



Internal Grant Writing Training and Other Support

Best Practices Session
Mini-Land Grant Meeting
SAAESD

Coral Springs, FL

March 2019

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Discussion sequence

- Overview of strategies at Virginia Tech and Mississippi State University
- Grant writing workshop – Mississippi State’s experience
- Multi-institutional grant writing workshop – University of Tennessee, University of Kentucky, Virginia Tech
- Facilitated discussion



VT Proposal Development Institute

- 2-day workshop with consultants
- Travel to Washington DC to visit with agency program managers
- Educational seminars
- Research mixers
- PDI mentoring groups
- Internal Review of NSF Career Award proposals
- Luncheons with Sr. VT Administrators
- Admission by nomination and selection from Department Heads/Colleges
- Targeted to early career or transitioning faculty
- 6-8 month program





Virginia Tech – University Level Programs

- VT Faculty Activity Support Team (VT FAST)
 - pre-award
 - Post-award – reports, manuscripts, conference presentations, meeting organization
- Library Support
 - Concept diagram, data viz, graphic design
 - Data Management Plans
- Cost share for budgets that require it





VT CALS Support Programs: Enhancing Extension, Academics and Research Success

- **CALS grants coordinator**
 - Assistance with “forming, norming, storming, performing”
 - Project management; Journey to submission
 - Finding funding
- **Cost share for budgets that require it**





VT CALS Grants: Enhancing Extension, Academic, Research Success

- Travel to meet a program manager
- Travel to attend an agency grant conference or proposer's day
- \$10,000 to submit a training grant (NSF, NIH, etc.)
- \$25,000 for AREC-campus convergence grant
- \$10,000 to form teams
- No deadline; no RFA
- Internal to CALS
- Variety of seed grant opportunities



Sustained Success in Competitive Grants

Requires:

- ***Innovative idea***, supported by ***rigorous science*** and aligned with ***programmatic priorities***
- ***Understanding*** of programmatic and institutional procedures, policies, format, and uniform guidance
- ***Preliminary data*** that validates the central hypothesis and supports the specific aims of the proposed project
- ***Compelling story, clearly and succinctly communicated***
- ***Cost share***





MSU Grant Writing Support

- **Director's Grants & Contracts Office**
 - 2 Program & Grant Development Specialists, 1 C&G Specialist
 - Support ~ 200 scientists across 12 academic depts and 4 R&E Centers
- **Partnership with Office of Sponsored Projects**
 - Annually bring select NSF, NIH, NSF program officers to campus
 - Program officer webinars
 - Host mock NSF, NIH, NIFA review panels
 - Host sponsored activity seminars monthly throughout the year
- **New Faculty Mentoring Program**
- **Strategic Research Initiative – internal competitive program**
 - \$1.2-\$1.4 million annually
 - 25-30 projects, \$50,000 each
 - Preliminary data to support competitive proposal development
 - Preference to pre-tenure faculty
 - Mean ROI in awards 1.55:1
- **Undergraduate Research Program**
 - ~ 50 projects/year
 - \$3000/project
 - Preliminary data to support competitive proposal development
- **Cost-share as required**





Grant Writing Workshops

- 2-Phase grant writer's seminar and workshop
- Currently in 3rd cycle
 - 2010/2011
 - 100 Phase I participants, 22 Phase II participants
 - 2016/2017
 - 100 Phase I Participants, 17 Phase II participants
 - 2018/2019
 - 75 Phase I participants, 15 Phase II participants
- Phase 1
 - 2-day seminar
 - NIFA
 - NSF
 - NIH
 - 75 – 100 participants
 - Agency-specific manual
 - Cost ~ \$20,000
 - Consultant
 - Books
 - Food for participants





