

UW - Madison Geoscience Graduate Student Climate Survey

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GGSA Ad-Hoc Climate Committee

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M2. In the past three months, how often have you experienced the following?	10
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Q2c. Describe how your experiences in the Geoscience Department have affected your health, emotional well-being, and/or stress levels. There will also be a comment box at the end for general comments.	17
Work Environment	19
Q3a. Have you ever experienced or witnessed any of the following while you have been a member of this department? Select as many as apply.	19
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Q3a3 - Responsibilities and development	23
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Q3c. Do you have any comments or observations about how any groups are treated in the department based on gender, sexual orientation, race, class, religion, or other? Please elaborate.	26
Q3d. Do you have any comments or observations about how welcoming the physical space of Weeks Hall is for you and your community?	27

Q4. Select up to three components which are most positive/engaging and up to three components which are most problematic/disheartening in your position as a graduate student.	28
Q5a. On average, how many hours do you spend doing research-related activities per week? Activities include, but are not limited to: time in lab, classes, meetings, working from home. Please omit hours devoted to lunch, coffee breaks, or casual conversation.	29
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Q11c. From the list below, please select all of the GeoPath events you have attended in the past year.	39
Q11d. If you would like, please elaborate on your responses to Q11a to Q11c.	39
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Q12b. Please rank the following statement: I feel that an AWG chapter is a positive addition to the department.	41
Q12c. I would like to see AWG undertake the following initiatives/I would participate in the following:	42
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Q13b. During my time at UW Madison I have engaged with GGSA in the following ways (check all that apply):	44
Q13c. GGSA obtains part of their departmental budget via service to the department. These tasks include: 1) hosting spring banquet, 2) organizing activities for/hosting prospective students 3) providing refreshments and sober monitoring at Weeks End receptions 4) providing coffee and cookies before Weeks End Lectures 5) organizing department social events (picnic/holiday party) In the last year, I have volunteered in the following number of these services:	45
Q13d. I feel that these services are a fair work load on the graduate student population.	46
Q13e. Please answer on a scale from strongly agree to strongly disagree "GGSA should continue supporting this service"	47
Q13f. If you would like, please elaborate on your responses to Q13a to Q13e.	48
Q14a. What percent of the Weeks End Lectures have you attended in the last year?	48
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Executive Summary

During the 2019-2020 academic year, the Geoscience Graduate Student Association (GGSA) authorized a newly formed committee to conduct a survey of Geoscience graduate students. The goal of this survey was to evaluate the current state of graduate student professional life and personal well-being. 34 individuals completed the survey, accounting for approximately 74% of the current geoscience graduate student population. The survey included several different question formats, generating qualitative and quantitative results that are fully disseminated within this report. A committee composed of both graduate students and faculty evaluated the results of the survey independently and as a committee, and through discussion identified common positive themes as well as areas for improvement. We summarize those findings here.

Six major themes were identified as common problems faced by the geoscience graduate students: **1) The majority of our graduate students struggle with mental health issues**, primarily anxiety (72%) and depression (45%) (M4, Q2a). Previous studies have documented troubling rates of mental health disorder in early career researchers and college students, but survey format differences make direct comparison tenuous^{1,2,3}. While an exact comparison is challenging, it appears that our department is characterized by median to high levels of poor mental health for graduate students when compared with national and global studies^{1,2,3}. **2) Graduate students perceive large disparities in work expectations between research groups** (i.e. teaching, research, exams, working hours) and 53% of graduate students stated that the lack of clearly communicated expectations from their advisor has negatively affected their mental health and productivity (Q2c, Q3b). **3) Some graduate students believe that the departmental work performed by GGSA is unfair (48%) and many believe it is beyond the organization's scope (67%)**; additionally, this labor is not evenly distributed among the student body (Q13d,f). Similarly, graduate students feel that they disproportionately contribute to diversity and inclusion (D&I) initiatives, with limited departmental involvement in planning and participation (Q10b, Q16a, Q17). **4) Although rare, Graduate students do perceive some negative and/or inappropriate behavior within the department generally, as well as specifically on the basis of race, ethnicity, gender, sexuality, or family status (Q3a1, Q3c)**. There is a perceived lack of accountability for negative/abusive actions, and graduate students face a disadvantage in raising and resolving workplace conflicts due to the unique power dynamics of academia (Q3b). The decentralized and poorly communicated departmental hierarchy and the perceived opaqueness of departmental decision-making exacerbates these issues (Q9a, Q10b). **5) Departmental safety culture in the lab and field are inadequate**, particularly in regard to departmental support for field training for

