

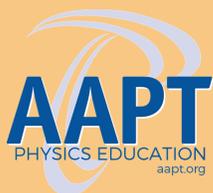
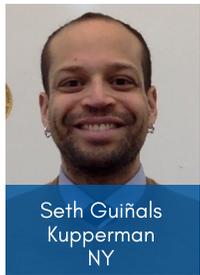
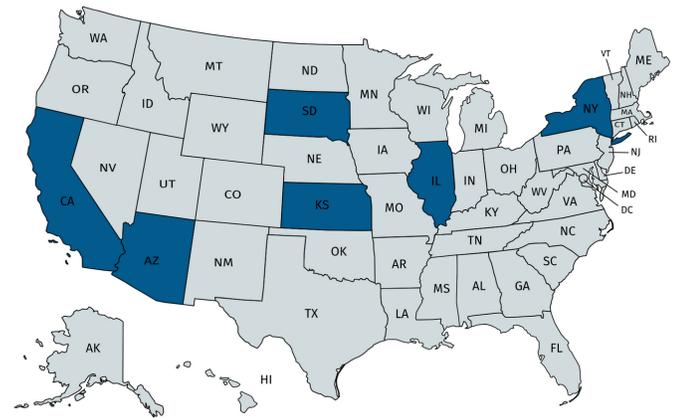
2018 AAPT/AIP Master Teacher Policy Fellowship

The American Association of Physics Teachers and the American Institute of Physics is pleased to announce the 2018-2019 AAPT/AIP Master Teacher Policy Fellowship.

This fellowship brings together a dozen **K-12 teachers of physics and physical science** to Washington, DC to develop and revise their own plans for effecting change in policy that relates to physics education. The program aims to support and empower teacher-driven efforts to improve education policy on topics including, but not limited to, standards for learning, instructional resources, assessments, recruitment and retention of physics teachers, professional development, and teacher preparation.

Across eight days in July, these fellows will work to learn about how federal, state, and local government interact, and take home a plan to implement for the 2018-2019 school year.

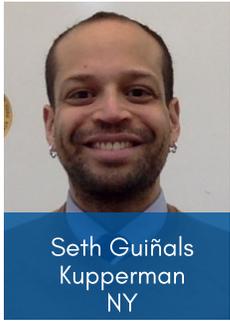
Looking for your local Fellow? Pages 2-4 have details on each Fellows' project proposal. See <https://www.aapt.org/k12/> for further details.



The American Institute of Physics is a federation of physical societies, including the American Association of Physics Teachers (AAPT). The AAPT is a professional membership association of scientists dedicated to enhancing the understanding and appreciation of physics through teaching. One Physics Ellipse College Park, MD 20740 | 301-209-3311 | aapt.org



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Seth Guñals
Kupperman
NY

"The backbone of our country's industrial, technological and economic future is the students we graduate in the STEM fields. In order to provide the greatest equity, opportunity and deepest understanding of the nature of the scientific endeavor, we rely on a capable teaching force. To **overcome our nationwide shortage of committed STEM teachers**, we must implement supports on the municipal, state and national level to incentivize our most promising young people to be instructors of STEM so they can educate and inspire our custodians of future knowledge. "



Katie Martino
NY

"I am looking forward to learning from my colleagues and initiating positive change within physics education policy. Quality physics education is imperative at all grade levels (K-12). With **proper support for teachers and proper guidance from teachers**, there is limitless potential for our students to create the next great innovation(s). Physics education policy possesses the power and responsibility to create that opportunity for our students. The results from these changes could potentially influence science education and science progress for our entire country."



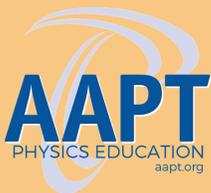
Julie Dahl
SD

"I'm looking forward to spending time with other like minded-individuals and building a plan to make a difference in science education policy. Currently, there is relatively little priority given to teaching and learning science in elementary grades. However, research shows the importance of early experiences in science to function productively as problem-solvers and an increased likelihood to choose science courses in high school (and beyond). This fellowship will provide an opportunity to advocate for policies to provide **high-quality elementary science programs**."



