



**Participants' Perceived
Importance and Application of
Mentoring@Purdue Program
Seminars and Workshops**

**Brandon C. Allen
Neil A. Knobloch, Ph.D.
Levon T. Esters, Ph.D.**

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INTRODUCTION

UNDERREPRESENTED MINORITY (URM) GRADUATION RATES

- Graduate Program Completion Rates
 - Forty-one percent of master's students will complete their program in two years (Kent, 2013)
 - Black and Latino students constituted 7.6% of doctoral degree recipients (Merolla & Serpe, 2013)
 - Within seven years, 48% of Hispanic/Latino(a) and 40% of Black doctoral students completed their program (Sowell, Allum & Okahana, 2015)
 - Seven year attrition rates for Hispanic/Latino(a) and Black doctoral students are at 38% and 35% respectively (Sowell et al., 2015)
- Changing Demographics (Gasman & Conrad, 2013)
 - Between 1980-2010
 - Hispanic/Latino(a) population: +246%
 - American Indians/Native Alaskans population: +106%
 - African American population: +50%

WOMEN AND URM BARRIERS FOR SUCCESS

- Campus Climate (Peterson & Spencer, 1990)
 - Minority students report hostile, “chilly,” unwelcome, uncomfortable environments (Nugent et al., 2004).
 - Poor social adjustment
- Sense of Belonging (Strayhorn, 2012)
 - Basic human need
 - Perceived social support on campus
 - Feeling of connectedness
 - Feeling of mattering





MENTORING AS A TOOL TO PROMOTE ACADEMIC SUCCESS

MENTORING

- Senior or more experienced person (faculty or staff) formulating a relationship with a junior or less experienced person (graduate student) for professional and/or academic development (Baker, 2007; Campbell & Campbell, 1997)
- Mentoring positively affects (Kendricks et al., 2013; Campbell & Campbell 1997)
 - GPA
 - Retention
 - Completion rate
- Attributes of mentoring (Berk et al., 2005)
 - Focuses on achievement or acquisition of knowledge
 - Emotional & psychological support
 - Reciprocal relationship
 - Personal
 - Emphasizes the mentor's greater experience, influence and achievements within an organization



MENTORING URM AND WOMEN GRADUATE STUDENTS

- Mentors assist URM graduate students with adjustments to academic and nonacademic aspects of graduate education (Brown, Davis & McClendon, 1999)
- Mentoring systematically addresses causes of culturally diverse student attrition and delayed graduation (Dickey, 1996)
 - Promoting greater student-faculty contact, communication and understanding
 - Encouraging the use of university resources for nonacademic problems
 - Intervention with academic difficulties
 - Creating a culturally validating psychosocial climate
- Mentors should be encouraged to discuss discriminatory and racial challenges experienced by URM graduate students (Baker, 2007)



MENTORING IN HIGHER EDUCATION

- Mentoring relationships that occur in the institutional environment impact (Baker, 2007)
 - Faculty development
 - Student learning
 - Student personal development
- Predominantly white institutions should be more intentional about providing mentoring programs that addresses (Tillman, 2001)
 - Social needs
 - Cultural needs
 - Emotional needs
 - Professional needs