Grant Writing Workshops – Phase I Evaluation

- **Post seminar survey**
 - Material appropriate – 4.4/5 (0.74)
 - Presenter knowledgeable – 4.8/5 (0.43)
 - Responsive to questions – 4.9/5 (0.36)
 - Visual aids informative – 4.6/5 (0.56)
 - Handout was a useful supplement – 4.7/5 (0.56)
 - Program would be useful as regular part of faculty development – 4.8 (0.57)
- **Comments**
 - *“This workshop was very helpful in setting the stage for effective grantsmanship. As a new investigator, it made me feel better prepared to submit my first grant.”*
 - *“I have learned grantsmanship skills in bits and pieces from various sources during my training, this course has been great because it covers grantsmanship and how to navigate major funding agencies (making them less intimidating) in one sitting. Thank you”*
 - *“This was great! All pre-tenure faculty should take this.”*

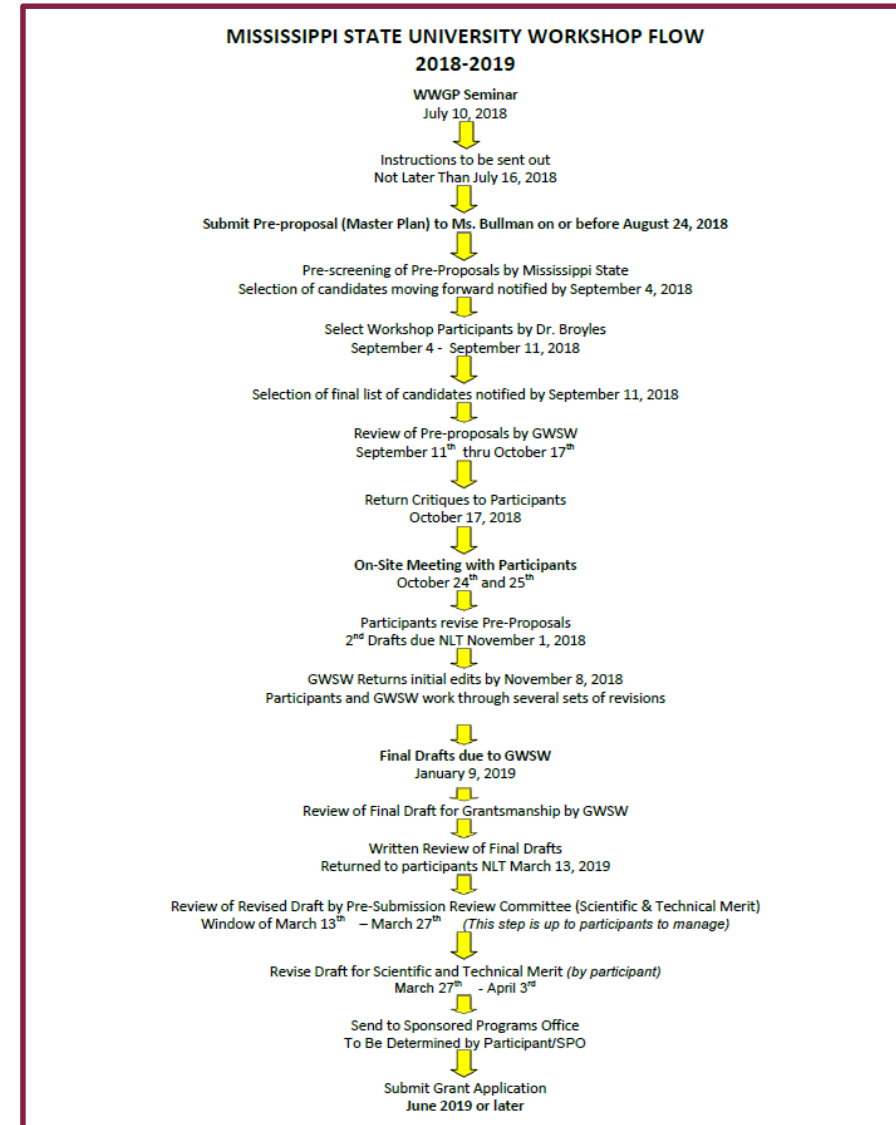




Grant Writing Workshops

• Phase 2

- One-on-one mentoring with a professional grant writing coach
- End product – submission-ready proposal
- 1-year process
- Competitive process
 - Pre-proposal submission
 - 3 levels of review/participant selection
 - 15 – 20 participants
- Cost ~ \$4000/participant, ~\$60,000 total