Becky Bundy
SD

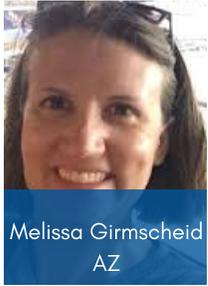
"I look forward to making the connections and building the relationships that will enable me to make a meaningful impact on science in our elementary classrooms. Elementary students are naturally excited about science. Instead of pushing science to the side, making room for ever more math and English language arts, we should be **integrating science throughout the K-6 curriculum**. Only by leveraging the natural curiosity of our young students will we truly engage them in meaningful learning experiences. Additionally, science is a natural means for developing the critical thinking, logical argumentation, and thoughtful questioning skills required for informed participation in our representative democracy."



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Melissa Girmscheid
AZ

"I love helping teachers find new ways to inspire their students. Physical science is rich with opportunities to spark creativity and problem-solving in our students and all that is required is the training for teachers. Helping **elementary teachers integrate more physical science** in their classrooms will, in turn, encourage more students to engage in the study of physics when they reach high school. I am looking forward to making important connections that my team and I can bring back to Arizona."



Nichole Spencer
AZ

"My policy focus motivates me because I am a product of an Arizona education that lacked access to a high school physics teacher. I know first hand how missing a physics experience can make college more difficult and I know first hand what it's like to lack the content knowledge needed to teach physical science. Through continued graduate education, support from physics professionals, and hard work and perseverance, I was able to build both my content knowledge and confidence in teaching physical science. College courses and teacher preparation programs should adequately prepare K-12 educators to teach physical science, and all students should have **access to high-quality physical science instruction.**"



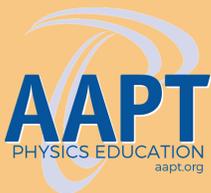
Jeff Hengesbach
AZ

"Through this fellowship I hope to support **high-quality STEM teacher professional development.** I look forward to gaining confidence in my skills to influence policy and build a case for STEM teacher support."



Amanda Whitehurst
AZ

"Arizona is quickly becoming a physics desert. With few teachers left who are certified to teach physics, entire schools have decided it is simply easier to not offer physics to their students. Additionally, a decade of underfunding schools has created a teacher shortage and taken opportunities for professional development from teachers. Arizona students deserve teachers who are well prepared to teach all subjects and well compensated for their hard work on behalf of students. We would like to encourage policy that addresses both these issues. We want to **help create qualified physics teachers** by providing the financial assistance needed to help fill these high need positions."



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"I am driven by what education can and should be for every child. With a policy focus, we will be able to take in the whole picture and work together to **address the most challenging barriers to moving physics and science education** toward the vision put forth by the National Research Council. I am looking forward to being a member of this outstanding team of educators and leveraging the knowledge, experiences, and expertise of every member to help address the collective issues we identified. The resources and expertise of AAPT and AIP connect us, support us, and provide input throughout the process."



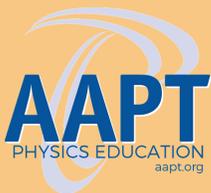
"I am excited to help other teachers create lessons with **authentic engineering practices** that align with **NGSS** in a project-based setting. I look forward to being able to grow as a teacher leader and learn how to successfully advocate for teachers."



"As a father to a young daughter, I have watched her experience **negative biases** on her ability to complete science, math, and engineering tasks simply **because she is a girl**. While I knew this problem existed, her struggles pushed me to learn more about the problem and recognize that something larger needs to be done. I am most looking forward to having the opportunity to network with other inspired individuals who are looking to make a difference."



"I have taught in all girls schools for almost 13 years and have seen the great need for **more women in the field** to demonstrate the possibilities of what is possible not only in Physics, but in all STEM fields. I am looking forward to the opportunity to grow as an educator, to learn ways to improve my field, and to gain great insight into how policy can converge with what is best for education."



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