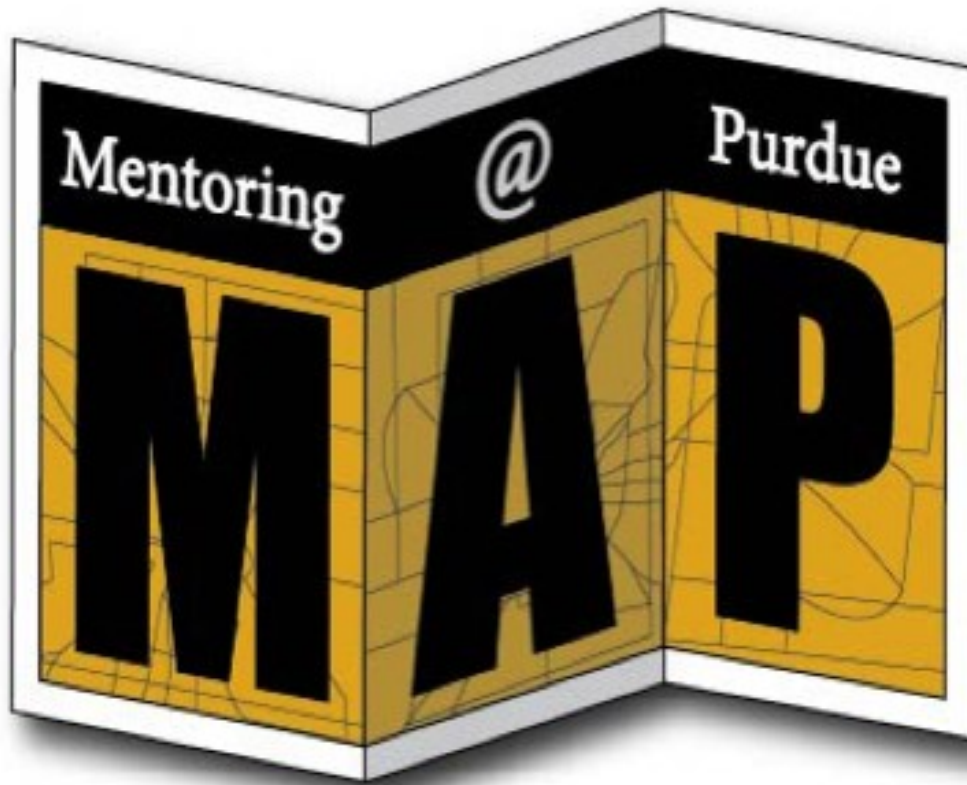


NEED FOR A MENTORING PROGRAM

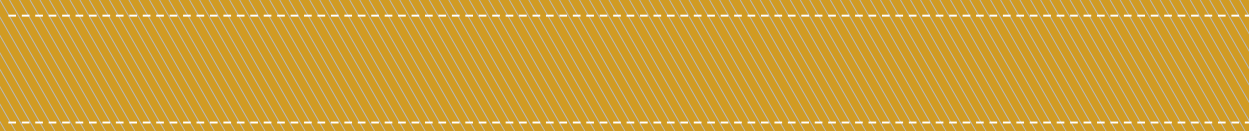
- Mentoring is one of the most effective methods to increase URM participation in STEM fields
- URMs are less likely to enter and remain in STEM fields when they lack mentors and role models
- Before we can facilitate mentoring dyads, there is a need to create workshops and seminars that explores topics and provides skills for mentoring URM graduate students

MENTOR TRAINING AND WORKSHOPS

- Most mentors who are positioned to provide mentoring have not participated in formal training in mentoring techniques (Johnson & Ghandi, 2014)
- National survey of mentoring programs revealed only 13 of the 46 responding institutions with mentoring programs conducted some form of mentor training and workshops (Lau et al., 2016)
- Single session mentoring workshops are effective methods by which mentoring competencies can be increased (Lau et al., 2016)



MENTORING@PURDUE PROGRAM



MENTORING@PURDUE PROGRAM

- Mentoring@Purdue (M@P) is an initiative aimed at increasing the persistence of minority students pursuing Agricultural and Life Sciences graduate degrees in the Purdue University College of Agriculture
- M@P aims to improve the quality of graduate education by fostering mentoring relationships between graduate students and faculty members in Agriculture and Life Sciences
- Established in 2012 with USDA/NIFA Funding
- Partnerships with
 - Historically Black Colleges and Universities
 - UPenn Center for Minority-Serving Institutions
- Host 1-hour training workshops, professional development, group mentoring forums, and guest lectures

M@P SEMINARS & WORKSHOPS

- Seminars & workshops held during the Fall and Spring semesters, beginning with the Spring Semester of 2013
- Seminars & workshops scheduled to last for one hour and promoted via email, fliers and social media
- Seminars & workshops were presented in a guest lecture, interactive or panel “question and answer” format
- While the target audience of M@P is women and URM graduate students in the College of Agriculture, workshop and seminar participants included faculty, staff and graduate students from across the University
- Participants were asked to complete evaluations at the conclusion of each workshop or seminar

