

# Workshop for Early Career Geoscience Faculty: *Strategic Planning and Support At the Beginning of Academic Careers*



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# HELPING TO PREPARE STUDENTS BY PREPARING EARLY CAREER FACULTY

Supporting faculty early catalyzes a **career-long** impact

- on the faculty
- on their future students



*Photos by Carol Ormand*

# CHALLENGES FOR EARLY CAREER FACULTY

**New faculty can feel overwhelmed from:**

**New Institution**

**New Courses**

**New Research**

**New (not clearly defined) expectations**

**New faculty can benefit from:**

**Hearing tips & getting feedback from other faculty**

**Developing a network of support**

**Making strategic plans**



# WORKSHOP FOR EARLY CAREER GEOSCIENCE FACULTY

- 5-day workshop with associated web resources
- Offered annually since 1999; > 850 faculty
- Part of **NAGT On the Cutting Edge** program
- Support from **NSF, GSA and AGU**



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PCAST “Engage to Excel” 2012 report

***“Establish discipline focused programs ...  
to train current and future faculty  
in evidence-based teaching practices”***



# WORKSHOP PROGRAM PROMOTES EVIDENCE-BASED TEACHING PRACTICES

*Workshop sessions on*

- **Course goals**
- **Active learning strategies**
- **Assessment**
- **Metacognition**
- **Misconceptions**
- **Lesson design**
- **Assignment/Activity Review**
- ...



*Figure modified from D. McConnell*

## WORKSHOP PROGRAM PROMOTES EVIDENCE-BASED TEACHING PRACTICES

**The workshop totally changed my view of teaching from teacher-oriented to student-oriented. It's no more what I want to teach but what students need to learn or take away from the course.**

Participant quote from end-of-workshop survey

# WORKSHOP PROGRAM PROMOTES STRATEGIC PLANNING



## Sun

- Strategic Decisions



## Mon

- Teaching Strategies



## Tues

- Strategies for working with research students
- Time management



## Wed

- Creating a strategic plan for research



## Thurs

- Strategic action planning

*Strategic planning & setting goals are themes that run throughout the workshop.*



# WORKSHOP PROGRAM SUPPORTS FACULTY BY DEVELOPING RAPPORT & COMMUNITY

## Sunday

- Gallery walk

## Monday

- Feedback on course goals
- Collaborative lesson design

## Tuesday

- Lunch discussions
- Individual consultations with leaders

## Wednesday

- Review of proposal summaries
- Review of activities/assignments

## Thursday

- Informal poster session
- Building a network of support
- Strategic action planning



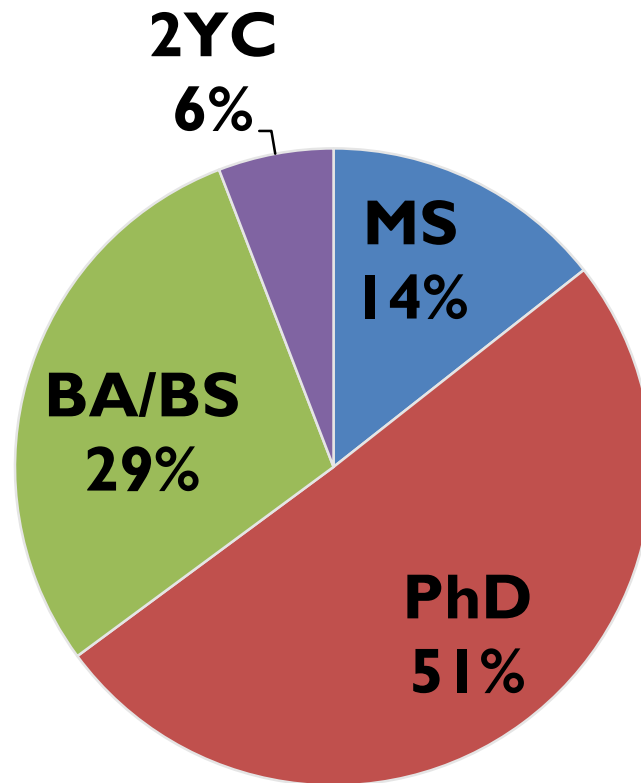
## WORKSHOP PROGRAM SUPPORTS FACULTY BY DEVELOPING RAPPORT & COMMUNITY

**Meeting other faculty in my position did a lot to relieve the stress of feeling that one is all by oneself in struggling with teaching and research.**

