## YOU HAVE OPTIONS!

## preparing for a successful career with your bhysics degree

Dr. Toni Sauncy, Texas Lutheran University

Former Director, Society of Physics Students & Sigma Pi Sigma Physics Honor Society

# WHAT AM I SUPPOSED TO DO WITH MY PHYSICS DEGREE?



## Acknowledgements Project Personnel

#### **Project Investigators**

- Thomas Olsen, former Assistant Director Society of Physics Students
- Kendra Redmond, Programs Manager Society of Physics Students
- Roman Czujko, Director AIP Statistical Research Center
- Toni Sauncy, former Director Society of Physics Students and Sigma Pi Sigma
   New Contributions:
- Brad Conrad, Director-SPS and Sigma Pi Sigma
- Kerry Kidwell Slak, Assistant Director SPS and Sigma Pi Sigma

#### **Student Contributors-SPS Summer Interns**

- Amanda Palchak, University of Southern Mississippi(2011)
- Shouvik Bhattacharya, Minnesota State University (2012)
- Jose "Ro" Avila, King College, SPS Summer Intern (2013)



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## Data. How many?

Good news.

Physics bachelor's degree production is on the rise.



### Physics students have broad interests

About 1/3 of all physics majors graduate with a double major



## One year later.

#### Good news!

#### Status of Physics Bachelors One Year After Degree, Classes 1995 through 2014



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### **Physics Bachelors 1 Year Later**

7,430 Recent Degree Recipients



#### Field of Employment for New Physics Bachelors Employed in the Private Sector





## What about PhDs?

#### Physics PhDs Conferred in the U.S., 1900 through 2012. Number 2.000 2.000 1,800 1,800 1.600 1.600 1.400 1,400 Total U.S. Citizens 1,200 1,200 Non-U.S. Citizens 1.000 1,000 800 800 600 600 400 400 200 200 0 0 1900 10 20 30 40 50 60 70 80 90 00 12 **Degree Year**

#### Primary employment for PhD physicists is in the private sector! FMI: https://www.aip.org/statistics/whose

hiring-physics-phds

#### Less than 5% of Physics Bachelor's degree recipients will enter academia in a tenure track position

#### Number of Faculty Hired by Physics Departments



• The noticeable drop from 2008 to 2010 is likely due to the 2008 recession.

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# So, where <u>do</u> all those BS/BA physics graduates go?



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Students should be equipped for <u>the path they choose</u> when they complete their bachelor's degree.

Workforce (STEM, non-STEM)

Teaching K-12

Grad School (Physics & other)

Departments that provide robust programs addressing a broad range of career trajectories for undergraduate students *tend to be most successful.* 

Anythin

g!

## Resources are FREE.

#### https://www.spsnational.org/career-resources/career-

Society of Physics Students			
About 👻 Programs & Resources 👻 Av	wards  Meetings  Career Resources  The SPS Obse	erver 👻 Sigma Pi Sigma 👻	
Home » Career Resources			
Career Resources	Career Resources		
SPS Jobs	Share This: 🛉 😏 🖇 🖗 🖾 🖨		
What opportunity are you	What opportunity are you looking for?		
looking for?			
Considering a Physics Major? Currently Studying Physics?			
Considering the Workforce?			
Considering Grad School?			
Career Pathways Project Careers Toolbox Website	Considering a Physics Major?	Currently Studying Physics?	
	Find out what you can do with a physics	Expand your resume. Search REU and	

Toni Sauncy - tsauncy@tlu.edu

#### Skills Used Regularly New Physics Bachelors Employed in STEM Fields

Work on a Team Manage Projects Work with Customers Manage People Manage Budgets Solve Technical Problems Technical Writing Perform Quality Control Design & Development Applied Research Programming Use Specialized Equip. Knowledge of Phys. or Ast. Advanced Math Simulation or Modeling Tech Support



Percent Regularly Using Knowledge or Skill

## Physics – Common skills / skill sets

Working with laboratory instruments	Computer hardware and software
Conducting research	Analysis and quantitative thinking
Communicating complex ideas	Working with others
Problem solving and critical thinking	Others??

**Physics** I can't wait to hear Professor where \*your\* Career pathway takes you!



## www.spsnational.org

Toni Sauncy tsauncy@tlu.edu

## References

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