Grant Writing Workshops

• Phase II Routing Form

- PI Commitment – “I am willing and able to commit the time and effort required to see Phase II through to successful submission of a nationally competitive proposal as described above.”
- Department Head Endorsement – “The applicant’s proposed idea aligns with their skill set and research program and fits the target agency/program area. The applicant has demonstrated adequate recent scholarship and/or generated sufficient preliminary data in support of the proposed concept. The proposed research concept is scientifically viable and relevant. The applicant shows evidence of motivation, coachability, commitment, and follow-through.”



MISSISSIPPI STATE UNIVERSITY
DIVISION OF AGRICULTURE, FORESTRY, & VETERINARY MEDICINE

Write Winning Grant Proposals PHASE II Routing Form

Scientist _____ MSU ID# _____ Dept. _____ Org Code _____ Primary Appointment MAFES _____

Targeted Granting Agency: NSF NIH USDA-NIFA other _____

Targeted Funding Mechanism _____ Program Area/Program Code _____
(AFRI Foundational, AFRI Challenge, NIH- R01, NIH-K-Award etc.)

Anticipated Proposal Title: _____

Total Estimated Funds Requested: _____

Phase II participation requires a significant commitment of time and effort on the part of the PI and an investment of \$3600 by the Dean/Director’s office. Phase II participation is limited to 15-20 highly motivated individuals. We received 2-3 times more Phase II nominations than can be accommodated.

The following assurances will be used in screening/selection of Phase II finalists:

PI Commitment – I am willing and able to commit the time and effort required to see Phase II through to successful submission of a nationally competitive proposal as described above.

PI Signature _____ Date _____

Department Head Endorsement – The applicant’s proposed idea aligns with their skill set and research program and fits the target agency/program area. The applicant has demonstrated adequate recent scholarship and/or generated sufficient preliminary data in support of the proposed concept. The proposed research concept is scientifically viable and relevant. The applicant shows evidence of motivation, coachability, commitment, and follow-through.

I cannot endorse this applicant’s nomination given the above criteria

I endorse this applicant’s nomination with some reservation given the above criteria

I endorse this applicant’s nomination given the above criteria

I strongly endorse this applicant’s nomination given the above criteria

Department Head Signature _____ Date _____

Dean/Director Assurance – If selected for Phase II, the College/Center will support the nominee’s participation and tuition.

Assoc. Dean Research/Assoc. Director Signature (MAFES, FWRC, MSU-ES, CVM) _____ Date _____

Fully signed routing form and complete application package should be forwarded from appropriate Dean/Director’s office to:

LaDonna Bullman – lmb13@msstate.edu, 662.325.0785

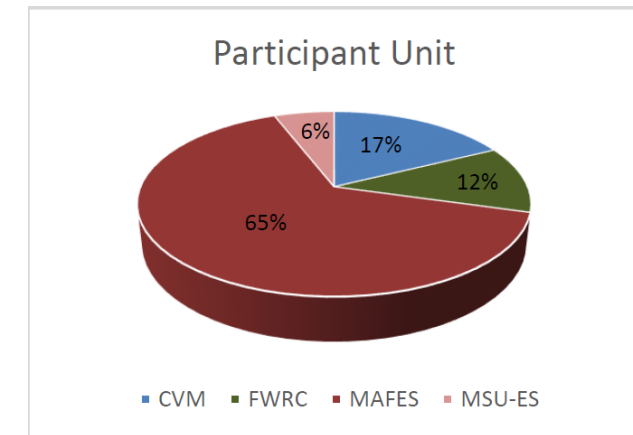
Complete nomination packages must be received by 2:00p.m, 08/24/2018