both research and teaching purposes (Q3d). **6) Geoscience-specific professional development and career counseling for graduate students is limited (Q15a, Q15b).**

Several positive themes were identified within the survey results including **1) Student Community:** strong comradery was repeatedly cited as a positive force amongst the graduate student community (Q2c), **2) Conflict resolution:** students facing issues with their advisor felt comfortable seeking help either directly from their advisor or another department member (Q8), **3) Weeks-End Seminars as Network Development:** Weeks End was described by many respondents as providing a good opportunity for both professional networking and community development (Q14b, Q17) and **4) New D&I initiatives making positive impacts:** Several newer programs, specifically GeoPath and AWG, were identified as positive additions to our department culture. Respondents reflected on mentorship, diversity-focused discussions, and the addition of diverse visiting speakers as effective mechanisms for change (Q10a,).

We hope that the results of this survey will act as a catalyst and inform specific departmental goals for bettering both graduate student life, faculty-student mentorship, and departmental community. The department has significant strengths in its supportive culture and recent advances in addressing diversity and inclusion within STEM as a whole and Weeks Hall in particular. We believe that improving graduate students' mental health will positively contribute to a more productive and engaged departmental research and teaching environment. While we understand that improving mental health is a multifaceted and long term goal with no single solution, we believe that there are concrete short and medium term actions that can be taken to improve the departmental experience for graduate students. To help address the key issues identified by graduate students and build on existing initiatives, we have provided a list of first-step recommendations (see following section), but note that the success of such measures will likely hinge on clear leadership and well-executed implementation. We suggest that future biennial surveys are necessary and provide a means of assessing progress toward improving graduate student perceptions of departmental climate.

*We apologize for the quality of some of the graphics enclosed within this report. The automated export from the survey software does not produce high-quality graphics and the committee had limited time to analyze the data and prepare this report. If you have questions about any of the data please feel free to reach out to GGSA.

1. Woolston, C. (2017). Graduate survey: a love-hurt relationship. *Nature*, 550, 549-552.
2. Woolston, C. (2019). PhD poll reveals fear and joy, contentment and anguish. *Nature*, 575, 403-406
3. Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., ... & Murray, E. (2018). WHO World Mental Health Surveys International College Student Project: prevalence and distribution of mental disorders. *Journal of abnormal psychology*, 127(7), 623.

Committee Recommendations

*Where appropriate, we denote potential decision-making and or implementing bodies with an **

GSC (Graduate Studies Committee)

D&I (Diversity & Inclusion Committee)

GGSA (Geoscience Graduate Student Association)

BOV (Board of Visitors)

1. Addressing Graduate student struggles with mental health

- a. Encourage advisors to formally communicate expectations to incoming students and offer opportunity for discussion. ([Example faculty expectations](#)) *GSC
- b. Encourage discussion and practice of a healthy work-life balance and a healthy department through expectation documents (point a) and department events (point c).
- c. Normalize mental health awareness and treatment by continuing to share and advertise university level resources. Encourage and host seminars (perhaps one each semester) on mental health or community resource topics. *D&I, GGSA
- d. Encourage advisors to explicitly define different research expectations (semester by semester) for students funded via TA vs. RA, recognizing the different workloads. *GSC

2. Addressing disparities in work expectations amongst research groups *GSC

- a. Homogenize the format and expectations for Ph.D. assessment/qualifying and preliminary exams. Revise Graduate Student Handbook to reflect these changes.
- b. Clearly communicate the expectations for these exams to Ph.D. students, well in advance of the exams.
- c. With input from faculty and graduate students, revise the Graduate Student Handbook and Chronology forms to incorporate a 1 page reporting form to be signed by the student and committee members at each G&E meeting describing progress in research, teaching, and service, as well as documenting proposed coursework and the student funding mechanism for (at a minimum) the next semester.
- d. Track and make accessible graduate student attrition data.

