

# SCIENCE AND ADVOCACY: SHAPING LIVES IN PHYSICS

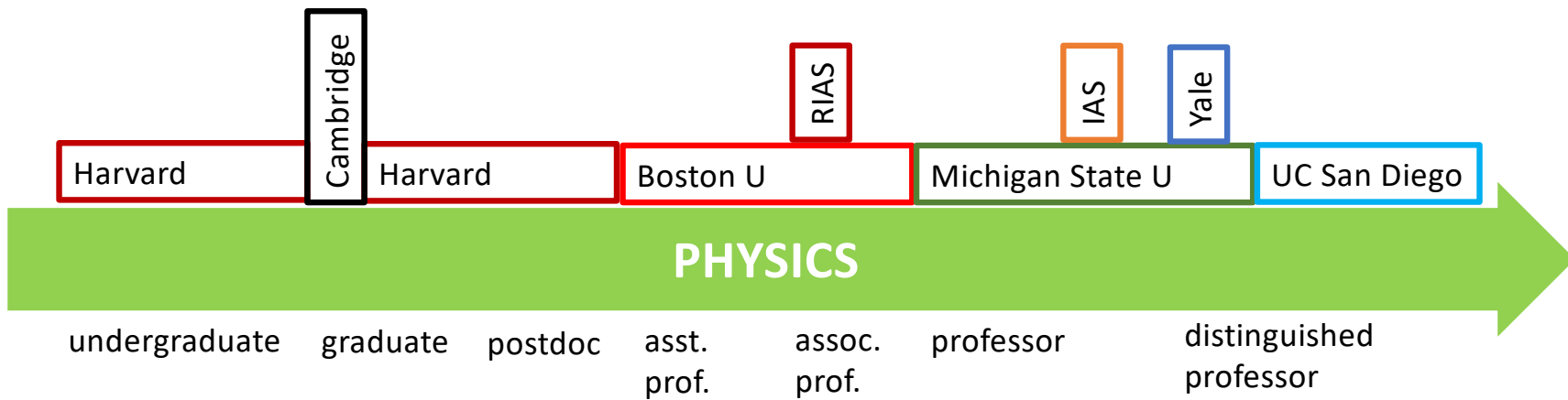
**Elizabeth H. Simmons**

Distinguished Professor of Physics