M@P WORKSHOP & SEMINAR TOPICS

2013

1. Mentoring: How Do We Get Started? (N=5)

2. Cultivating Mentoring Relationships (N=15)

2014

3. Strategies for Successfully Engaging 1890 HBCUs (N= 14)

4. It's All About me: Realized and Actualized Success as a STEM Graduate Student (N=9)

5. Diversity Inclusion: Creating a Culture of Mentoring (N=9)

6. Are You Done Yet? Getting to "Yes!": Discussing Challenges and Solutions of Graduate Degree Completion (N=10)

7. The Art of Mentoring: Promising Practices, Proven Results (N=34)

8. Speed Mentoring (N=5)

9. The Path Less Traveled: Success Stories from Women in STEM (N=16)

2015

10. What Does Mentoring Mean to Me? (N=5)

11. Strategies for Building and Maintaining your Mentoring Network (N=29)

12. In Search of Building Highly Effective Professional Relationships (N=7)

13. Strategies to Lift as You Climb (N=4)

14. Mentoring Across Differences: Part 1 (N=17)

15. Strategies for Effective Mentoring (N=30)

16. Mentoring Across Differences: Part 2 (N=16)

EVALUATION OF M@P'S SEMINAR & WORKSHOP

- M@P workshop participants were asked to evaluate the sessions attended for effectiveness using the following scale
 - I have a better understanding of why mentoring is important while advancing as a professional.¹
 - The examples shared helped me identify ideas that I could use.¹
 - I want to see more professional development activities at Purdue.
 - I want to see more mentoring activities at Purdue.
 - I plan to participate in more workshops on mentoring in the future.
- Rating
 - 1 = None/Not At All
 - 2 = A Little
 - 3 = Somewhat
 - 4 = A Lot*
 - 5 = Absolutely*

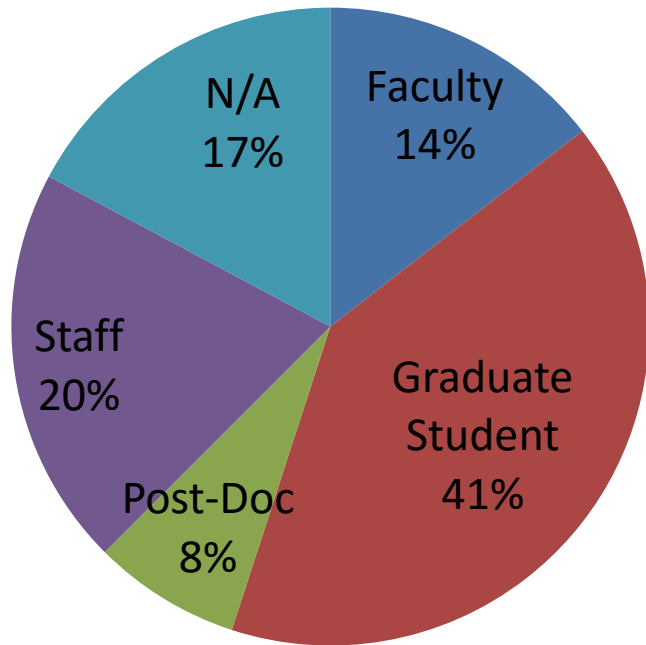
(¹) Denotes selected statements that addressed importance of mentoring or application