Participant quote from end-of-workshop survey

# WHO PARTICIPATES?

## WORKSHOP PARTICIPATION BY INSTITUTION TYPE

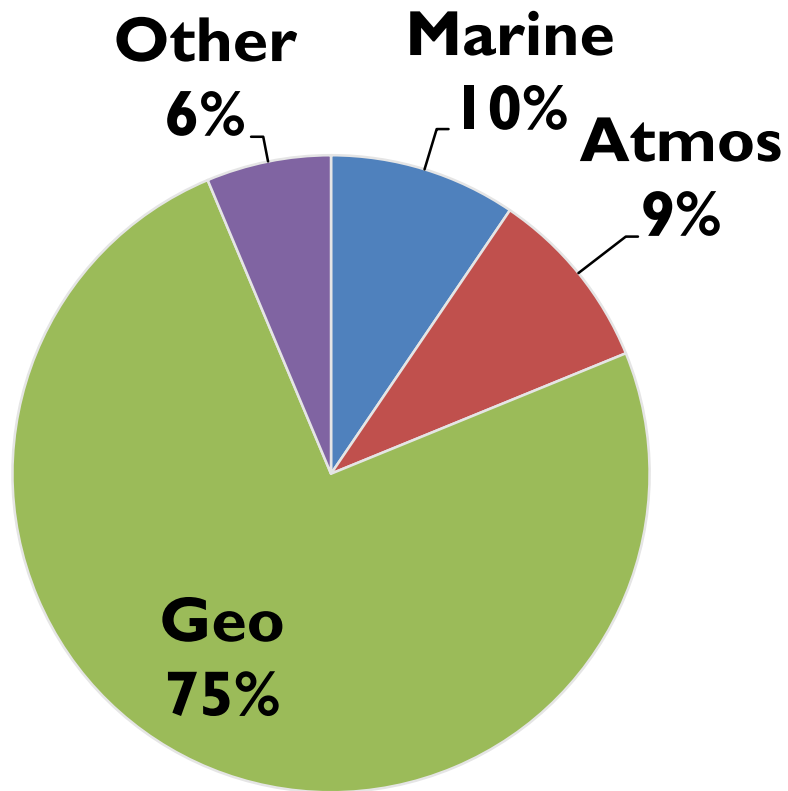


Data from 2003-2015  
Early Career Workshop  
Participants  
n=410

Based on highest degree  
offered by department

# WHO PARTICIPATES?

## WORKSHOP PARTICIPATION BY DISCIPLINE



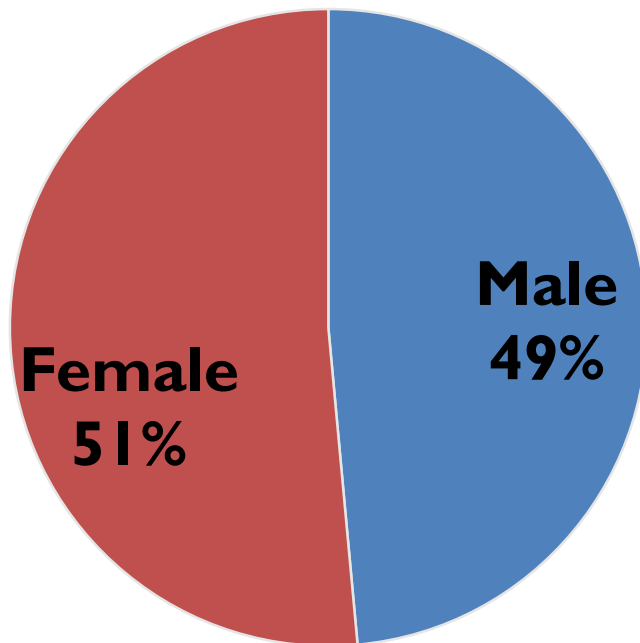
*For comparison...*

2011 On the Cutting Edge  
Survey of Faculty

Geo 71%  
Ocean 9%  
Atmos 8%  
Other 14%

Data from 2002-2014  
Early Career Workshop Participants  
n=632

## WHO PARTICIPATES?



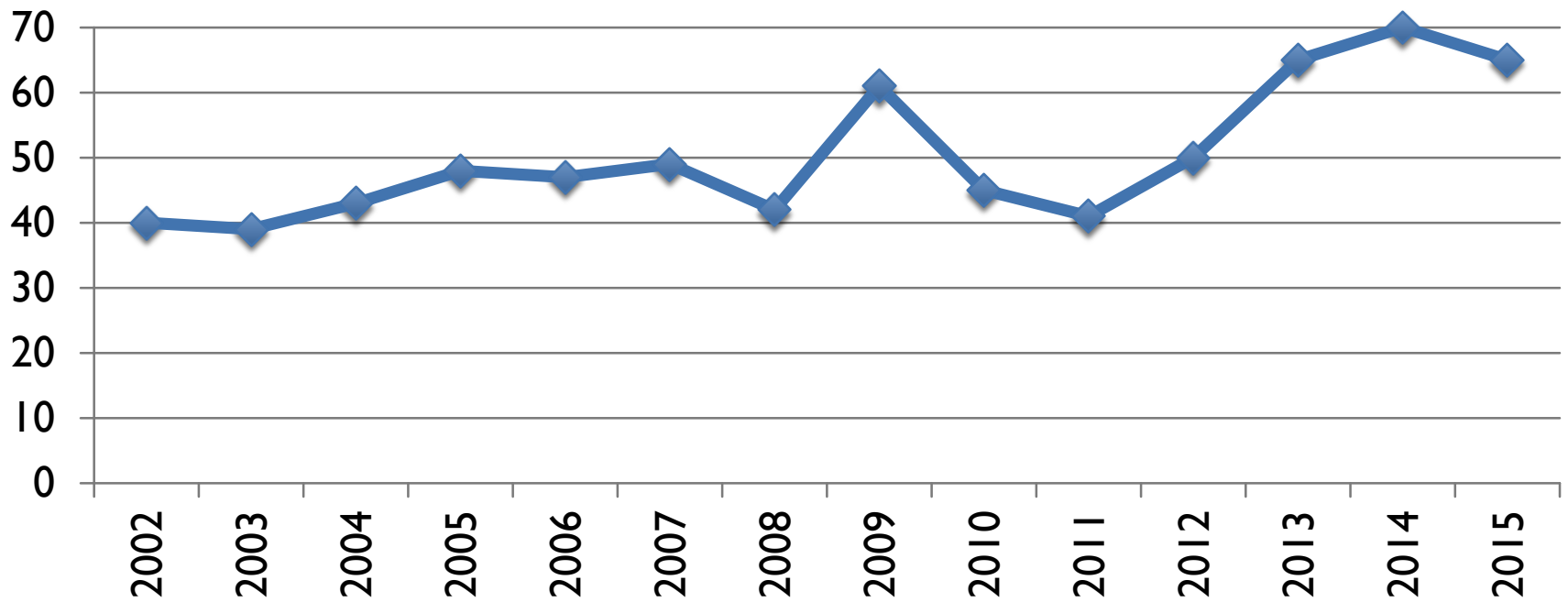
*For comparison, in the geosciences...*

**23% female assistant professors**  
(2008 AGI report)

**36% female @ PhD institutions**  
(Holmes et al., 2015  
based on 2010-2011 data)

Data from 2002-2014  
Early Career Workshop Participants  
N=685

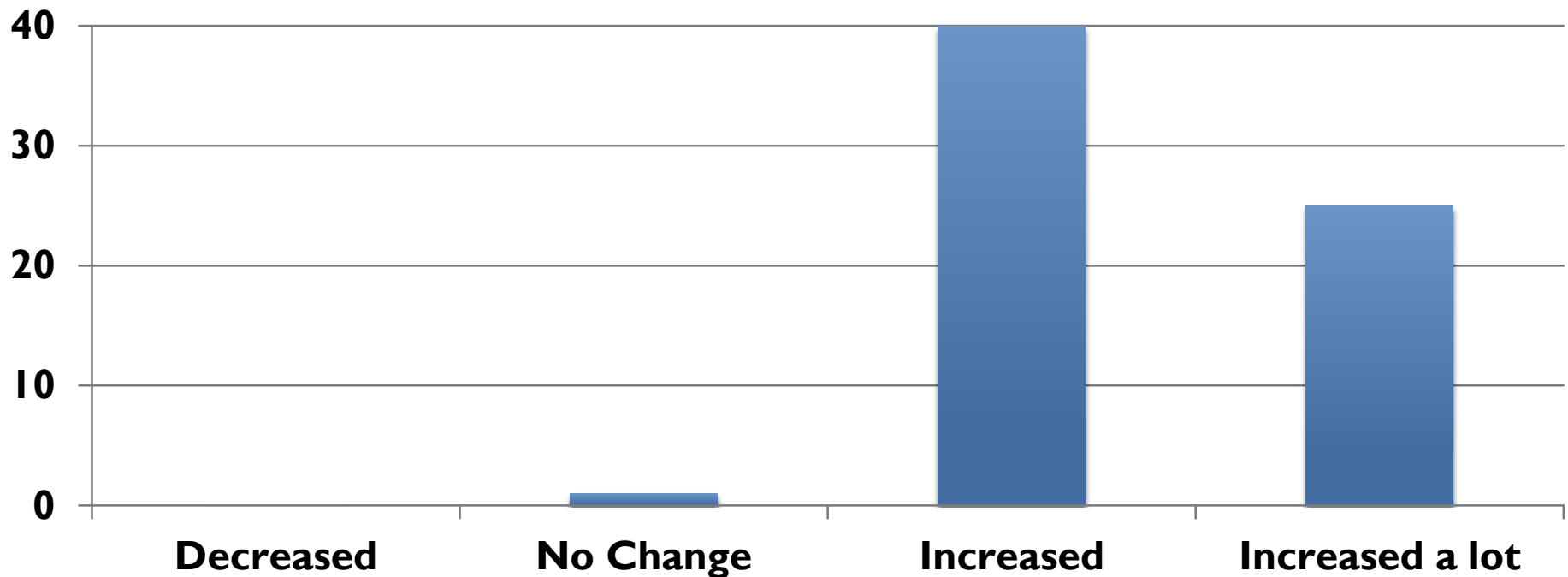