Grant Writing Workshops – Phase II

2016-2017 Evaluation

- 41 applicants submitted pre-proposals and 17 finalists were selected
 - CVM = 3
 - FWRC = 3,
 - MAFES=10,
 - MSU-ES = 1.
- Prepared proposals submissions for:
 - USDA-NIFA-AFRI = 57.1%
 - NSF = 28.6%,
 - NIH = 14.3%.
- 13 (76%) participants submitted one or more proposals based on their preproposal.
 - 38% (n = 5) were successful on their initial submission,
 - 54% (n = 7) were declined,
 - 1 still pending.
 - Mean dollar amount requested = \$622,145 (n = 13), total requests \$9,332,179.
 - Awards had a mean value of \$442,427 and secured a total of \$2,212,138.
- Within 24 months:
 - 15 (88%) of Phase II participants had submitted one or more proposals to nationally competitive programs
 - 29 proposals requesting \$13,865,775 in funding.
 - 13 awards (44.8% success rate) from nationally competitive programs valued at \$4,378,889.

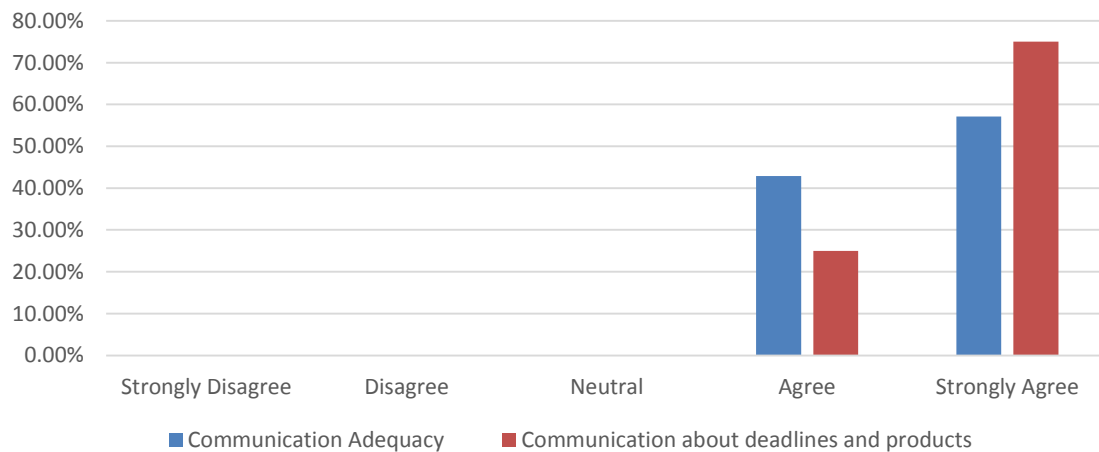


Grant Writing Workshops – Phase II

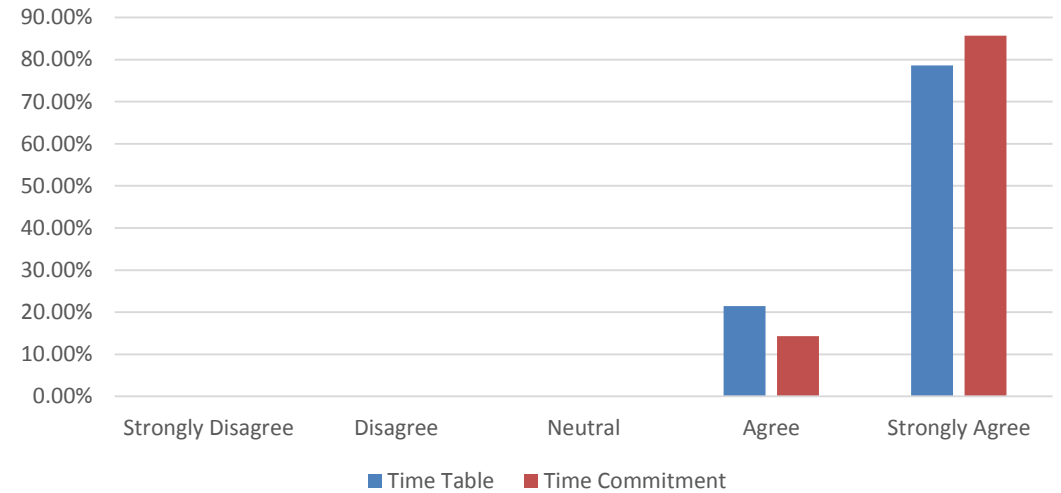
2016-2017 Post Workshop Evaluation

- Understanding the commitment
- Communication Responsiveness
- Communication Clarity

