1. Develop a guide for self-assessment of undergraduate physics programs founded on documented best practices linked to measurable outcomes

   *The guide should provide a physics-community-based resource to assist programs in developing a culture of continuous self-improvement, in keeping with their individual mission, context, and institutional type. The guide should include considerations of curricula, pedagogy, advising, mentoring, recruitment and retention, research and internship opportunities, diversity, scientific skill development, career/workforce preparation, staffing, resources, and faculty professional development.*

2. Recommend a plan for ongoing review and improvement of this guide under the oversight of the APS Committee on Education
APS BPUPP Task Force Members

Co-Chair: David Craig, Le Moyne College
Co-Chair: Michael Jackson, Millersville University of Pennsylvania

• Noah Finkelstein, University of Colorado Boulder
• Courtney Lannert, Smith College and UMass Amherst
• Ramon Lopez, University of Texas at Arlington
• Willie Rockward, Morehouse College
• Gay Stewart, West Virginia University
• Gubbi Sudhakaran, University of Wisconsin-La Crosse
• Kathryn Svinarich, Kettering University
• Carl Wieman, Stanford University
• Lawrence Woolf, General Atomics Aeronautical Systems, Inc.

Project Manager: Sam McKagan
Staff Liaison: Ted Hodapp; Task Force Support: Miranda Bard
AAPT Liaison: Bob Hilborn

www.aps.org/bpupp
What BPUPP is Doing

Designing a process to help department chairs with:

• Periodic program assessment (departmental review)
• Improve usefulness of assessment
• Bring together known literature on topics, and best practices when there is insufficient evidence-based knowledge about topics
• Encourage discussions in departments on continuous improvement of physics major using evidence-based methods
• Provide a leverage point for departments to advocate for resources to improve the major
• Engage PER community on departmental needs
Main Sections

- Recruitment and retention (enrollment strategies, degree tracks, partnerships, student interactions)
- Student learning (curriculum, education research, undergraduate research)
- Career preparation (teacher preparation, graduate school, diverse careers)
- Assessment (program and student learning)
- Diversity and equity
- Department climate and faculty professional development
- Department leadership
- Program Review (for reviewers and departments)
BPUPP: Brief Timeline

STB*: Requests to APS to do what ACS does: Program Certification
2012: APS leadership asks to investigate
2013: Working group formed to investigate
2014: Survey of physics chairs, report written
2015: Committee on Education (COE) discusses, and makes recommendation to APS Council; ABET announces intention to accredit all science fields
2015: APS Council charges COE to form task force
2016: COE begins process, drafts preliminary documents, recruits task force
2016: Task force starts meeting
2017: Applied for funding, beginning drafts and discussions on underlying issues

*Since Time Began
Guide Timeline

2017: Initial drafts; external input on drafting sections; external section reviews by invited department chairs and experts in the field

2018: Limited release of first sections; feedback from community; continued development and feedback

2018: Begin workshops on use of guide; training of departmental reviewers

2019: Release of entire (1st edition) of guide; continued workshops

2020: First review by COE to update/improve content, updating of review procedures to ensure fidelity of design principles
1-Minute Exercise

• Take a piece of paper
• Write one or two things you would like addressed in this guide or would like to contribute to it
• Pass the paper to the aisles
Large-scale goals

• 0. Prepare students for diverse careers
• 1. Increase number of graduates
• 2. Improve program pedagogy
• 3. Increase diversity and inclusion
• 4. Improve student success & satisfaction
• 5. Develop, review and assess (program) curricular and degree program offerings
• 6. Develop, implement and maintain effective cycle of program improvement
• 7. Develop and implement strategic planning processes and evaluate program constraints and resources
• 8. Prepare for departmental review and accreditation.
• 9. Improve professional environment for faculty
• 10. I’m a new chair. Help! (New employee orientation)