Access **CS10K**

Founded 2014

Richard E. Ladner, PI
Andreas Stefik, PI
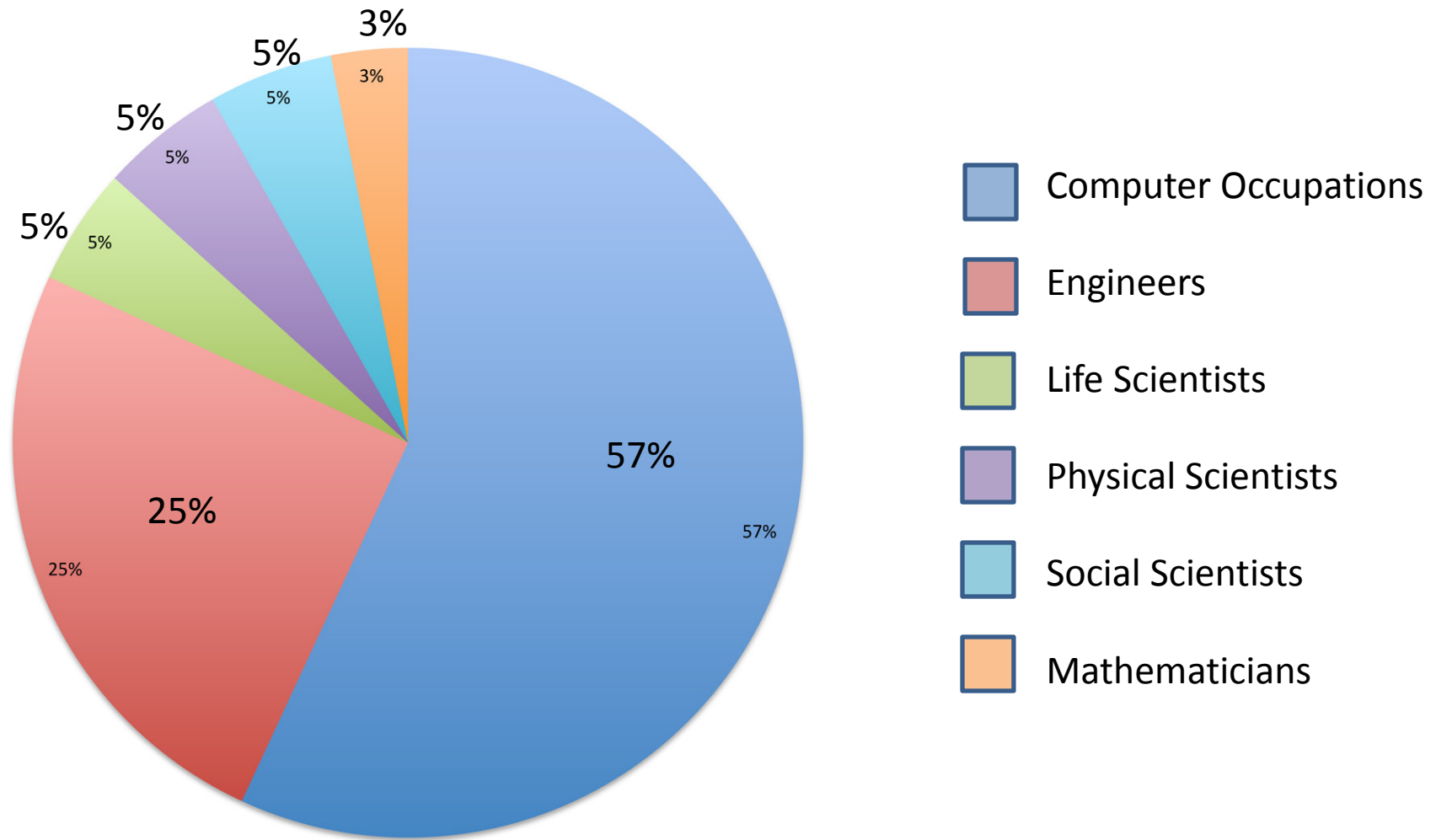**Sheryl Burgstahler, Co-PI and Director**

