

Climate and Diversity Action Plan

Department of Chemistry

University of Illinois at Urbana-Champaign

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Executive Summary

1. The Illinois Department of Chemistry (Department) is **striving to become a leader in professional climate**, just as it is a leader in research, teaching, service and safety. We want to provide an inclusive environment that is free of all forms of discrimination or harassment and is welcoming to all chemists, regardless of their gender, national origin or other characteristics.
2. A recent report issued by the National Academies of Sciences, Engineering, and Medicine (NAS) highlights the many challenges faced by women within the science community in terms of sexual harassment. **Surveys of a broad cross-section of our community** (including written responses and semi-structured interviews) revealed that our department is not immune to those challenges, as well as challenges relating to faculty accountability and student-student conflicts.
3. We seek to address those challenges by enabling students, postdocs, staff and faculty to build a community of civility and respect from “the bottom up.” To enable this approach, committees that represent the whole community will seek community input actively and continuously update and improve our action plan. It will be the **department head’s highest priority** to work with the committees and implement and advocate for changes within the department as well as within the University of Illinois at Urbana-Champaign (University), so that **changes are institutionalized**.
4. The key to improving our climate and diversity is a **forward-looking, adaptable and sustainable approach led by representatives of the whole Chemistry community**. A number of the initial steps that these representatives intend to take are identified below in Section 4. Immediate steps that already have been taken include the following:
 - Convened meetings with specific individual faculty by the department head, dean, and other university officials to **set healthy workplace expectations** and discuss training for inclusive leadership;
 - Held the first of a series of **mandatory workshops for faculty** on personnel management that was conducted held by Dr. Daniel Wong on October 15th, 2018 and which was attended by 91% of the available chemistry faculty;
 - Held the first meetings of the Program Review Committee to discuss strategies to **achieve and sustain** a healthy program climate and increased diversity; and
 - **Restructured Chemistry 492** (Professional Development for Chemists), a first-year graduate student course, to include sessions on mental health, sexual harassment and misconduct.

1. Introduction

The Illinois Department of Chemistry has a long-standing tradition of excellence in research, teaching, and service. Ranked within the top ten programs nationally, with many Nobel Laureates and National Academy members among its faculty and alumni past and present, the department sets a high standard for research with its over 40 faculty engaged in teaching or research, and about 300 graduate students, 100 postdocs, and 600 undergraduates. Many of our past and present teaching assistants and faculty have been named as HHMI Professors, Cottrell Scholars or have

been featured on the list of Teachers Ranked Excellent. Our department also possesses the largest number of American Chemical Society Presidents among faculty and alumni, one of many testaments to our professional service.

And yet, there are two more pillars of excellence that must be achieved within the chemical sciences: workplace safety and workplace climate. Our safety culture has been elevated from average to excellent in just two years, thanks to the establishment of a Joint Safety Team (JST) driven from the “bottom up” by students, postdocs and faculty. Our goal is to achieve a top ranking in safety, and if the nearly 100% compliance with the Division of Research Safety findings during the past two years is any sign, we are well on our way.

An inclusive workplace free of discrimination and harassment that attracts and sustains top diverse talent is equally important to our mission’s future. As a report on gender harassment by NAS recently showed through analyzing multiple studies and extending the data with its own studies, the numbers in science are as bleak as in the entertainment industry or politics.¹ For example, about half of the women in science report sexual harassment or assault at a level where it would result in actionable findings, and a much higher number, the ‘hidden iceberg’ (see Figure 1) live with derogatory remarks like “not being able to do the work because they have children” to unwelcome advances in the work environment. Other studies likewise have shown that workplace harassment is as pervasive in academia as it is in business or industry.²

Two recent surveys of the department (see Section 2) revealed that we are not immune to these unacceptable workplace behaviors. The results of those surveys indicate that issues exist with regard to how our academic and workplace climate is perceived in terms of fairness and being free of discrimination and harassment. Based on these surveys, we recognize that we must **do better and become a leader**

