ARP

Aggie Research Program

Team Leader Information and Guidelines

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Introduction

Welcome to the Aggie Research Program.

Since the Spring of 2016, the Aggie Research Program has facilitated the creation of over 500 research teams led by faculty, postdocs, grad students, and advanced undergraduates. Through these projects, team leaders have created thousands undergraduate research positions. We are very proud of the impact that our program has had on the research community at Texas A&M, and we are pleased that you have joined us in the effort to contribute to that research community.

Whether you have chosen to participate in the DeBakey Executive Research Leadership Program or the Aggie Research Mentoring Program, this document contains a wealth of information that you will find useful for your time as a research team leader.

Much of the information is built on the experiences of team leaders such as yourself and represents the best practices of the research program to-date. Of course, this document is not exhaustive, and one of the more important functions of the ARP is to facilitate the identifying, refining, and creating best practices in research leadership through monthly team leader meetings.

We are always striving to make the program as beneficial to everyone involved, so if you have any comments about this document or can suggest additions that would be valuable to your fellow team leaders, or, please feel free to AggieResearch@tamu.edu.

We look forward to working with you throughout the semester, and we hope that your time in the program is productive and beneficial to both you and your students.

Sincerely,

Andrew McNeely

Andrew McNeely

Chris Quick

Christopher Quick, Ph.D.

Administrative Processes

Registration

As you have seen by now, registering a project with the Aggie Research Program is done through an online form. This form is found on the Aggie Research Website, under the "Research Leadership" section. Data are kept secure and shared only with program directors.

Requirements to participate

Each project requires a team leader and with 3-8 team members. Please ensure that your research team meets the following requirements listed below:

Team size: Prior experience has shown that teams between three and eight students optimize effectiveness of the team-based model (the historical average is 4.5).

Faculty advisor for team leaders who are students or postdocs: The faculty advisor's role within the program is to advise the team leader on the nature of the research project and approve the registration once it is submitted. The ARP does not require direct communication or interaction with the faculty advisor, but they are welcome to contact us at any time at Aggieresearch@tamu.edu with comments or concerns.

We understand that during the course of a semester circumstances may change unexpectedly. We want to ensure that every team can provide the best experience for all its members, so please do not hesitate to contact the program with any issues involving administrative requirements.

Editing your project profile

You will need to make changes to your project profile on the Aggie Research Website when you select team members, or when you want to make changes to the number of team members, project description, or meeting times. To make changes to your project profile, return to the registration form online. Previously submitted information will be visible and will remain the same unless you make changes to specific fields. On submission, your changes will be sent to the research program coordinators for processing. If you are a student and want to change your faculty advisor, please contact the Aggie Research Program directly at Aggieresearch@tamu.edu. If you decide to continue the project the next semester, you will be required to "create a new project".

Adding or removing team members

You may add team members at any time throughout the semester by returning to the online registration form and adding their name and email to your team roster. You may also remove team members by deleting their name, so be careful not to inadvertently overwrite your team members. Please alert us to any team members that are removed so that we can make sure our records are accurate.

Research Compliance

It is the responsibility of every team leader to ensure that they, their research, as well as any team members assisting them in that research are in compliance with any applicable state, federal, or Texas A&M University policies.

Graduate students and postdocs can ask their faculty advisor whether their study requires research compliance approval and will be able to guide them through the approval process. If you are unsure about whether or not your project needs prior approval, Contact the Research Compliance & Biosafety office.

Types of Research Compliance

If you are working with any of the following, you must obtain necessary approvals from the appropriate committee and complete any specialized training before collecting any data:

- Human subjects: Institutional Review Board (IRB)
- Vertebrate animals: Institutional Animal Care and Use Committee (IACUC)
- Biohazards and pathogens: Institutional Biosafety Committee (IBC)

For more information about each of the three compliance categories above, visit the Research Compliance & Biosafety website at http://rbc.tamu.edu

Mentoring as the Basis

The Aggie Research Mentoring Program and the DeBakey Executive Research Leadership Program both strive to equip participants with the tools necessary to be successful leaders in their respective fields. Though the two tracks for certification differ in the specific tools they apply, both emphasize mentoring as the basis for a successful team and team leader.

Mentoring focuses on the development of team members as students, as professionals, and as individuals outside of the parameters of a research project. Because the ARP provides research opportunities to non-traditional and under-represented students, team leaders should be aware that circumstances—both within as well as outside the academic realm—are likely to impact their team members throughout the course of any given semester. As mentors, team leaders should be prepared to identify the warning signs of such circumstances, and the appropriate responses that best suits the situation.

Identifying, discussing, and formulating strategies to deal with difficult situations as mentors is a main focus of the monthly team leader meetings. At these meetings, we set aside time for team leaders to voice their concerns or scenarios that they would like feedback on from the group. Because our roster of team leaders includes a diverse range of academic and personal backgrounds, as well as the varying levels of experience of each team leader, a viable solution is often available on hand at the meeting through discussion.

