

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



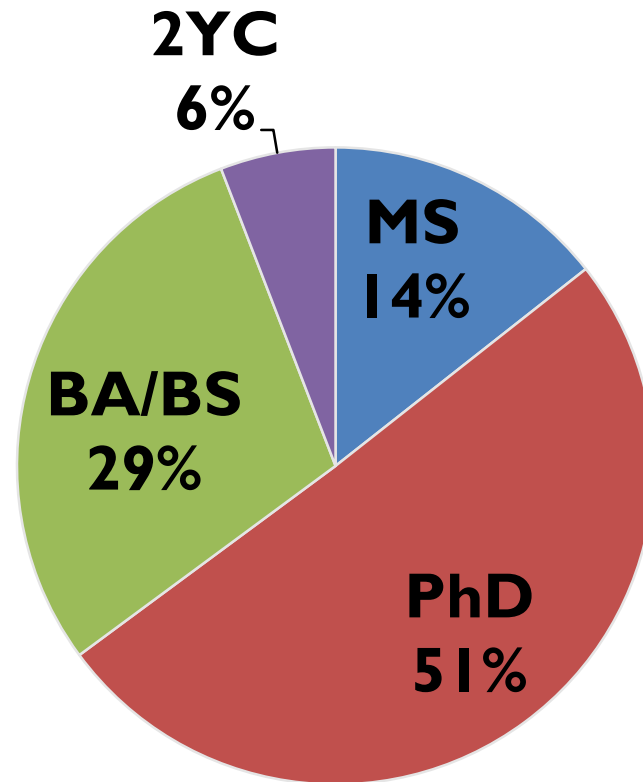
WORKSHOP PROGRAM SUPPORTS FACULTY BY DEVELOPING RAPPORT & COMMUNITY

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

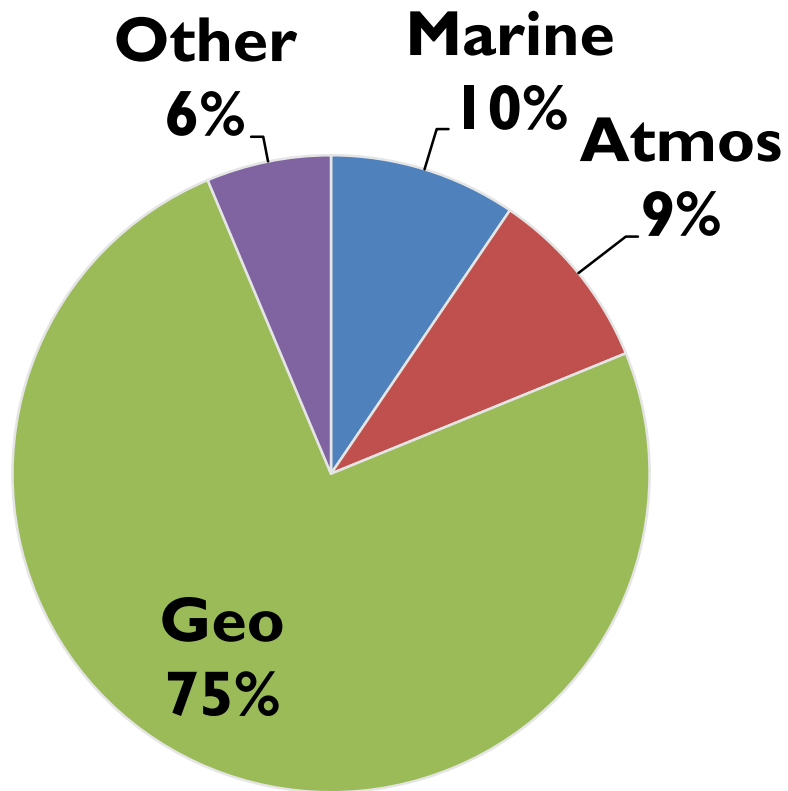


Data from 2003-2015
Early Career Workshop