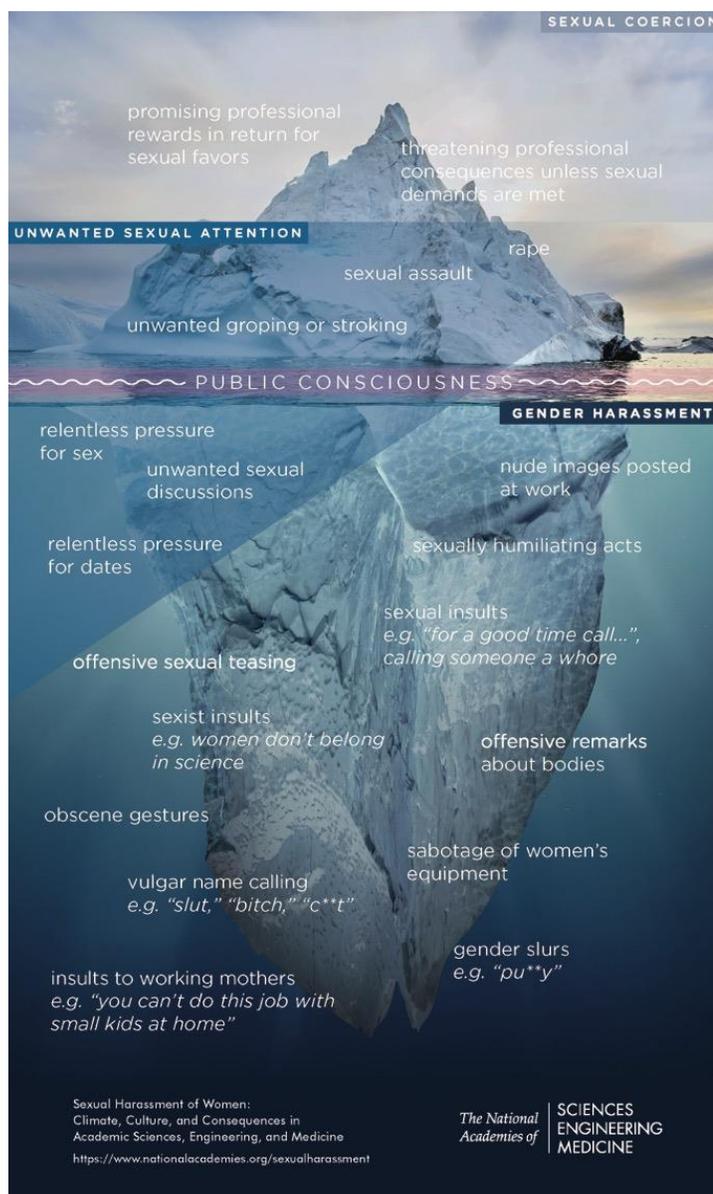


Figure 1. Behaviors that would be deemed actionable under the law (above public consciousness) are at the top of a continuum of abhorrent behavior that ultimately demoralizes recipients and, among many other consequences, reduces workplace performance and reduces scientists’ ability to carry out their mission of research, teaching, and service. The NAS report is publicly available through the website identified above.

in workplace climate and diversity if we want to sustain our position at the forefront of chemistry into the far future. We want to offer a welcoming environment for the best chemists to work and learn and to embrace the diversity that imbues our exceptional scholarship.

Our overall goal is to be best at the five pillars of chemistry in academia: research excellence, teaching quality, service mindedness, lab safety, and climate and diversity:

- A positive research work environment is critical to a productive and cohesive workplace.
- A positive work environment is critical to our long-term strategy of attracting and retaining the most talented and diverse graduate students and faculty.
- Our positive reputation in the community will increase the size and quality of our applicant pool, improve department morale and retention, and minimize complaints and disruptions to our world-class research.