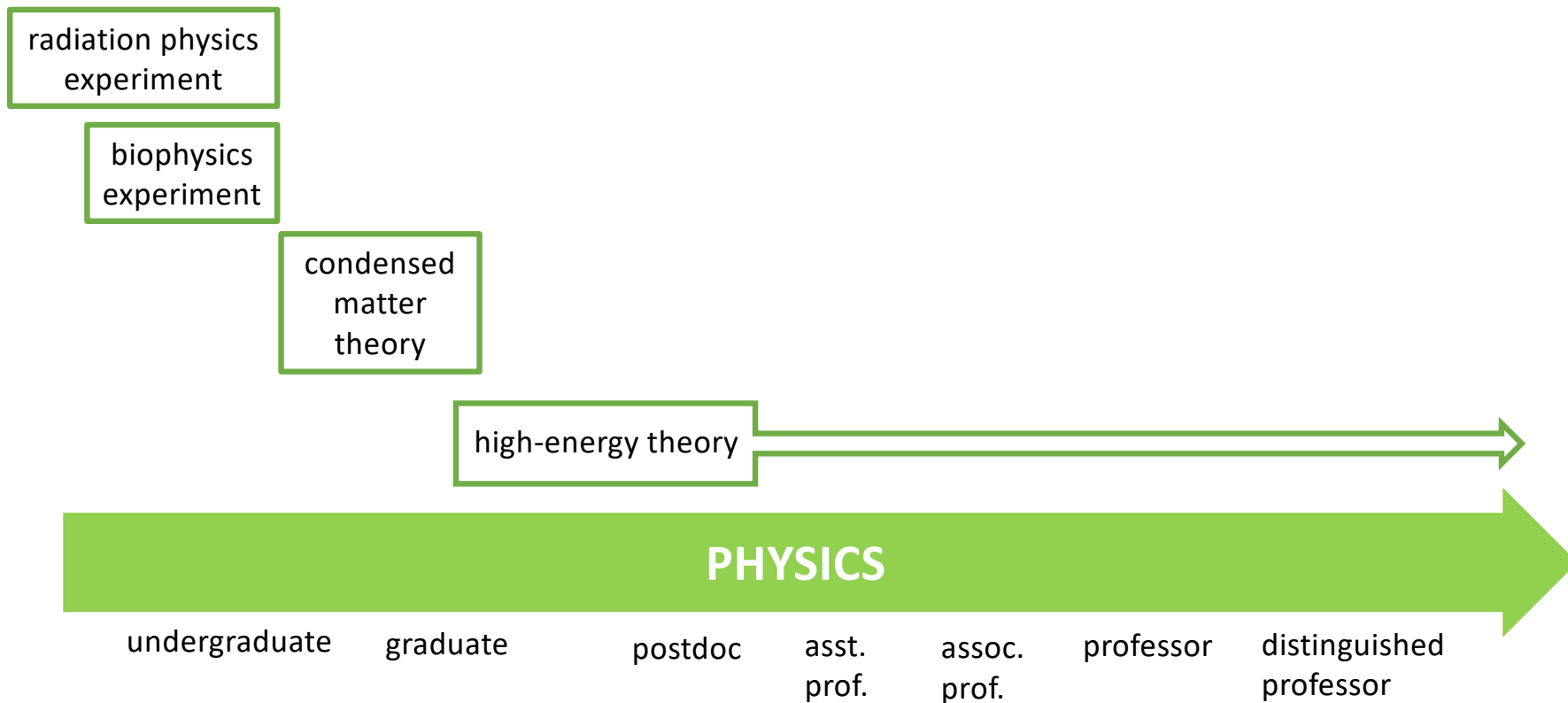
Executive Vice Chancellor

**University of California, San Diego**