3. Addressing burdens due to Graduate student departmental labor

- a. The recent changes to recruitment weekend responsibilities have significantly improved the labor distribution. Other ideas for potential improvement include more explicitly communicating the importance of service and encouraging a more equal distribution of labor among the student population. Additionally, the department could lessen the logistical burden on graduate students by either appointing faculty or staff to play key roles in organizing department social events (picnics, banquet), with graduate students fulfilling event specific volunteer roles rather than long-term event planning *GGSA
 - i. This would increase graduate student time and resources available to focus on professional development and other aspects of departmental culture (e.g. Diversity and Inclusion, Science Communication, others).
- b. Continue efforts related to TA assessments and workload *TA Committee
 - i. Existing committee work underway as of 2019-2020
- c. Continue to encourage and formalize faculty and staff roles in leading and participating in diversity and inclusion programming and events. *D&I
 - i. Have the department budget for D&I programming (existing, e.g. GeoPath) and future activity, facilitated by the departmental D&I committee.
 - ii. Longer term: consider developing a TA/RA type position where part of the labor expectation is D&I programming and/or development (to make existing activities sustainable, and facilitate growth)
 - iii. Longer term: consider giving a scholarship or RA award to those who have shown service in this area (to reward demonstrated volunteerism and recognize the significant work this endeavor requires, in addition to completing one's own research and teaching responsibilities)

4. Improving accountability amongst faculty for negative/abusive actions *D&I

- a. Draft and ratify a departmental code of conduct with explicit opportunity for community feedback prior to ratification. [Examples here](#)
- b. Institute and follow inclusive field policies ([examples here under 'field'](#)). Include these policies in course syllabi, on the website, and within research groups.
- c. Clearly communicate reporting avenues for inappropriate conduct (e.g. ombuds, Title IX office, Dean of Students office, L&S level reporting) during orientation and at least once per semester, via the ombuds.
- d. Continue to cultivate a respectful, inclusive, and considerate workplace.

5. Improving lab and field safety training/infrastructure *D&I, GSC

- a. Provide training for graduate students that conduct field work commensurate with the hazards and responsibilities of that person's job duties. Special emphasis should be put on providing appropriate health and safety training for TA's of field courses.
- b. Consider funding first aid, wilderness first aid, or other out of department safety and health training opportunities for students conducting or teaching field activities.
- c. Institute a clearly communicated culture of safety with an accompanying formal health and safety program ([example](#), [example](#)).

6. Improving career counseling for graduate students *BOV, GGSA

- a. Encourage the BOV to facilitate an updated digital network where students can see a database of BOV members in various fields and/or fill out a form to be matched with an alumni mentor in their field of interest
 - i. Pair BOV point person (longevity of position on a 2-year term or longer within the BOV) with annual graduate student liason (GGSA Professional Development Chair?) to facilitate the program
- b. Host a job resources page on the website, with links to relevant regularly updated job boards (both academic and non academic), and to other resources like the [NAGT](#) early career workshop, and similar training resources like SERC, others.
 - i. Work with the graduate school to host in-department workshops related to job finding and statements (tailored to geosciences, in addition to encouraging graduate students to attend L&S level events)
- c. Consider funding one non-research related training experience (at the \$600 level) for each Ph.D. student. (e.g. science communication conference, diversity/inclusion forums, teaching/pedagogy workshops, industry or topical short course)