MSU ADVANCE- TRACS
Mid-year Evaluation Report

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Section 3

Grant Writing Boot Camp (GWBC)
This program was offered to STEM and SBS faculty of MSU-Bozeman, with the purpose to “facilitate the production of a solid, review-ready grant proposal” in order to receive feedback from grant facilitators. This program was offered during six weeks, from September 16, through October 18, and was organized in weekly two-hour sessions. During these sessions participants attended presentations of grant successful faculty to learn writing and procedural skills for developing competitive grant proposals, and eventually worked in smaller writing groups. The main topics included: writing proposal letters of intent, cultivating mentee-mentor relationships, assembling the project team, developing narratives and budgets, understanding of funding agency and university requirements, and the process of the grant review panel and responding to panel’s critiques.

The data presented in this section include field observations of two sessions (second and second to last), attendee’s survey, and interviews of three participants and boot camp facilitator; both surveys and interviews were used at the end of the program. The number of attendees that attended the observed sessions fluctuated such that the first observed session included 13 participants and the second observed session included 7 attendees. This is a very research-oriented group, with except of one participant that has a high teaching load. The structure of the sessions was similar for both observations, including a brief introduction of the boot camp facilitator, followed by invited speakers presentations. In both cases participants had opportunities to ask questions and “homework” was assigned at the end of the session for attendees to complete during the week.

During the first observation the facilitator presented information about early-career NSF grants and a search-engine for requests of proposals of major federal funding agencies. Then, participants shared each project focus and funding agency for imminent grant submission. these agencies include: Montana Space Grant Consortium, NSF, NIH, USDA-NIFA, and DoT. The invited speaker of this session talked about mentoring from both mentor and mentee perspectives. Participants asked a lot of questions about ways to engage mentors. Strategies that might help to recruit mentors were discussed. Participants “homework” was to write a letter to a mentor, and to develop a list of all the necessary steps to submit a grant proposal.

The second observed session was a multi-speaker session focused on successful grant submissions and grant opportunities at MSU. The speakers shared some insights about strategies that were conducive to success, such as recruitment of senior personnel for the project, developing a project summary, getting support letters on behalf of the project, using senior faculty and national and regional professional networks to set the project’s Advisory Board, and strategies for outcomes dissemination. Staff of the Office of Sponsored Programs (OSP) shared material and resources to assist grant writers and explained the concepts of indirect cost (IDC) and cost-sharing. In both observed sessions participants were very
engaged; most questions were related to issues of budget, “broader impact”, and collaboration.

Participants completed an online survey (see Appendix C) at the end of the GWBC program. Some of the survey questions were designed to measure concepts of Self-Determination Theory, including autonomy, competence, and relatedness. Results of Likert-type questions (in a 7 points scale) are shown in Figure 4.

![Figure 4. Grant Writing Boot Camp Survey results.](image)

The GWBC was overall a positive experience for the participants. Participants felt they can express their ideas, gained confidence in grant writing, enjoyed working with other participants, and are more likely to apply for external funds. Participants would recommend the GWBC.

Based on the analysis of the open-ended questions, participants enjoyed the sessions that addressed practical information, such as: NSF submission process, writing letters of intent, using the critique of reviewers, and how to form a project team.

“Building a team. The practical advice was great. I wrote and sent out 2 letters of support for my grant after this workshop. “

The session that focused on budget preparation was perceived as less useful due to the complexity of the topic.

“Being completely new to the University, I needed more of a 101 version of how grants are administered, budget item descriptions, etc.”

Finally participants suggested improvements to the GWBC, such as: shorten the presentation times, have less speakers, and increase the interactive time spent in writing groups during the
sessions. It was perceived that the pace of the GWBC was too intense for attendees to complete the assignments.

“Move to an every other week format, given the other pressure of the academic term it was very challenging to keep up...”

Finally, one participant commented feeling overwhelmed by the emphasis on large NSF and NIH awards.

“I felt a lot of pressure to come out of the gate with a large, multi-investigator, multi-disciplinary, multi-million dollar grant -- and in my first semester, that's just not realistic. ...So my suggestion for improvement, based on my experience, would be to also encourage (or encourage more) of the small, pilot projects to start with. “

Based on the analysis of the surveys, three main ideas emerged upon which to conduct the interviews: 1) Tension between the time invested in the program and gains, 2) participant’s expectations, and 3) application and future plans in relation to the experience gained in the GWBC. Semi-structured Interviews were conducted at the end of the program. Three attendees were interviewed; all interviewees were from different STEM departments. The interviews took place on-campus and transcriptions were sent back to interviewees for subject check.

All interviewees stated that the time spent in the Grant Writing Boot Camp was well invested. One interviewee noticed the importance of face-to-face interactions

“You could get the information from a drop box, but the fact that the program was face-to-face provided a context for the information. Additionally, the 'social pressure’ to attend face-to-face meetings helped motivate the participant to look into the information provided ahead of time.”

Interviewees commented on the specificity of the program -mainly focused on NIH and NSF grant proposals- implying long-term, large projects and a more experienced audience in terms of grant writing

“Maybe it would be more helpful if we had a proposal drafted, or being the lead PI, or re-submitting something.”

“...being a new faculty and being my research very place-bound I still first need? to get to know the place before jumping into a new large project.”

