# When Mentoring Works

EDGE Summer Session 2016

Dr. Sarah Bryant (EDGE '02)

# When Mentoring Works

for the Women Math Warriors of EDGE

# Reflect- write- share

- What is a mentor?

- Have you had a mentor?

- Will you need a mentor in graduate school?

# Mentoring is not one size fits all

- Formal/informal

- 1-1 "guru" mentoring

- Peer mentoring

- Near-peer mentoring

- Mentoring networks

- Events/dinners/seminars

- Coaching

# Benefits of mentoring

- Mentored individuals are more likely to have higher compensation, greater salary growth, and more promotions than those who are not mentored (Allen, Eby, Poteet, Lentz & Lima, 2004).

- Female assistant professors with no mentors had 68% probability of grant funding versus 93% of women with mentors (National Research Council, 2010).

- Research-Supported Benefits for Mentors And Mentees:
  - Career advancement, including increased productivity and faster promotion rate
  - Opportunities to develop new networks and collaborations
  - Feelings of personal satisfaction
  - More positive work attitudes, including increased job satisfaction
  - Increased ability to obtain resources
  - Opportunities for visibility and recognition

# Mentoring and graduate study

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|---|---|
| What factors do women cite for leaving graduate study? | • Personal/Social<br>• Financial<br>• Academic |
| Unfortunately there is poor data on retention | • Graduate departments feel students leave due to lack of ability<br>• Some "slip through the cracks" and quietly leave after a Master's degree<br>• Graduate departments may not track or report attrition rates |
| Women and those from minority groups must navigate additional barriers | • Women and minorities have particular difficulty accessing the unwritten rules of the game<br>• Women and minorities have greater difficulties gaining visibility and exposure to key people in their field |

"Consider this multi-faceted definition of mentors as people who:

• take an interest in developing another person's career and well-being.

• have an interpersonal as well as a professional relationship with those whom they mentor.

• advance the person's academic and professional goals in directions most desired by the individual.

• tailor mentoring styles and content to the individual, including adjustments due to differences in culture, ethnicity, gender and so on."

--Taken from Rackham Graduate School University of Michigan Faculty Guide to Mentoring

# Mentoring & EDGE

# The EDGE approach: Mentoring women before, during, and after graduate study

The mission of EDGE (Enhancing Diversity in Graduate Education) is to support the pipeline of women, particularly those from underrepresented minority groups, pursuing PhDs in mathematics. As women complete PhDs, EDGE seeks to support their transition to visible leadership roles in mathematics.

# Know your network:
# Graduate institutions attended by EDGE participants
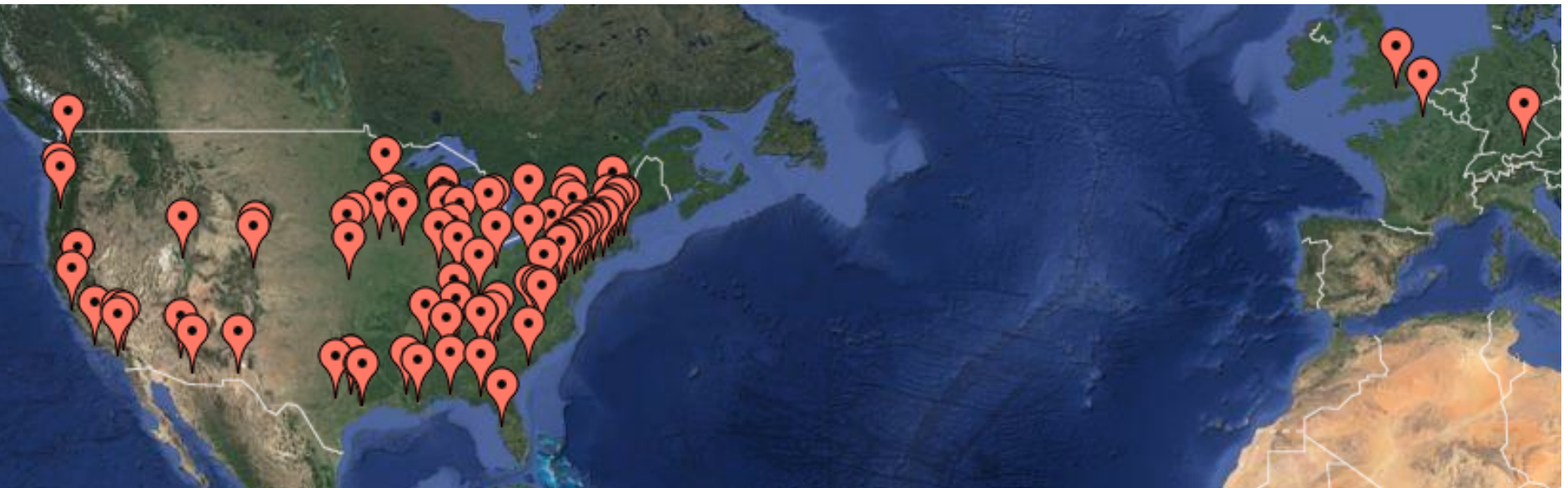
# EDGE activities & opportunities

The EDGE Program is comprised of a collection of integrated activities and opportunities, creating a lifelong mentoring network.