2. Data Collection

During the 2017-2018 academic year, the Department and other University units conducted surveys to obtain quantitative and qualitative information about how different constituencies, ranging from students to faculty, perceive the department's climate and diversity. These surveys included:

- i. A wellness survey organized by the Department of Chemistry Graduate Student Advisory Committee (DCGSAC) that gathered quantitative data as well as written responses;
- ii. A climate survey conducted by the department and the College of Liberal Arts and Sciences (LAS), with support from the Provost's office, that consisted of quantitative data, written responses and interviews by LAS staff with random members of the department;
- iii. Interviews conducted by the Office for Access and Equity (OAE) and Illinois Human Resources (HR) that provided an opportunity for individual feedback and intervention;
- iv. Additional formalized feedback, such as information brought to the attention of the head, the climate and diversity director (CDD) or the director of graduate studies (DGS).

A brief overview of key results from these sources is provided below. Sources are annotated by roman numerals according to the list shown above. The information gathered revealed concerns regarding how the climate within the Department is perceived in terms of fairness and discrimination. A significant percentage of survey respondents indicated that discrimination on the basis of gender, national origin, and marital status occurs within the Department; that they have been harassed or otherwise subjected to offensive verbal, written, or visual interactions at some point; that students, as a whole, are not treated fairly by other students or postdocs; that they are fearful to voice their opinions or utilize the complaint process out of fear that it will jeopardize their career; and that the Department has been ineffective in addressing or stopping inappropriate conduct by faculty, staff, and students.

The LAS-sponsored survey revealed a number of issues, including a schism in how the department's climate is perceived. As can be seen in Figure 2 from (ii), the perception by faculty and staff (F/S) is more positive than by students and postdocs (S/P). Over half of S/P respondents ranked the department's climate as 'Fair' at best. 18% of S/P responded that they feel uncomfortable expressing their identity.

Over 50% of S/P respondents were "not very confident" or "not at all confident" that they could report grievances without negative consequences from their advisor or other sources.

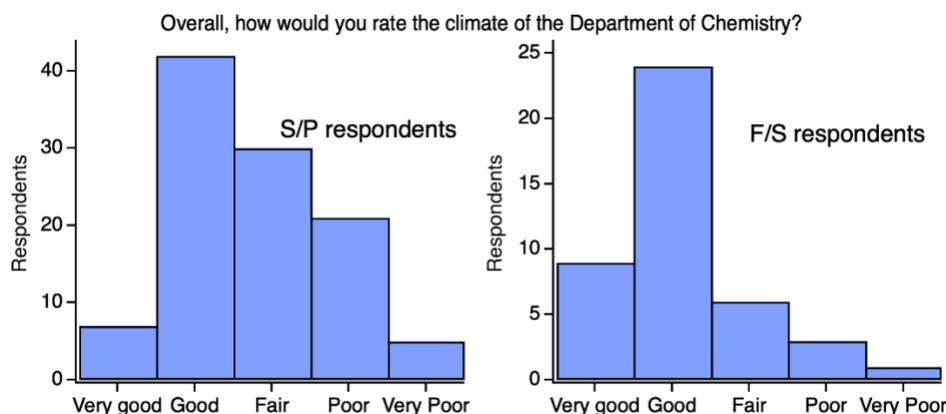


Figure 2. Data from (ii) Perception of climate by students/postdocs (left, N=105 respondents) and faculty/staff (right, N=44 responses). Analysis courtesy of David Tewksbury.

