PTRA Strategic Plan 2020

Goals-

1. Enhance Diversity

Strategies:

- a. Partner with diverse organizations (e.g., NSHP)
- b. Outreach to Hispanic-serving and HBCU teacher training programs.
- 2. Improve K-12 physics instruction by providing PD for pre and in-service teachers. Strategies:
 - Continue to promote workshops supporting basic content of secondary physics, physical science and astronomy (concepts and pedagogy)
 - Develop and provide workshops focusing on new teacher initiatives and provide connections to Common Core, Next Generation Science Standards, Physics Education Research, STEM integration, Learning Cycles
 - Develop resources and provide PD for educators related to current physics and astronomy such as the Quantum Initiative.
 - d. Develop and promote support for AP Physics teachers
 - e. Develop and promote workshops for basic content relevant to K-8 such as electricity, force & motion, and waves
- 3. Improve outreach to teachers and the physics/education community Strategies:
 - Identify and disseminate current research and pedagogy (e.g., quantum technologies)
 - Volunteer to present workshops/sessions at education/teacher-serving organizations, e.g., at the UTeach conferences, engineering education conferences, etc.
 - c. Support relevant events such as Science Day, state meetings, national meetings, etc.
 - d. Disseminate relevant and appropriate supportive resources (archival, current, future) and PD opportunities.
 - e. Develop support materials for AP
- 4. Build/Enhance relationships with partner organizations to enhance visibility and increase membership and opportunities for outreach. Strategies:
 - Develop relationships with partner organizations (e.g. AAPT, NSTA, AAPT Sections, UTeach)
 - b. Collect data regarding needs of educators and relevance/effectiveness of workshops to allow for self-improvement and a basis for funding.
- Sustain/build PTRA organization, active instructional leaders Strategies:
 - a. Website update

Comment [MJA1]: We did not mention this explicitly in our original draft although it has been our "bread and butter."

Comment [MJA2]: Making it explicit that we cover astronomy also and that Quantum for all is just an example

Comment [MJA3]: Making it clear that UTeach is just an example.

Comment [Office4]: Giving examples of organizations, not exclusive to those listed

- b. Publicize the work of PTRA in AAPT publications (i.e. eNNOUNCER, website) and other venues (i.e UTeach Newsletter)
- c. Offer graduate credit (e.g., Mercyhurst, BYU) through universities willing to partner with PTRA.
- d. Promote leadership development through institutes, fellowships and awards
- 6. Promote mission of AAPT by providing support for K-12 educators Strategies:
 - a. Facilitate workshops and sessions at AAPT national meetings.
 - b. Publish/present curriculum/PD on NGSS; Consider development/marketing of "Teaching Physics through NGSS" through NSTA
 - c. Publish resources through AAPT, e.g., AAPT PTRA book series
 - d. Pilot New Teacher workshop (parallel with New Faculty) in anticipation of submitting a grant.

Comment [MJA5]: This was also not explicitly listed in the draft, although again it is a large part of what we do and have done and is critical to the AAPT high school constituency.

Comment [Office6]: Added development/marketing