A mentoring perspective sees the various challenges to productivity—i.e. lack of motivation, lack of communication, interpersonal issues, underachievement, etc.—not simply as management issues to "correct", but rather as opportunities to assist our team members in overcoming personal, academic, or professional challenges. Team leaders are encouraged to use the monthly meetings as venues to address these issues with the learning community, as well as reach out to program directors at any time for additional support.

From here, the programs diverge in their application of these concepts. The ARMP applies the mentoring principles to traditional and non-traditional classroom and teaching settings—such as the undergraduate research team—and further emphasizes mentoring for the undergraduate population specifically. The DeBakey Executive Leadership Program applies the mentoring principles to professional settings outside of the classroom, and assumes a more advanced starting point for the research team as well as the team leader.

Certification of Team Leaders

The Aggie Research Program presently has two tracks that lead to certification: The DeBakey Executive Research Leadership Program with a focus on research mentorship and leadership and the Aggie Research Mentoring Program with a focus on research mentorship and teaching. Although each track has a different focus, they have the same basic requirements.

Certification is awarded to team leaders who meet the following conditions: completion each semester enrolled in ARP; completion of weekly surveys; substantive contribution to the ARP community. The following is a description of each item. The ARMP and DeBakey programs also have unique products that are developed by team leaders and submitted by the end of the semester. Details of these products will be discussed by the respective program director.

Semester minimum: Each project and team with the Aggie Research Program is registered for one semester at a time. This is the minimum requirement for certification of both team leader and team members (see below for explanation of team member certification). Team leaders are welcome and encouraged to continue projects for multiple semesters in order to take advantage of increased team competencies.

Weekly surveys: The ARP will distribute surveys to team leaders to track team engagement week to week and provide short videos written material relevant to leading your team. Your responses will be combined with aggregated responses from surveys distributed to you team members.

Learning Community: A significant component of participation is the utilization of and participation in the leadership community of practice. For the ARP, this is primarily the monthly team leader meetings. During these meetings, the team leaders engage in group discussion of their experiences in leading undergraduates as well as the challenges or obstacles they've encountered in the process. The intent is for the group to assist each other in overcoming challenges and benefit from each team leader's diverse background, varying level of experience, and different methodological approaches to team management. When team leaders are unable to attend monthly meetings, they can work with the ARP directors to come up with an alternative method for contributing to the research-intensive community. Oftentimes alternative methods present themselves in the form of workshops or campus events, but team leaders are also invited to submit ideas for alternatives.

Certification of Undergraduates as Aggie Research Scholars

Undergraduate team members have the opportunity to earn a certification through the Aggie Research Program. This certification requires one semester of enrollment on a team and the completion of the weekly surveys sent to them by ARP. Remember, the weekly surveys for undergrads track their motivation, frustration, and working hours, which are aggregated and sent to the team leader for review; thus you have an interest in making sure your team members complete surveys.

In addition, the certification of team members as Aggie Research Scholars is *at your discretion*. If you believe a team member has not performed satisfactorily on your team, especially with regards to the expectations you establish and their performance relative o their fellow team members, it is appropriate for you to advise the program to withhold that team member's certification. Keep in mind that team leaders should work with team members and make every effort to correct whatever deficiency is threating their certification.

If mentoring and corrective actions are not enough to improve a team member's productivity or engagement, removing them from the team can be considered an appropriate action. Team leaders are expected to have exhausted reasonable interventions to improve the team member's performance, but we recognize that a team leader's time and energy are limited. Your primary responsibility is to the team, and team morale and productivity *should not* be sacrificed at the expense of one team member's unwillingness to improve. Please contact the ARP program directors for assistance in these matters.

Cases of overt and/or direct aggression, disrespect, sexual harassment, sexual assault, or flagrant violation of the Aggie Honor Code are grounds for immediate dismissal from the Aggie Research Program. Please contact the program directors immediately in the event of any such occurrence.

See Resources for Undergraduate Mentoring below.

Suggestions for New Team Leaders

The Aggie Research Program strives to facilitate the development leadership skills. Throughout the semester, we collaborate on the best approaches to each team leader's objectives and challenges. However, there are a few best practices and strategies that new team leaders can adopt early on in the semester to avoid many common problems.

Project goals and timeline

A useful strategy for any team-based project is to establish a goal for the semester, something that the team can view as a measure of success. This can be a specific research milestone, a deliverable (research poster, article, or other publication), or preparation for a conference presentation. In addition, a timeline for progress can be useful to help focus the agenda for your team and ensure that each student is aware of their particular contribution.