# NUMBER OF WORKSHOP PARTICIPANTS





## WORKSHOP BUILDS CAREER CONFIDENCE

**How has your confidence in your ability to succeed in an academic career been affected by your participation in this workshop?**



2014 responses to end-of-workshop survey question

## WORKSHOP BUILDS CAREER CONFIDENCE

**I felt like a sponge throughout the week. I've gained so much in terms of concrete things to implement and a holistic appreciation for this career. I can totally do this, and this workshop instilled that confidence.**

Participant quote from end-of-workshop survey

# PREPARING FACULTY FOR SUCCESSFUL CAREERS

The ability to feely exchange ideas about ...learning activities, classroom management strategies, funding opportunities, proposal improvement, and collaboration with such a talented and diverse group of people was unlike anything I have yet experienced.

I am heading back to my institution feeling that I am better equipped to be a more efficient and effective teacher, researcher, colleague, father, husband, and community member.

Participant quotes from  
end-of-workshop survey

# WORKSHOP FOR EARLY CAREER GEOSCIENCE FACULTY: TEACHING, RESEARCH & MANAGING YOUR CAREER

**July 24-28, 2016**

University of Maryland

with an optional visit to NSF on Friday, July 29

Conveners: Rachel Beane, Bowdoin College  
Tessa Hill, University of California - Davis  
Sarah Penniston-Dorland, University of Maryland

**Application Deadline: March 16, 2016**

*Workshop sessions on effective teaching strategies, course design, establishing a research program, working with research students, writing strong proposals, balancing professional and personal responsibilities, task management and strategic planning.*

<http://serc.carleton.edu/NAGTWorkshops/earlycareer>