(*) Denotes successful rating scores

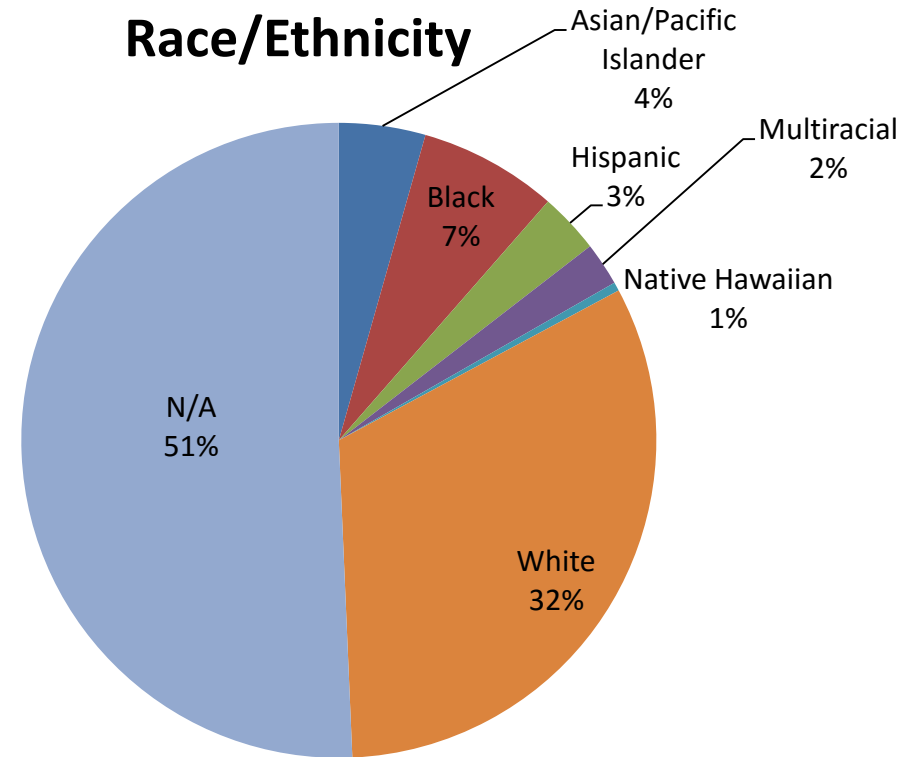
M@P SEMINAR & WORKSHOP PARTICIPANTS

- Two hundred and twenty-five faculty, staff, post-doc and graduate students encompassing various racial demographics attended 16 M@P seminars & workshops