Team diversity

Because research projects in ARP are collaborative, team leaders have found that their teams become more effective when they select team members who have unique and complementary strengths. Diversity of disciplines, skills, interests, experiences, and personal backgrounds not only provides a resource that can be called upon to produce research in a collaborative team, but also prepares undergraduates to work in a diverse world.

Team selection and prerequisites

The ARP is committed to the creation of research opportunities for undergraduates, particularly those for whom conventional research opportunities are unavailable. To this end, the program is open to all disciplines, undergraduate levels, and GPA attainments. You are entitled to set your own requirements for team members. However, three common misconceptions must be addressed. First, GPA is not considered to be a reliable measure of a student's research aptitude—it is influenced by a host of variables that are often outside of the student's control. Second, teams consisting of some freshmen or sophomore team members may be preferred to teams consisting solely of seniors. Because many teams persist for multiple years, today's freshmen and sophomores may be tomorrows extraordinarily well-trained juniors and seniors. Third, "motivation" is not an inherent quality of undergraduates but is instead context-dependent. You would not be team leader if you were not highly motivated, yet you likely have little or no motivation to join someone else's research team. You will motivate students by identifying how their personal, learning and vocational goals align with your goals. A disappointingly short email from an undergraduate expressing interest in your project is not a reliable measure of their potential motivation. Experienced team leaders typically ask for particular information from students before selecting those to interview (including times available to meet in the team (see below).

<u>Meeting times</u>

A weekly, face-to-face meeting between team members and team leader is an invaluable asset to any project. Weekly meetings help maintain a sense of cohesion among team members, which is itself a trait that is undervalued by many new team leaders. Further, face to face interaction provides opportunities to address smaller or less significant issues before they become more problematic. Weekly updates and overviews of progress are also necessary for team-based projects, and most effectively done in person. If you have not already done so, schedule a full team meeting on a recurring weekly schedule in addition to any work-related scheduling. Experienced team leaders use availability for meetings as a criterion for team membership to avoid the costly mistake of selecting a team of students who cannot meet at the same time.

<u>Clear expectations</u>

Perhaps the most important aspect of the team leader/team member dynamic is setting clear expectations early on in the project timeframe. As an agreement between you and the team member about what you will and will not ask of them, this is a helpful tool to keep team members on track and accountable for their work. These expectations can extend from work flow and method, to interposal communication and respect, to safety and accountability. The more accurately and explicitly a team leader makes their expectations for the team, the more likely they will see those expectations met in the long run.

Resources for Undergraduate Mentoring

Student Counseling Services
- Team leaders should expect that through the course of the semester, one or more of their team members may encounter events or circumstances in their lives that require more mentoring service than the team leader is comfortable with. In these cases, the best course of action is to refer the team member to student counseling *and* assist them in setting up their appointment if they wish to do so. Do not underestimate the role that a team leader can have in averting or mitigating personal crises in team members, even just by suggesting the team member seek out additional counseling.
- Student Counseling Service is located at Student Services @ White Creek. You can quickly and easily reach us using on-campus Bus Route 03 ("Yell Practice.")
- Student counseling is available for appointment as well as immediate (no appointment) crisis counseling.
- Counseling Services info and registration: https://scs.tamu.edu/?q=node/134
- Crisis counseling and after-hours information: 979-845-2700

University Writing Center
- "We offer graduate students assistance with writing and public speaking, including class assignments, CVs, journal articles, research posters, oral presentations, theses or dissertations, and the oral defense."
- The UWC is also a good resource for helping undergraduate team members develop their written products for your team. Consider having them submit drafts of their products to the UWC for improvement and feedback.
- http://writingcenter.tamu.edu/Students/Graduate-Students

Student Rules & the Aggie Code of Honor
- "An Aggie does not lie, cheat or steal, or tolerate those who do."
- Useful Links
  - Student Rules: http://student-rules.tamu.edu
  - Student Rights and Responsibilities: http://student-rules.tamu.edu/rights
  - Attendance: http://student-rules.tamu.edu/rule07
  - Conduct Code: http://student-rules.tamu.edu/rule24
  - Governing Research: http://rules-saps.tamu.edu/PDFs/15.01.01.M3.pdf
  - Authorship: http://rules-saps.tamu.edu/PDFs/15.99.03.M1.02.pdf
  - Ethics and Responsible Conduct: http://rulessaps.tamu.edu/PDFs/15.99.03.M1.pdf
  - Human Subjects: http://rules-saps.tamu.edu/PDFs/15.99.01.M1.pdf
  - Biohazards: http://rules-saps.tamu.edu/PDFs/15.99.06.M1.pdf
  - Vertebrate Animals: http://rules-saps.tamu.edu/PDFs/15.99.07.M1.pdf
  - Intellectual Property: http://rules-saps.tamu.edu/PDFs/17.01.99.M1.pdf

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