CS 10K

- Part of STEM + Computing Partnerships (STEM+C), NSF 15-537
- CS 10K awards aim to develop the knowledge and evidence-based foundation needed to support the teaching of introductory rigorous, academic computing courses in high schools.
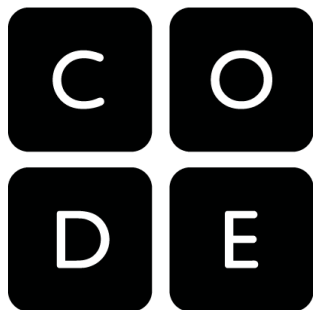
Job Openings 2012-2022

http://www.bls.gov/emp/ep_table_102.htm

CS 10K

- NSF initiative to get computer science into 10 thousand high schools nationwide.

- Focus on in-service professional development of existing teachers.

- Approximately 20 active NSF funded projects

- Coordination with non-profits

Broadening Participation

Attention to diversity. To ensure that advances in computing education are inclusive of our diverse student populations, *all* proposals must address, as a significant component, the longstanding underrepresentation in computing of women, persons with disabilities, African Americans, Hispanics, Native Americans, and indigenous peoples.

AccessCS10K Goal

- Increase the participation and success of students with disabilities in
  - Exploring Computer Science (ECS)
  - Computer Science Principles (CSP)
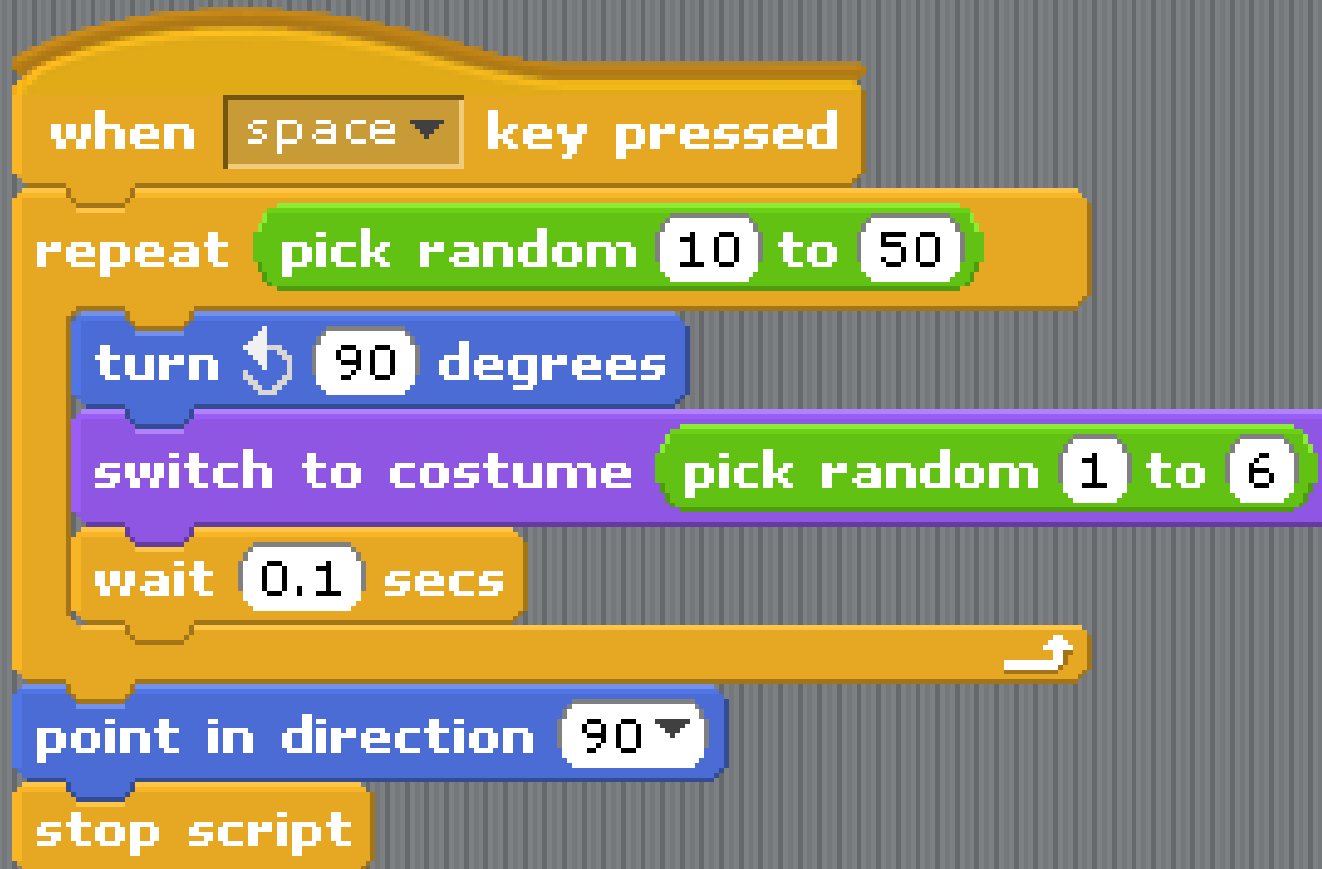
AccessCS10K Strategies

