

# **Strategies for Supporting Graduate Student Well-Being: Insights from the Montana University System M-HOPES Grant**

Ashby Kinch (University of Montana) & Beverly Karplus Hartline (Montana Technological University)



## **Student Mental Health Challenges Drive M-HOPES Design**

Baseline survey means. Normalized scale 1 (good) to 5 (bad). Student N~300,~70% female; Faculty N~90, ~65% male. Green X marks "threshold" for depression screening.

- In Year 1 (2021/22) issues were amplified by COVID-19, social turmoil, & career uncertainty.
  - In Year 2 survey, Social Isolation improved by 0.32 and Social Support improved by 0.21, perhaps due to end of COVID restrictions.
- Greater challenges for women, racial/ethnic minorities, veterans, students with disabilities, & international students.
- STEM students had significantly higher impostorism (+0.3;  $\alpha$ =.05) than non-STEM students.
- Faculty recognize student stresses & need for well-being support; desire mentoring skills to engage diverse students well. \*\*
- Over 60% of faculty respondents had referred a student for mental health assistance. \*

## **M-HOPES Activities & Timeline**

Year 2

Series

Year 3

Expand

Sustainability

#### **M-HOPES Model** Mental Health Influences on STEM Graduate Students Faculty Advisor Relationship & **Challenges to Student Well-Being Departmental Climate Disciplinary Pressure** Imposter Syndrome Interpersonal Communication Skills Social Isolation Cross-Cultural Understanding Depression/Anxiety Lack of Awareness Hopelessness/Loneliness Graduate Student Effects Bias Academic Performance Student Engagement Perceived Stress Perceived Support HOPES Assessment Activities Faculty Faculty-Student Peer Integrative Student Support, CBT, Mentoring Happiness Activities

### STUDENT OUTCOMES:

Improve Inclusiveness Reduce Stigma Foster Professional Identity Development Increase Awareness of Resources **Develop Coping & Thrival Skills** 



### FACULTY OUTCOMES:

Strengthen Faculty Agency & Mentoring Improve Mental Health Communication Foster Inclusive Departmental Culture

Activities		Q1		Q2		Q3		Q4		Q1		Q2		Q3		Q4		Q1		Q2		Q3		4
Experiences for STEM Grad Students				С	Ρ	Ρ			н	С		Ρ	Ρ											
Experiences for STEM Faculty Mentors				I	М	E				Ι		М	E											
Experiences for STEM Students + Mentors																								
Scale-Up & Expansion	Montana State Univ.; Univ. Idaho; Univ. N. Dakota; & Univ. District of Columbia																							
Assessment																								
C = Cognitive Behavioral Therapy Skills (4 sessions) I P = Narrative Peer Support Groups (6 sessions) N											FACULTY EXPERIENCES I = Indigenous/multicultural Mentoring Workshops M = Mental Health Awareness (3 Sessions) E = Equity/Climate (1 Session)													
Legend		aseli Des			Pilo	t	Α	sse	SS	R	efin	е		ecor				Up and				sitio sina		

Participation is a major challenge.

Year 1

Activities

- Students and faculty have too little "free time."
- "Stigma" may also be a factor.

& Design

- Only about half of registrants attend.
- Only about a third complete a multi-session activity.
- Huge appreciation for visible attention to wellness.





#### Acknowledgements

Mental Health Opportunities for Professional Empowerment in STEM (M-HOPES) is a collaboration of UM, MTech, and MSU Billings (MSUB) to design, pilot, assess, and implement evidence-based, sustainable, and replicable strategies to enhance graduate-student mental health. We thank project team members for their efforts. UM Team: Jayna Mumbauer-Pisano, Bryan Cochran, Anna Sala & Holly Schleicher. MTech Team: Scott Risser, Sue Schrader & Charie Faught. MSUB Team: Sarah Keller & Jana Marcette. M-HOPES is supported by the National Science Foundation's Innovations in Graduate Education Program under awards 2105221, 2105251 and 2105254. Opinions, findings, conclusions, & recommendations are those of the authors, and do not necessarily reflect the views of the National Science Foundation. For more information, please contact Ashby.Kinch@mso.umt.edu or bhartline@mtech.edu.