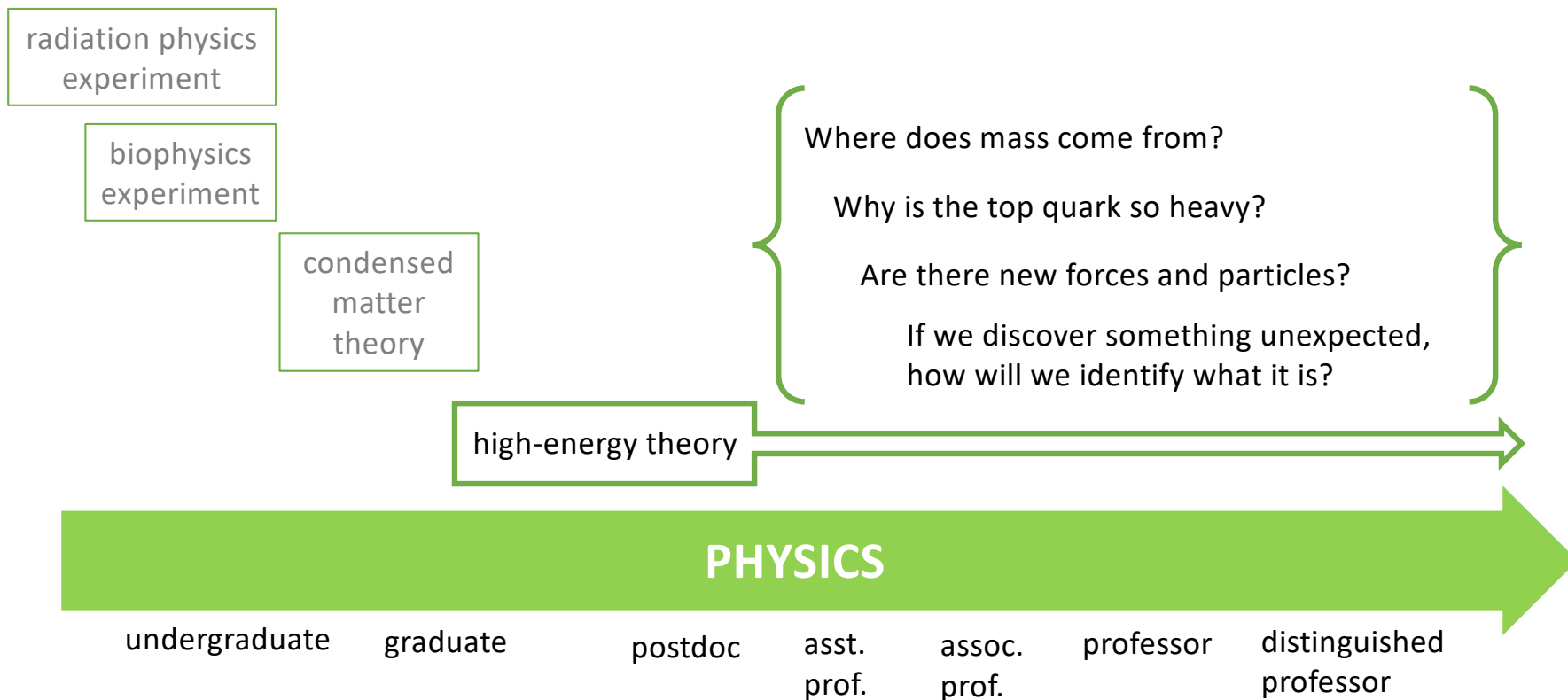
*Shaping My Life in Physics*



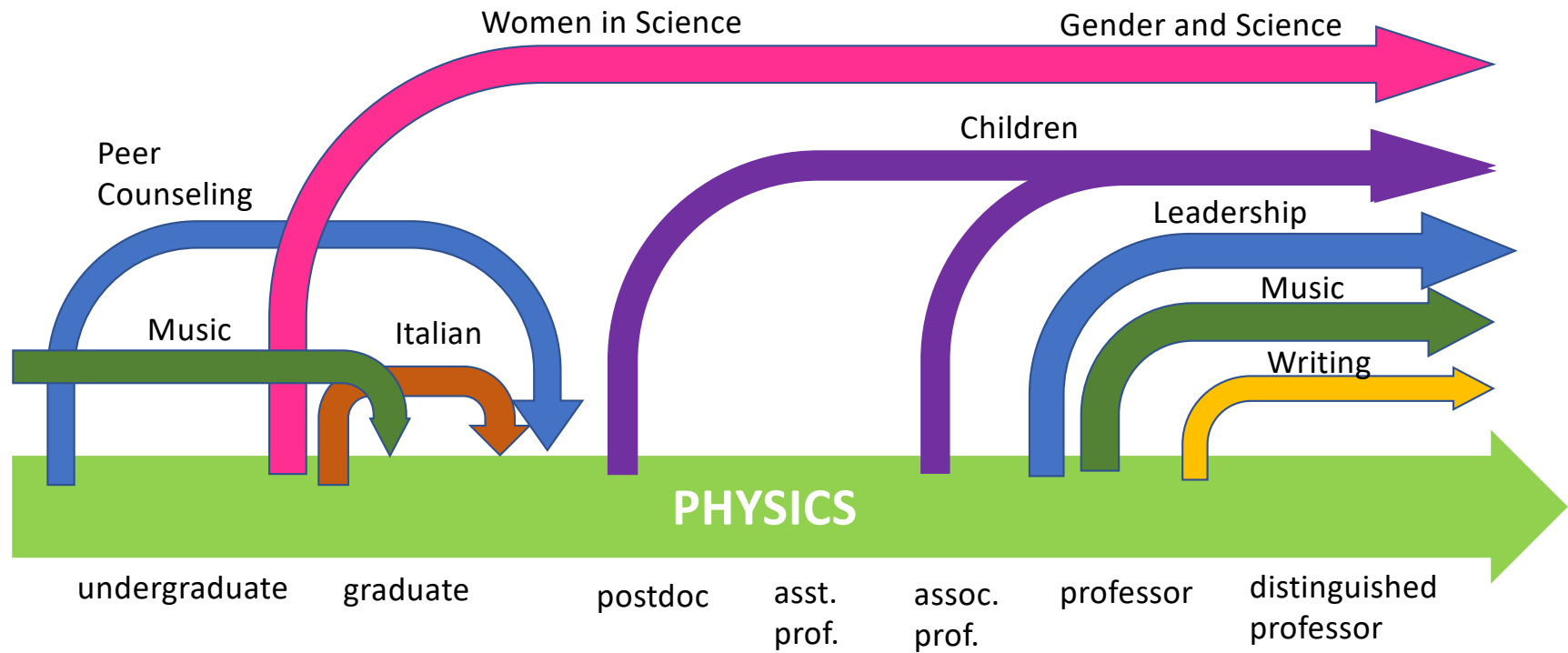
A Linear Career



A [less] Linear Career?