- Work with NSF-funded CS 10K projects and non-profits
  - Capacity building institutes
  - Community of practice
  - Partnerships
- Create and disseminate accessible tools and curricula.
  - Leverage work by development partners

Screen Reader

- Allows non-visual access to screens

Block Based Languages

Quorum Programming Language

- Text, not blocks
- Evidence based syntax and semantics
- Example

```
repeat 5 times
    say "hello"
end
```

- http://quorumlanguage.com/

Quorum Hour of Code

Tutorials in other programming languages

Accessible programming (with screenreader support)

Quorum

This tutorial is accessible for the visually-impaired, and works with screenreaders. Join Mary on a tour as she joins a biology lab as a programmer and learns the Quorum programming language. This tutorial is student-guided with online example activities.

Middle school + | Modern web browsers.
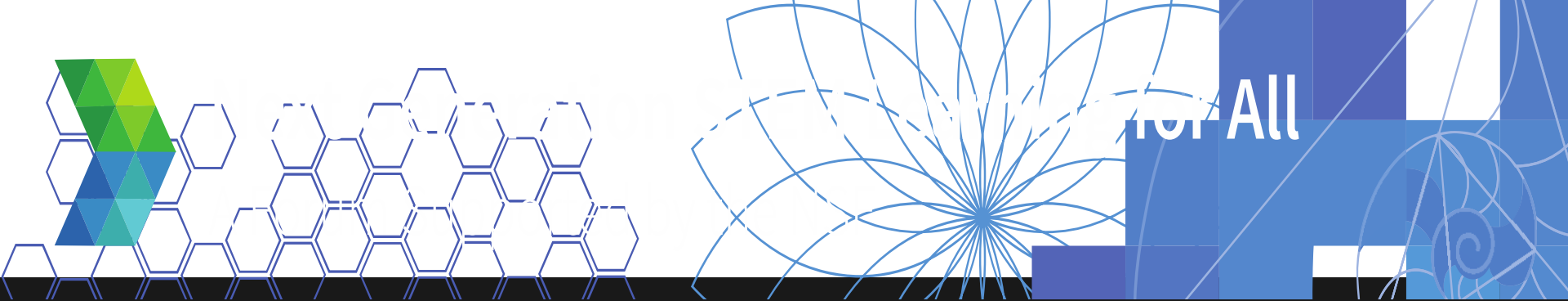Screen-readers supported

11,109 participants

http://hourofcode.com/qrm

Go

My Message

Computing fields need more people with disabilities because their perspectives and expertise will spark innovation.

Assistive Technologies for Learning:
Broadening Participation in STEM

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