# Developing a culture of mentoring

◻ As women are integrated into the EDGE community, they both **receive** and **provide** support for others at key junctures in their graduate school careers and beyond.

• Advanced graduate students serve as mentors to Summer Session participants.

• Mentoring is nurtured across all cohorts and all participants, beginning with Reunion Conference weekend and continuing through the variety of platforms and activities previously mentioned.

# Mentoring: What will you need and how will you get it?

# What will you need?

- List five **immediate (within the next year)** concerns, areas of growth, or goals

- List five **long-term** concerns, areas of growth, or goals

- **Note:** Goals should be SMART (Specific, Measurable, Attainable, Reasonable, and Time-Bound). This allows you to create accountability and an action plan.

# Steps to get what you need

- Step 1 is knowing what your challenges and needs are. Which ways are you looking to grow? What is holding you back?

- Step 2 is to understand the critical now. What are your immediate priorities?

- Step 3 is to identify mentors and develop an action plan. What are the outcomes I expect? How will I be accountable?

- Step 4 is to understand "do's and don'ts" of mentoring and establish logistics. How will you proceed to communicate? How often and in what manner? What are boundaries?

- Step 5 is to remember mentors are not miracle workers, you must own your past and your future

*Summarized from part 3 of Equitable Solutions for Retaining a Robust STEM Faculty (2014)*

# Mentoring network maps

- Starting with **YOU** and **YOUR PRIORITIES**, let's begin filling in a mentoring map (Rockquemore)

- Redefine branches to match **your** areas of growth and concern

- The people who are part of your mentoring network do not need to look like you, be your friend, or have all of the qualities we wish for in a "guru" mentor. Instead, think of centering yourself, your needs, your goals, and working with a wide variety of people to support those things.

# Mentoring advice from EDGErs

# EDGErs say:

"The thing that stands out to me as particularly special about EDGE mentoring is that it comes with such warm acceptance of edgers as whole people -- whether they choose to stay in academic mathematics, whether or not they complete a phd, whether or not they choose some other path for their life. This makes our network so much more accessible when the going gets tough. I have never worried that edgers would think I was a failure or was doing something wrong.

This acceptance is part of why I felt like I could reach out recently for advice and resources as I changed careers out of academic science, and edgers totally came through with wonderful help and encouragement -- from folks working both inside and outside academic environments"                                                                                    -N

# EDGErs say:

"The EDGE family has been the best part of EDGE for me. They are always there when I need advice or I just need an ear to listen. It so nice to know that I can trust what some people say as I make decisions about my future. It is also nice to know that there exist some successful and amazing mathematicians out there. I look up to everyone involved in the EDGE community and I feel extremely fortunate to be able to interact with them."

-A

# EDGErs say:

"I think a large part of mentoring is seeing people like you that have been where you are now and have gotten through it. I love hearing about the paths people take. It's very helpful to hear about how mentors overcame difficulties to end up in a place where they're happy. One of the parts of CaMeW that resonated with me was during a panel session when someone asked about impostor syndrome, which has been hitting me hard as I get closer to the judgement of the job market. I was amazed to hear that all the women on the panel still feel it, but most have learned to embrace it. Hearing a professor at one of my dream schools admit that she didn't think that she would get to where she is today flooded me with relief, because I don't see how I'm going to get where they are."

-Z

# EDGErs say:

"My advice is when you have a mentor, to step back and try to understand where the mentor is coming from, so that you can take their recommendations in context. Keep in mind that most mentors can only tell you how to be like them, and follow their career path. There is nothing wrong with this--they are speaking about what they now about! Yes, they want the best for you, and yes, they are likely trying to help you in a way that would have helped them. Just take it in context. If it doesn't suit you and your goals, don't feel bound by their recommendations."

-K

# References & Resources

Allen, TD., Eby, LT., Poteet ML., Lentz E., & Lima L. (2004)."Career benefits associated with mentoring for protégeé: a meta-analysis." J Appl Psychol. 89(1):127-36.

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**Recommended Mentoring Guides:**

- How to Mentor Graduate Students: A Guide for Faculty at a Diverse University. The Rackham Graduate School, University of Michigan, 2015. Retrieved from: http://www.rackham.umich.edu/downloads/publications/Fmentoring.pdf

- How to Get the Mentoring You Want: A Guide for Graduate Students.  The Rackham Graduate School, University of Michigan, 2015.
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