## Recurring Questions



Shape of a Career: Fundamental and Harmonics

## My family, December 2019



*Shaping Your Life in Physics*

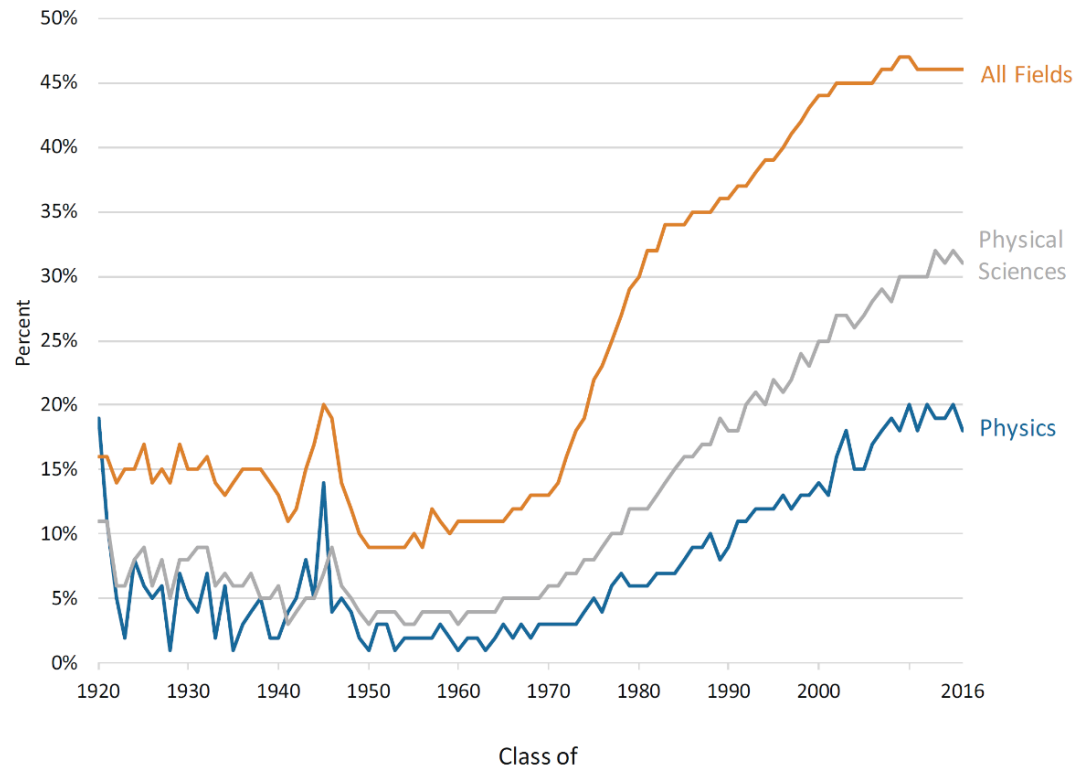


## *Tools and Tactics*

- Seek and seize opportunities
- Advocate for yourself
- Find multiple mentors to build a network
- Ask for what you need to succeed
- Accept help gracefully... and help others in turn
- Learn when to declare victory and move on

*Opening Doors so others can  
shape Their Lives in Physics*

### Percent of PhDs Awarded to Women in Specified Fields, Classes of 1920 through 2016



Source: National Science Foundation, National Center for Science and Engineering Statistics.  
Data Compiled by AIP Statistical Research Center.