In terms of timing and the pace of the WBC, it was proposed to break the program in every other week working sessions to allow participants to catch up with the “homework”. For example, organize the program such that in a session only information is presented and is followed by a session that focuses on discussion and delivery. The interviewees also commented on some overlapping among presentations of different speakers, and suggested that a closer coordination might contribute to a more effective use of time.

The purpose of the Writing Boot Camp was clearly articulated by the TRACS team, to “facilitate the production of a solid, review-ready grant proposal”. Yet, it was of interest to explore if participant’s expectations matched the purpose of the program. One interviewee “was interested in meeting new people, learn about MSU resources, OSP, IRB, and all the GWBC program has to offer.”
Interviewees expected a “flipped classroom” modality and wished more time for “hands-on,” application of information into proposal preparation, and peer interaction during the boot camp sessions.

“...maybe the phrase boot camp was a little misleading.”
“...To have a lecture about it [budget preparation] was good, but now that I want to use this I have to re-learn the information”

Interviewees praised the formation of writing groups as an unexpected beneficial outcome. Participants with similar interests were placed in smaller writing groups, supporting each other’s proposal writing. Although this activity currently extends beyond the time period of the boot camp, it was organized during the camp and is very well received.

“One thing that was very good and I did not expect was the writing groups. These are very good; people are committed and want to continue.... it will be a great advertising thing”

Other interviewee continues working with the boot camp facilitator in one-on-one basis and finds this interaction extremely productive.

Regarding applying the lessons of the boot camp two interviewees commented of future partnerships with other faculty to explore common interests for proposal submission.

“The GWBC was OK to find partners by knowing people that do similar things and could work in the future. For example the people in the writing groups.”

The GWBC stimulated thinking on research questions.

“The GWBC was important because it makes me think about research questions, even if I did not reach the program deadlines thinking about the next step towards the final product [proposal] was important”

and encouraged participants to submit proposals to MSU’s internal calls.

“I will use start-up money to pilot ideas to then apply to internal grants.”

The writing groups resulted relevant to the interviewees, stimulating sustained writing habits

“The daily writing is helpful in my productivity; I will use the reason of grant proposal writing.”

The GWBC facilitator’s interview focused on two main questions: what would you do different? What did you like the most? The suggested changes were related to “make the format work better” in reference to the balance between presentations and writing activities during the boot camp session.

“Maybe gather with the presenters before the session to make sure they know about the time limit and the format of the boot camp.”

Provide more opportunities for interactions among participants

“...because they [attendees] come from different disciplines. I would encourage the work in groups to create that interdisciplinary community.”

Considering the time of the year when the GWBC will be offered again, -possible in March.

Considering the length of the session, and possibly “scale back the syllabus.”

Reviewing the expectations of out of WDBC work participants can realistically accomplish. Talk to faculty that would participate in the WBC but declined because was NSF and NIH focused “maybe expand the [the GWBC] to foundations.”
The facilitator likes the work she continues to do with five participants of the WGBC to develop grant proposals.

“submitting and meeting with other people indicates this [GWBC] was useful.”

She also enjoyed the contribution of the presenters.

“The involvement of the facilitators [presenters] made the event because they provided their expertise.”

In addition, the facilitator wished to have TRACS administrative support to deal with the organization of GWBC hospitality. This could benefit the program because will allow the facilitator to focus solely in the organization of the GWBC sessions.

Interviewees, and facilitator comments agree in terms of the format of the sessions, the expected workload outside the GWBC sessions, and the specificity of the program towards NSF and NIH award programs.

**Lessons Learned from Grant Writing Boot Camp**

- **Make it interactive and provide opportunities for writing time during the sessions.** This change might imply: reduce the syllabus of the program, the number of invited speakers, and/or the length of the presentations.

- **Diversify the focus of the program.** Instead of focusing on NSF and NIH award programs include other federal (USDA, DoE, etc...), regional, and state agencies, and private foundations.

- **Set expectations that are feasible for new faculty.** Consider the time demand of the assignments outside the GWBC sessions by increasing the time between sessions. Consider the scope of the projects a new faculty might feel confident to pursue.

- **Be aware of the timing of the GWBC.** If possible, explore what time of the year is easier for faculty to fully participate in a grant-writing program.
Appendix C
General and final reflections of the Grant Writing Bootcamp

This six-week training aimed to help write review-ready grant proposal. Through this process you received information related to grant writing and submission, worked with a colleague, and had the opportunity to submit your proposal to a mock panel review and received feedback from grant successful facilitators. Please based on your experience at the Bootcamp answer the following questions:

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<td>I felt free to express my ideas and opinions during bootcamp</td>
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<td>The bootcamp increased my confidence in my ability to do well at grant writing</td>
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<td>I really like the people I worked with during bootcamp</td>
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<td>I do not feel very competent in grant writing</td>
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<td>Most days I feel a sense of accomplishment from the bootcamp</td>
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<td>I consider the people in bootcamp to be my friends</td>
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<td>As a result of bootcamp, I am more likely to apply for external grant funding</td>
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<td>I think bootcamp will have a positive impact on my career advancement</td>
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<td>I would recommend bootcamp to my colleagues</td>
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Please turn the page

What session you liked the most? Why?
What session you liked the least? Why?

How the ADVANCE Grant Writing Bootcamp program can be improved?