Participants
n=410

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%

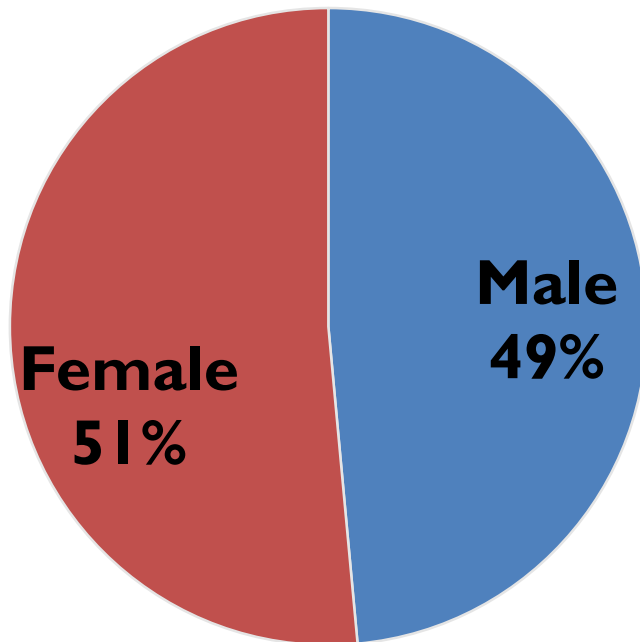
Other 14%

Data from 2002-2014

Early Career Workshop Participants

n=632

WHO PARTICIPATES?



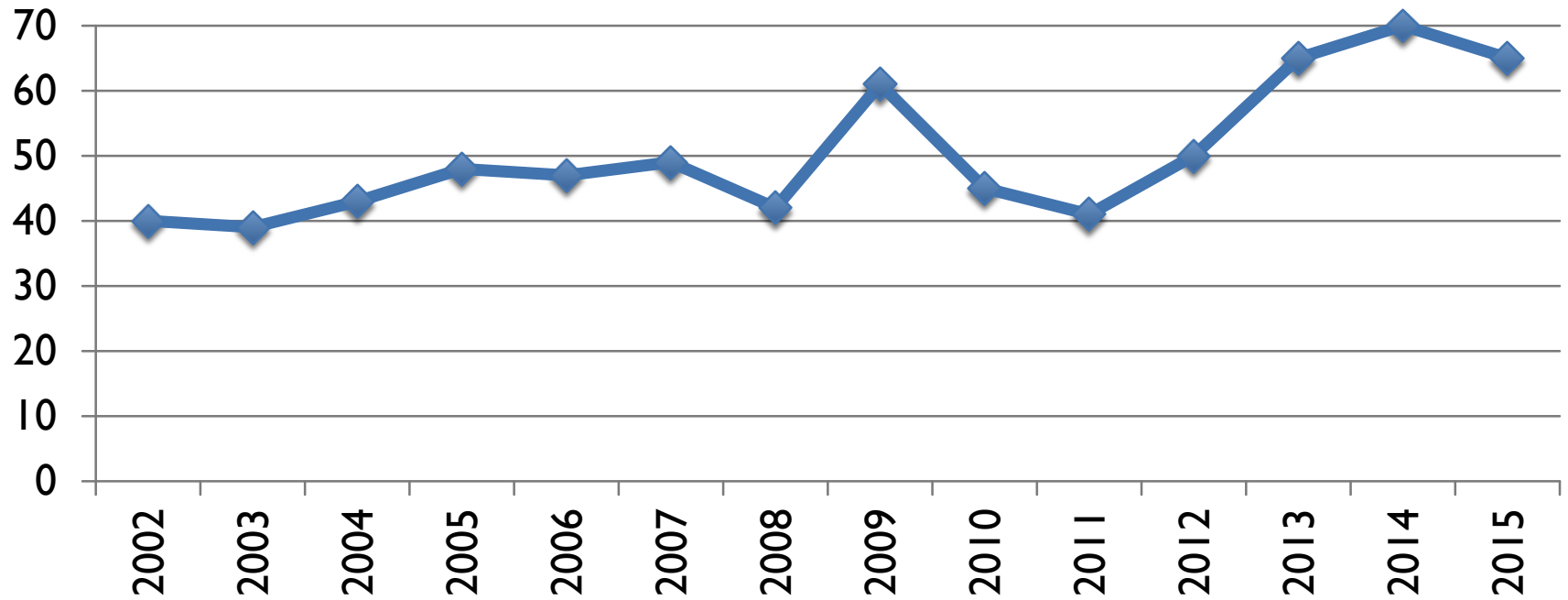
For comparison, in the geosciences...