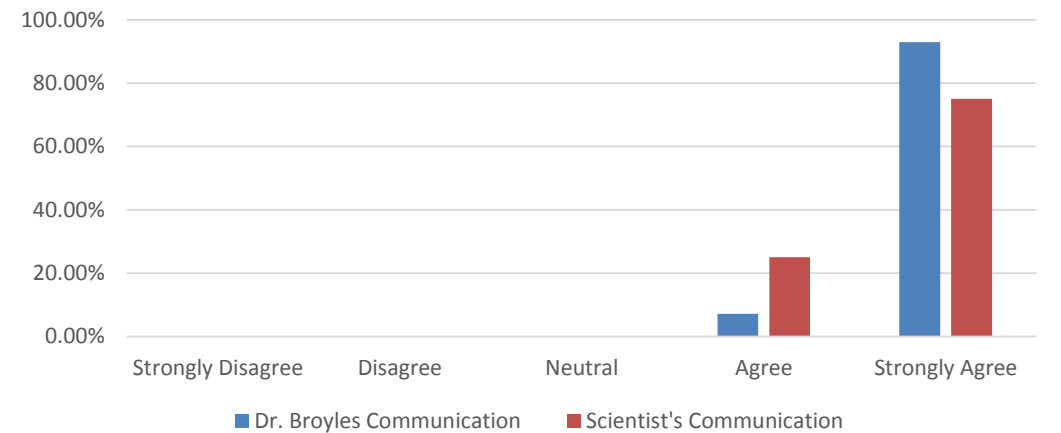
Communication Clarity and Adequacy



Understanding The Commitment



Communication Responsiveness



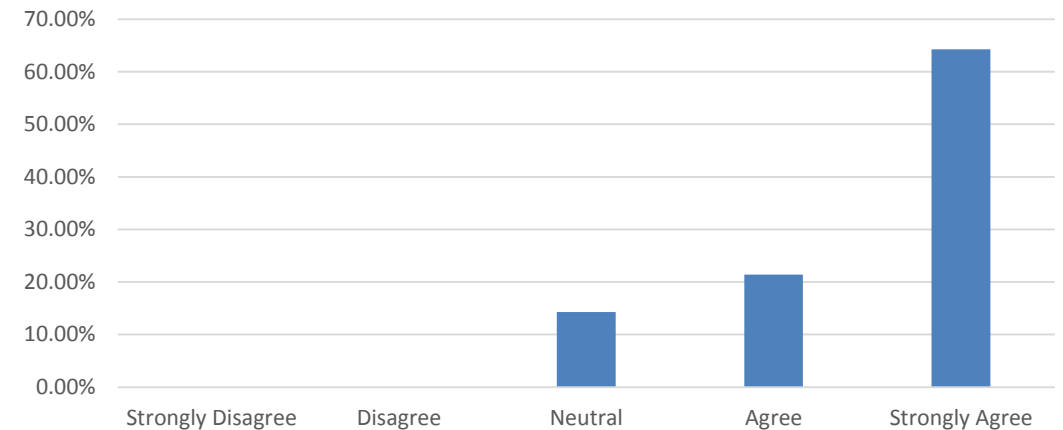


Grant Writing Workshops – Phase II

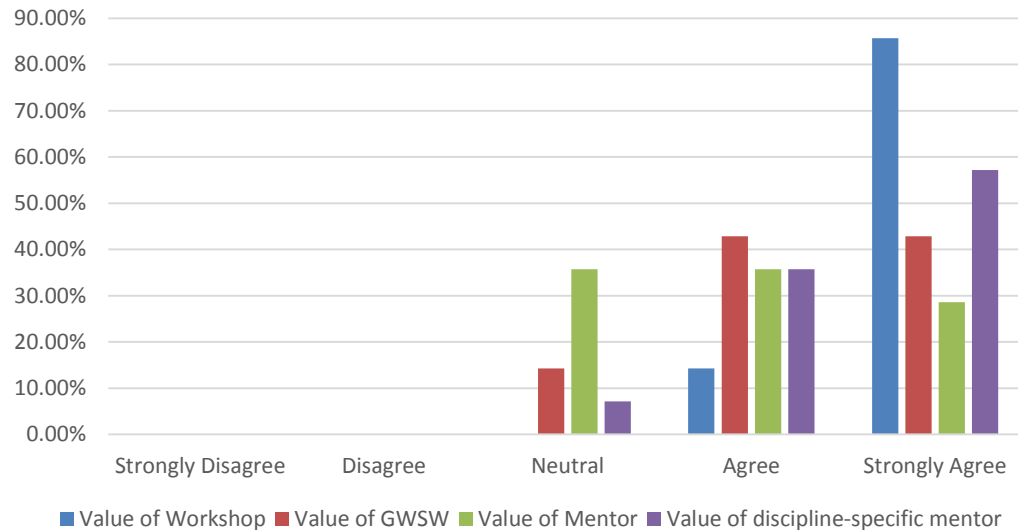
2016-2017 Post Workshop Evaluation

- Ability to meet deadlines
- Perceptions about improvement
- Value of workshop

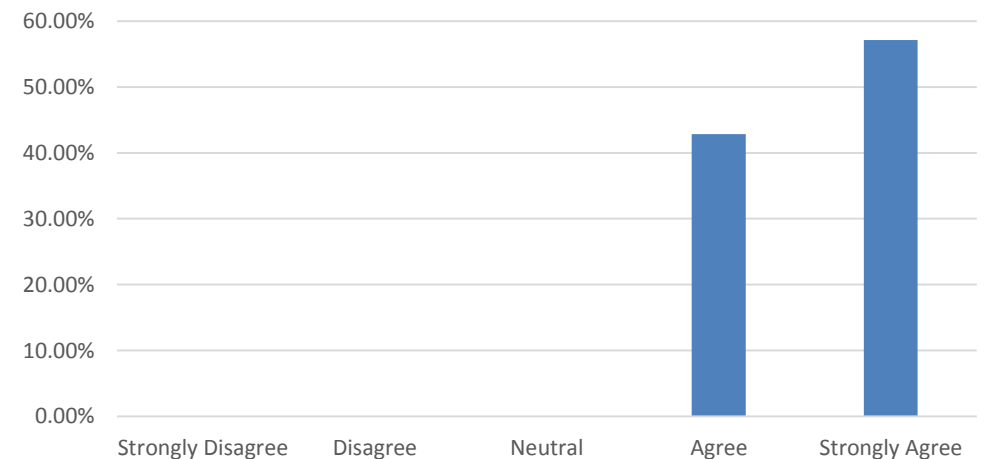
Ability to Meet Deadlines



Value of Workshop



Perceptions about Improvement





Grant Writing Workshops – Phase II

- **Return on Investment**
 - Total cost of \$80,562.72
 - Phase 1 \$20,562.72,
 - Phase II \$60,000.00
 - Submissions within 24 months
 - 29 proposals requesting \$13,865,775
 - Awards
 - 13 awards (44.8% success rate) valued at \$4,378,889.
 - Effective ROI
 - 54.4:1
 - Additional and indirect returns attributable to:
 - proposal submissions by Phase I-only participants
 - residual benefits in future submissions by Phase II participants
 - certain, but of an unknown magnitude.





