





ADVANCE@nsf.gov



## Lessons From the ADVANCE Program Model

## Systemic/organizational/institutional change:

- Has potential for long-term impact on diversity, equity, and inclusion in STEM
- Addresses the underlying reasons for disparities in STEM workforce – use the cure while mitigating the symptoms













- Necessitates the involvement of those in the majority in making change
- Rejects notion that there is something wrong with the ability or interest of individuals who have not traditionally participated in STEM education and workplaces – fixes the institutions not the people

#### **Sustainability of ADVANCE**

**UC-Irvine** Office of Diversity and Inclusion



Haynes



Purdue ADVANCE-**Purdue Center** for Faculty



Director Center



- University of Michigan University of Wisconsin

- - - North Dakota St U U of Nebraska Lincoln

You should take a negotiation skills class

...or my chair could be expected to treat everyone equally



# Lessons From the ADVANCE Program Model

## **Federal Grant Program Design:**

- Focus on scalability of the organizational change strategies
- Build an organizational "pay it forward" model
- Design and build "organizational peer pressure"
- Support and promote the community of experts that are created
  - Reward and recognize them as experts and leaders
  - Provide platforms for communication and information sharing among them and with others
  - Incentivize diffusion and adaptation when move into new roles and/or organizations







Northeastern University ADVANCE IT, PI Sara Wadia-Fascetti, STRIDE Committee Training 2008 to now. Luis Falcón co-PI on Northeastern ADVANCE, trained as a STRIDE faculty, becomes Dean at U Mass I owell in

Joseph Hartman, Dean of Engineering, adopts strategies shared by Dr. Falcón when he arrives at Lowell in 2013-2014.

U Mass Lowell awarded IT project in 2016, PI Jackie Moloney, focused on bystander training &

WAVES



# Lessons From the ADVANCE Program Model

### Metrics to measure program success:

- Change agents' professional and leadership success is a metric of program success
- Measure change from institutional baseline
  - Each institution will have different starting points and different long-term goals
  - Changes should reflect these parameters
- Cannot only count individuals in STEM
- Diffusion of strategies to non-grantees
  - Scale and rate of uptake
  - Transition to "standard operating procedures"



#### Implicit Bias Research Informing NSF Practice University of Michigan applied this NSF chemistry division asked U of Implicit (and explicit) biases research to academic settings Michigan to develop implicit research shows impacts on developing implicit bias training biases training for NSF panels. employment opportunities, with their ADVANCE Institutional Additional NSF programs adapted compensation, promotion, Transformation grant the training for their own panels leadership, & health disparities. ~1970 to now ~2001 to now ~2007 to now Mandatory new NSF Program NSF creation of video training for NSF Academy video training Officer training includes "Minimizing Implicit Bias" is panelists on implicit bias in peer information on mitigating implicit available to NSF staff review biases ~2010 to now ~2017 to now ~2012 to now \*Important Notes:

Awareness of ones own implicit biases is NOT enough to eliminate the impact of implicit biases in decision making – structures and policies around decision making need to be created to ensure mitigation of implicit bias influence.
"Implicit bias training" does NOT change an individual's implicit biases – rather it provided strategies and tools to

mitigate the impact of implicit biases in decision making.