A Versatile Degree Opens Doors -So Can You

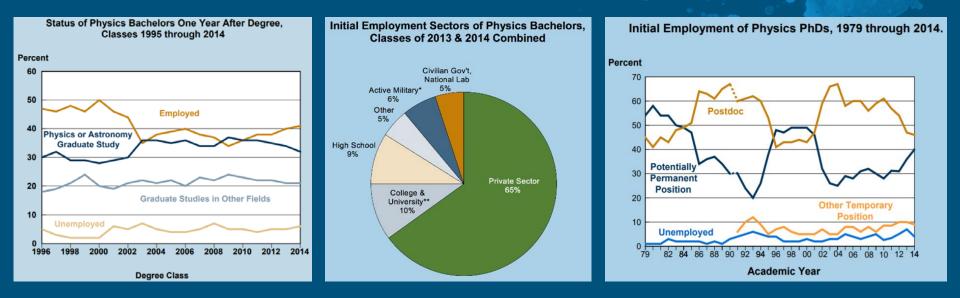
Mary Ann Mort Career Programs Intern American Physical Society BS Applied Physics - CSU Sacramento







## Where Do Physicists End Up?



AIP Statistical Research Center, Focus on Roster of Physics Departments with Enrollment and Degree Data
(2013), Physics Bachelors: One Year After Degree (2016), Physics Doctorates One Year After Degree (2016)

# So What Else Do Physicists Do?

- Medical Physics
- Policy Analyst
- Electronics Technician
- CEO, CFO, COO
- Lawyer
- TV Host
- Materials Science
- Architect
- TV Writer and Producer

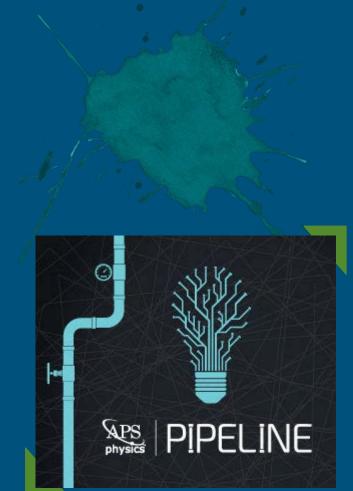
- Astronaut
- Flight Director
- Radiation Detection
- Technology Consultant
- Renewable Energy
- Analytics Manager
- Research and Development
- ENTREPRENEUR

# **Project PIPELINE**

- Gaps in physics curriculum
- Employers like:
  - Analytical & problem solving skills, adaptability
- Want to see:

4

- Leadership, communication, & multidisciplinary team skills
- Promote PIE: Physics Innovation & Entrepreneurship



APS Workshop on Nat'l. Issues in Industrial Physics ABET Survey of applied and engineering physics graduates, Kettering University

### **Startup Stories**

- Gets students excited about entrepreneurship
- Helpful advice for both students and faculty

"Being an entrepreneur is more like staring at a blank canvas with a paintbrush in your hand than it is to solving a problem with a calculator in your hand."



After its years in its undergraduate come, venich its standa as a computer visione may, Joe graduate with a Bischoler of Scores in Physics, He was insister of whiti he wanted to do, but weard it standard any of the coreer automas he thought were so called traditional physics coresers. He took a year of thom school and got a job as head of 17 before learning about <u>Case Western's Physics Entrepresentation</u> <u>Engagem</u> specializing in STEM academic

members, including grandparents

have Etc.D.s.in technical field

computer games

· His fathor and many family

#### Startup Stories



<u>Aaron Weiss</u> Aaron's passion for making things has led him to Google, prototyping devices as new ideas emerge.



#### Brian Andrews

A previous attempt has proven to put more obstacles in Brian's path, but that hasn't stopped him.



<u>Tracee Walker Gilbert</u> The woman who did it all - and then she started her own business to top it off.

### Spreading the Word

- The Vector synthesized Startup Story
- APS News article on PIE education





#### **Physics Innovation and Entrepreneurship**

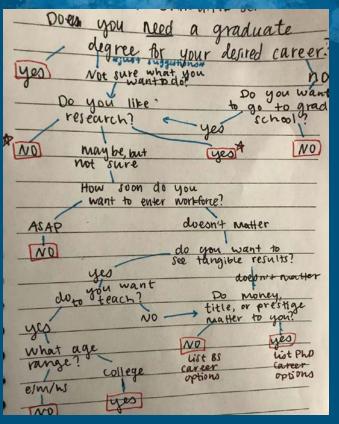
Interested in how you can use your physics degree to its full extent? Test your innovation to the max? Start your own business?

Nathan Swift has done just that, and more. Initially majoring in political science, he did a 180 after realizing his passion for science. He completed his B.A. in physics at Colgate University, and worked at McMaster-Carr Supply for a couple of years. When he recognized his knack for both technical and business matters. Nathan went to Case Western Reserve University to get his M.S. in physics entrepreneurship. These experiences gave Nathan a wide range of useful skills including market analysis, customer development, and the broad skillset of a physicist.



## Should You Go to Grad School?

- Desire
- Prestige/Title
- Research
- Time to enter workforce
- Money
- Meaningful/Tangible results
- Teaching



### STEP UP for Women

- Increase women physics undergrads
- Interventions for high school students
- Profiles of accessible, successful women with physics bachelor's degrees

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