# LGBT Climate in Physics

BUILDING AN  
INCLUSIVE  
COMMUNITY



AMERICAN PHYSICAL SOCIETY

## APS Ad-Hoc Committee on LGBT Issues

**Michael Falk (chair)**

Johns Hopkins University

**Timothy Atherton**

Tufts University

**Ramón Barthelemy**

APS/AIP Sponsored AAAS Science and  
Technology Fellow

**Wouter Deconinck**

College of William and Mary

**Savannah Garmon**

Osaka Prefecture University

**Elena Long**

University of New Hampshire

**Elizabeth Simmons**

Michigan State University

**Kyle Reeves**

University of North Carolina

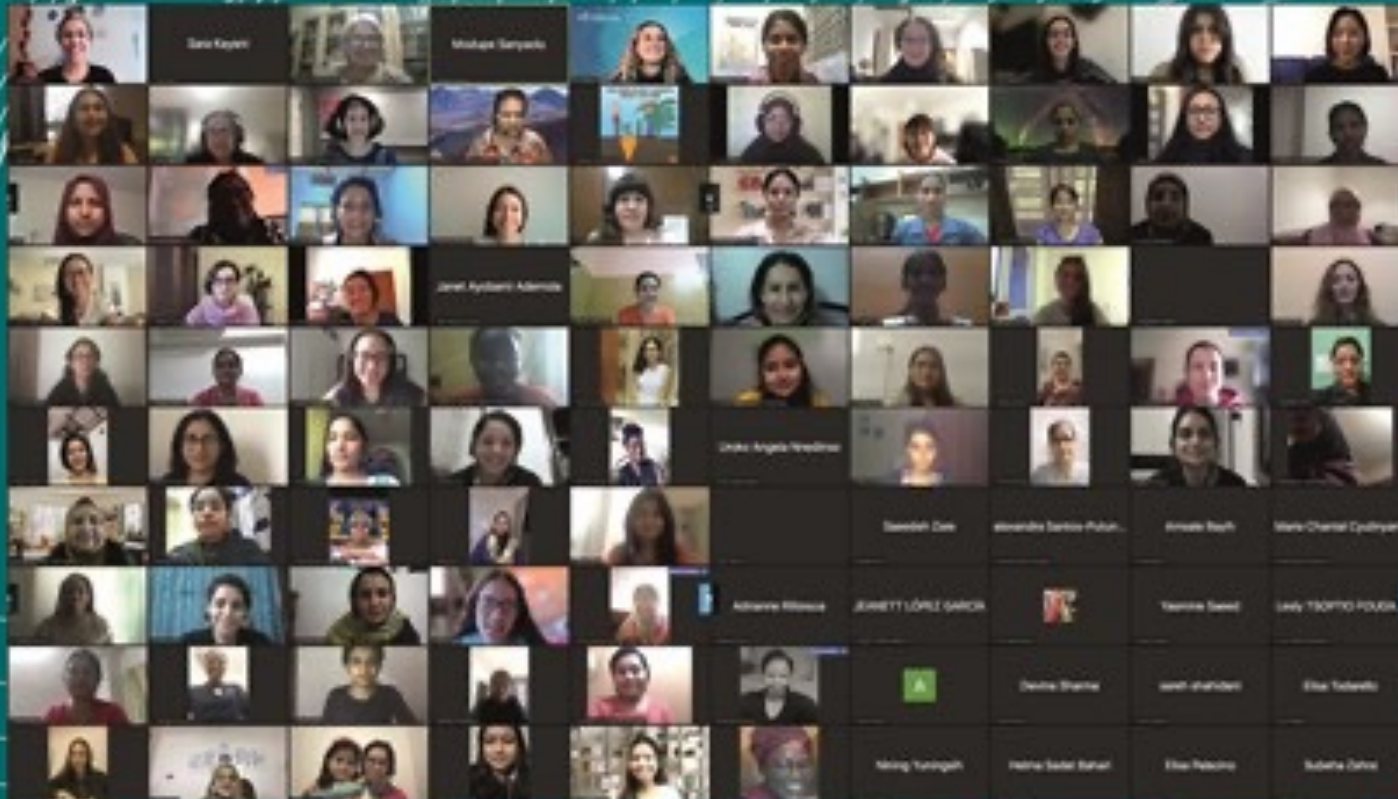
**Monica Plisch**

**Arlene Modeste Knowles**

APS Staff Liaisons

[Go.aps.org/lgbtphysics](https://www.aps.org/lgbtphysics)

# Career Development Workshop for Women in Physics | (smr 3614)



The Abdus Salam  
International Centre  
for Theoretical Physics



Virtual Meeting, Trieste, Italy  
17 - 19 November 2021

## Collaborating for 30 years



Shobhana Narasimhan (JNCASR, Bangalore, India)  
Elizabeth H. Simmons (UC San Diego and MSU, U.S.A.)