23% female assistant professors
(2008 AGI report)

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

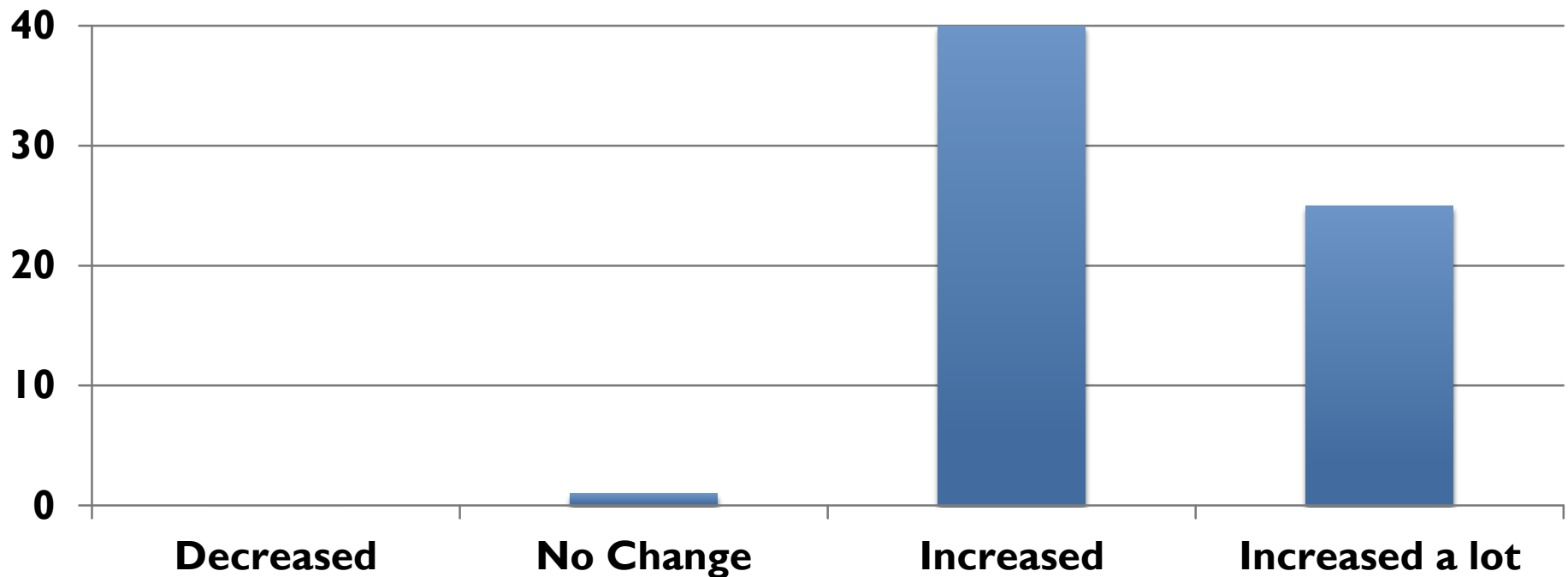
Data from 2002-2014
Early Career Workshop Participants
N=685

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>