Participants



Race/Ethnicity



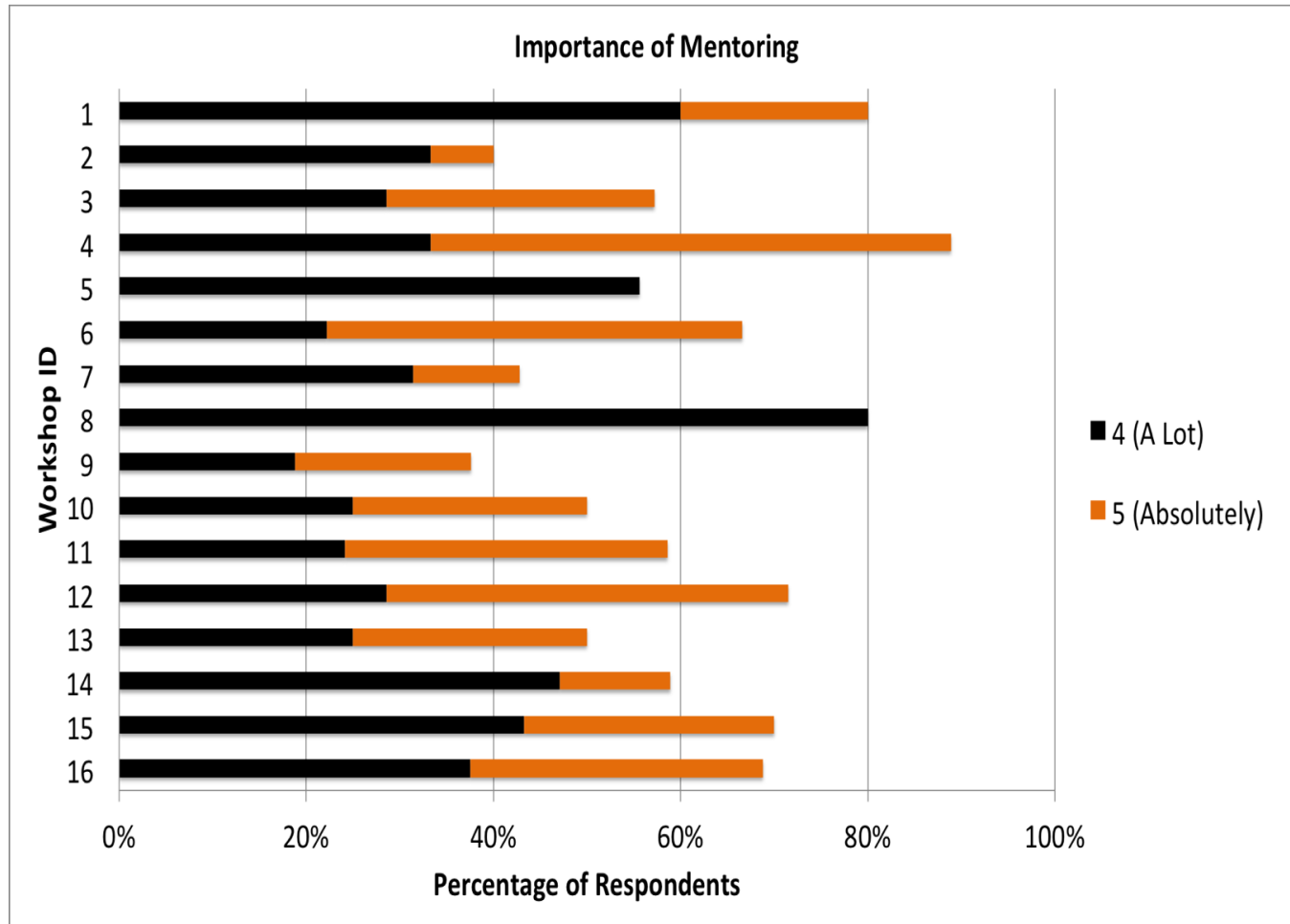


FINDINGS FROM M@P SEMINAR & WORKSHOP EVALUATIONS

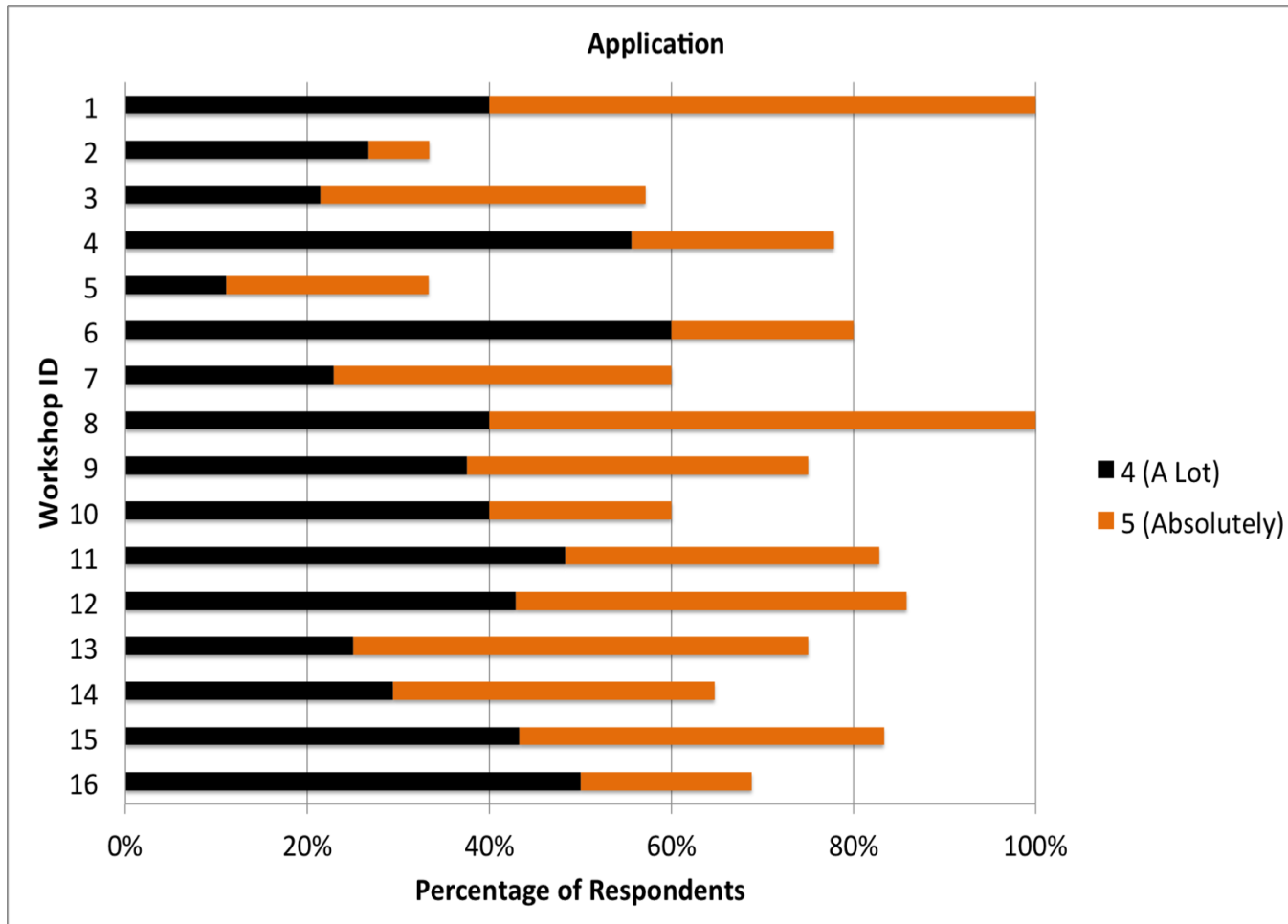
FINDINGS

- Of the 16 seminars and workshops, at least 50% of the participants agreed that
 - 13 of the sessions were successful in expressing the importance of mentoring
 - 14 of the sessions were successful in providing applicable examples of mentoring strategies
- Interactive and engaging workshops were most effective in delivering content
- “Mentoring: How Do We Get Started” and “Speed Mentoring” had the highest agreement rates for application (100%)
 - Consistent with previous research that suggests graduate mentoring programs should be designed to provide close, supportive relationships between mentoring faculty and graduate students (Brown & Davis, 1999)

FINDINGS: IMPORTANCE OF MENTORING



FINDINGS: PRACTICAL APPLICATION



IMPLICATIONS FOR PRACTICE

- Suggests a blueprint for mentoring training workshops and seminars at other campuses
 - Topics
 - Format
- Findings revealed mentoring is important, hence colleges should be more proactive in encouraging these relationships
- Colleges and universities should use engaging and interactive workshops when trying to teach faculty members how to best engage in mentoring relationships with women and URMs



RECOMMENDATIONS FOR FUTURE RESEARCH

- Explore workshop influence on retention and persistence rates of URMs in the college of agriculture
- Conduct focus groups with workshop participants to explore how the mentoring workshops impacted students perception of mentoring
- Explore the impact mentoring workshops have on mentors and mentees who engage in mentoring workshops in contrast with those who do not

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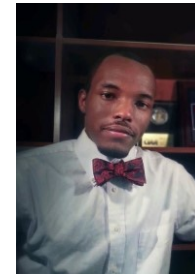
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CONTACT INFORMATION

Brandon C. Allen
M@P Social Media & Marketing Coordinator
Doctoral Student
Youth Development & Agricultural Education
allen352@purdue.edu



Dr. Neil A. Knobloch
M@P Co-Director
Associate Professor
Youth Development & Agricultural Education
nknobloc@purdue.edu



Dr. Levon T. Esters
M@P Director
Associate Professor
Youth Development & Agricultural Education
lesters@purdue.edu





QUESTIONS?