# Immediately Relevant Topics

Specific Skills	Career Pathways
CV preparation	Picking a research problem
Publishing tips	Transitioning from academe to industry
Negotiation	Workplace challenges
Teaching strategies	Work-Life issues
Writing methods	The culture of physics
Funding opportunities	Careers in different countries



## Varied Formats

Lecture, demonstration, panel,  
Workshop, team assignments,  
Theatre-based, posters, discussion







## Diversity of Speakers

Physics sub-field,  
Country of origin,  
Career stage,  
Gender,

...



# Impact

based on survey and  
post-workshop communications

- ❖ Sense of community
- ❖ An enduring network
- ❖ Inspiration to persevere
- ❖ New directly useful career skills
- ❖ Perspective on global context of women physicists
- ❖ Plans to share what was learned back at home institution
- ❖ Plans to organize a similar conference in home country
- ❖ Request for future workshops to benefit more women physicists



# Resources:

**AIP Statistical Research Center:** [www.aip.org/statistics/](http://www.aip.org/statistics/)

## **American Physical Society**

Gender Equity Report: [www.aps.org/programs/women/workshops/gender-equity/](http://www.aps.org/programs/women/workshops/gender-equity/)

Best Practices: <http://www.aps.org/programs/women/reports/bestpractices/>

**C-LGBT Report:** [go.aps.org/lgbtphysics](http://go.aps.org/lgbtphysics)

**Faculty Family Friendly Edge:** [ucfamilyedge.berkeley.edu/](http://ucfamilyedge.berkeley.edu/)

**Gender Equity Project:** [www.hunter.cuny.edu/genderequity/](http://www.hunter.cuny.edu/genderequity/)

**Implicit Associations Test** <https://implicit.harvard.edu/implicit/demo>

## **lgbt+physicists**

Website, with Out and Ally lists [lgbtphysicists.org](http://lgbtphysicists.org)

**Best Practices Guide:** <https://arxiv.org/abs/1804.08406>

## **NSF ADVANCE**

Portal Website: [www.portal.advance.vt.edu/](http://www.portal.advance.vt.edu/)

Michigan State's ADAPP-ADVANCE Project: [www.adapp-advance.msu.edu/](http://www.adapp-advance.msu.edu/)

StratEGIC Gender Equity Toolkit: [www.colorado.edu/eeer/research/strategic.html](http://www.colorado.edu/eeer/research/strategic.html)

**WISELI** Guide to Inclusive Hiring: <http://wiseli.engr.wisc.edu/searchguidebooks.php>

# More Resources:

## Books:

- L. Babcock and S. Laschever [negotiation], *Women Don't Ask and Ask For It*
- S.E. Page [diversity and teams] *The Difference*
- C. Steele [stereotype threat] *Whistling Vivaldi*
- J. Williams & R. Dempsey [patterns of bias] *What Works for Women at Work*
- E. Ideal & R. Meharchand, eds. [women role models in STEM] *Blazing the Trail*
- T. Wilson [conscious & unconscious mental processes] *Strangers to Ourselves*
- J.S. Antony & A.M. Cauce & D.E. Shalala *Challenges in Higher Education Leadership*
- C. Rennison & A. Bonomi *Women Leading Change in Academia*

## Articles:

- Nature special issue: Vol. 495, 7 March 2013
- Inside Higher Ed, column: *Mend The Gap* [E.H. Simmons]
- Inside Higher Ed, column: *Mentoring 101* [Kerry Ann Rockquemore]

## Organizations:

- National Center for Faculty Development & Diversity <http://www.facultydiversity.org>
- MentorNet <http://mentornet.org>
- National Society of Black Physicists <http://nsbp.org>
- National Society of Hispanic Physicists <http://www.hispanicphysicists.org>
- SACNAS <http://sacnas.org>