Climate Statements, Dahlberg remains unconvinced we should combine any/all of them.

ACTION: Dahlberg will send a cut & paste combine of the statements to the E&E

Subcommittee for review & discussion and report back to POPA in February.

New Business POPA discussed whether a proposed statement regarding the Physics Graduate Record Exam (PGRE), as brought forth by the APS Committee on Education, was advisable. It was suggested that the current draft be reworked to follow the format of more current APS statements (concise statement, followed by background information). It was suggested that if we propose that Physics Departments reduce their reliance on the PGRE as a tool to filter applications then we should provide alternative tools for filtering. POPA noted that particular populations might be disadvantaged if the PGRE is downplayed in the selection process. An APS Statement on the PGRE should be positive and focus on best practices.

ACTION: OGA will send POPA's thoughts and suggestions to the APS Committee on

Education. After reiteration OGA will send the draft statement to a panel of skeptics to get their feedback. F. Slakey will present findings to POPA in February.

Intersessional Minutes

- The APS Council of Representatives approved the block of POPA Statements up for review in 2018, as presented, at their meeting on November 9, 2018.
- The Ethics Statement was sent to membership for review; comments were received through November 26, 2018.

Next Meeting The date for the next POPA meeting will be February 8, 2019.

Adjournmen

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ACTION: *M. Marder adjourned the meeting at 2:24 PM.*