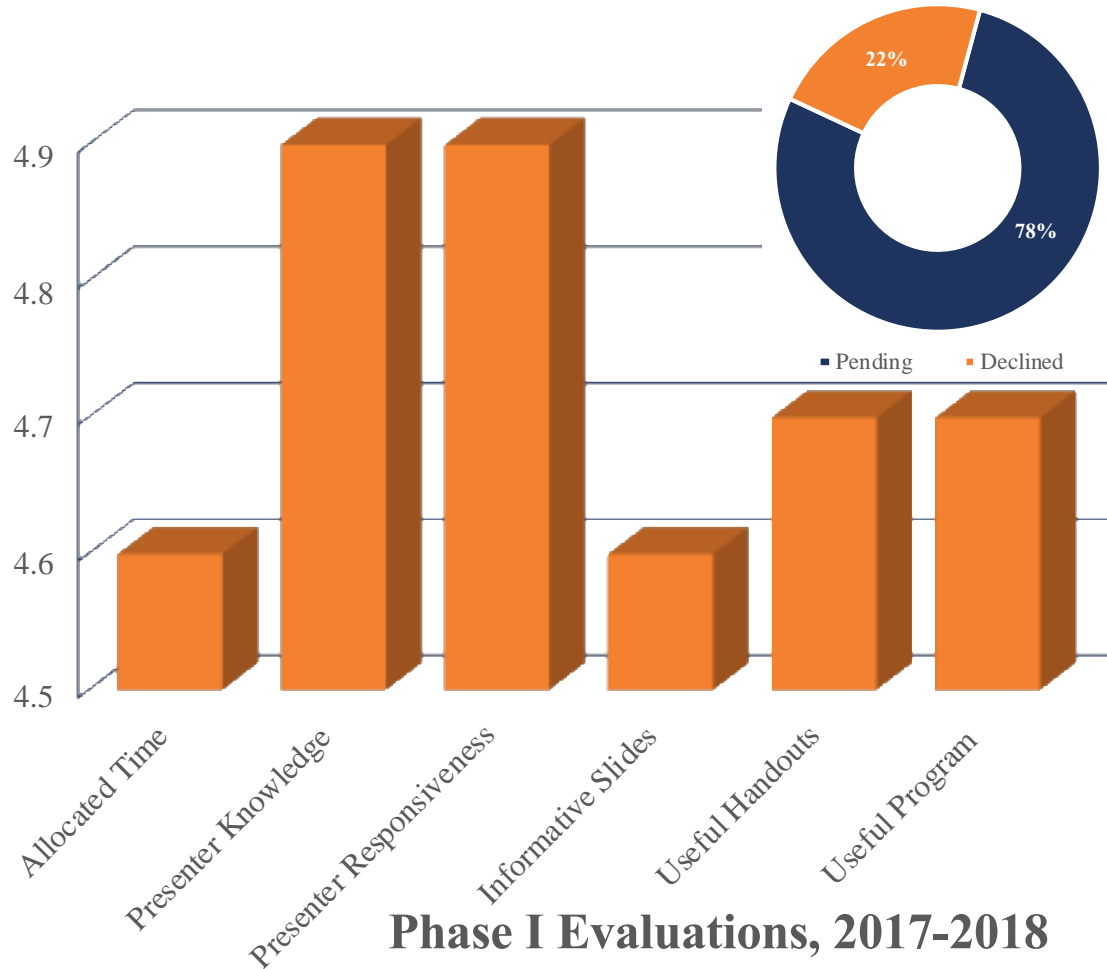
Multi-Institutional Grant Writing Workshops with Consultant

- University of Tennessee, University of Kentucky, Virginia Tech
- Same consultant group as MSU
- Common location for Phase I session
 - Expenses – host site; traveling schools
- Phase II – teams and individual PI proposals
 - Expenses
- Challenges
 - Strategies for developing collegial engagement and partnerships



THE UNIVERSITY OF TENNESSEE

2016, 2017 (UT/UK), 2018 (UT/UK/VT)



THE POSITIVE

- Consistently positive assessment of Phase I value.
- 1-on-1 attention and team interaction was helpful.

THE CHALLENGE

- Specific FOA not available to guide proposal development.
- Inconsistent researcher commitment to the process.
- Desired program outcomes have varied
- Multi-institutional collaborations have not emerged as hoped.
- Poor tracking (among other things) makes it difficult to assess overall effectiveness.



Discussion