In addition:

- Students mainly interact with a few faculty, but with a substantial number of other research group members. About 40% of S/P respondents feel that they have been treated unfairly by other students or postdocs. This percentage is higher than the percentage of students who feel they have been treated unfairly by faculty, highlighting concern expressed about student-student peer relationships, not just faculty-student relationships. (ii)
- F/S respondent rated lecturers, teaching faculty and staff as more respectful than tenure-track faculty, however, S/P respondents did not. Dissatisfaction with workplace harassment and climate is not limited to tenure-track faculty. (ii)
- A significant fraction of S/P in (ii) reported that they had offensive verbal (66%), written (23%) or visual (7%) interactions at some point. Offensive written and visual material has been made available to the department as proof. (iv)
- 82% of S/P respondents were aware that there are units/offices on campus to help them if they are treated unfairly, but not everyone was. Student comments included “Make it more clear how to access mental health services. You really have to want to utilize these resources to be able to find information.” (i)
- A substantial minority of faculty and students believe that female graduate students are treated unfairly at least moderately often. (i.)

Written replies within the surveys also paint a picture of deficiencies in our department's climate:

- While the department is not perceived as actively engaging in bad acts, it is viewed as being tolerant of bad behavior or not doing enough to address inappropriate conduct. (ii)
- A notable percentage of S/P respondents to the LAS survey reported experiencing what they considered to be unfair treatment based on their gender, national origin, or marital status. (ii)
- Students reported that they avoid available complaint processes out of fear that their reporting may impact their career. (ii) Lack of accountability for thesis advisors was a recurring theme. (i)
- Among area-level problems, over 50% of organic area students reported themselves ‘over the threshold for depression and anxiety.’ (i) The organic area was mentioned 13 times in a negative light. (ii)

- F/S respondents indicate that female colleagues ‘sometimes don’t feel safe voicing their opinions and often don’t feel heard.’ (i)
- Previous training for advisors and mentors was felt to be insufficient. (i)

In-person interviews and interventions by Office of Access and Equity (OAE) , Human Resources (HR) and LAS staff further support the written replies (iii) (i)

3. Implementation

The most important feature of a sustainable action plan is its *ability to evolve* to serve its community. This was achieved for our Department’s safety culture through the formation of the JST, which is supported by the faculty, students, postdocs and staff. A similar principle can be applied to achieve and sustain a positive, inclusive climate:

1) *Diversity and Climate Committees*

These current diversity and program review committee will be split and given an expanded role. The climate and diversity committees will be chaired by our climate and diversity director (CDD, see (2) below) and director of graduate studies (DGS), with representation from tenure-track faculty, teaching faculty, staff, postdocs, and graduate students. Committees’ charges include:

- regular review of training and practices (such as the ones outlined in the Initial Action Plan below). The purpose is to communicate with the Department’s community on a regular basis to find out what measures work, which ones do not, and what new ones should be instituted when less effective ones are abandoned;
- regular meetings with the department head to propose items that require Departmental action or institutionalization;
- organizing relevant events (such as training sessions, retreats, relevant off-campus speakers, workshops) in conjunction with chemistry student organizations and the CDD; and
- meeting regularly with students to hear about complaints and suggestions and inform the department long before problems escalate.

2) *The Assistant Director for Graduate Climate and Program Diversity*

The CDD works directly with the head, associate heads, and the DGS to institutionalize and monitor good practices, including those recommended by the diversity and climate committees. The CDD:

- provides continuity for the Department’s climate and diversity efforts;
- implements this action plan together with the head and DGS;
- chairs one of the committees (the other being chaired by the DGS) and serves as a liaison between the committees, student organizations, and the Department administration;
- acts as the Department’s ombudsperson for graduate students;
- coordinates the implementation of relevant events (e.g. workshops, retreats);
- conducts regular town halls for students and postdocs, and meets with faculty; and
- participates in higher level reviews of the Department and communicates with the College.

4. Initial Action Plan

A task force, consisting of participants from the Department, College, Provost’s office, OAE, Title IX Coordinator, HR and Legal, reviewed the data and proposed an initial list of actions. Several of those actions already have been implemented. Those actions that were taken during the data

review and those proposed for initial implementation are shown below. An additional list of suggestions is being compiled by the diversity and climate committees. The diversity and climate committees intend to regularly evaluate the effectiveness of the remedies proposed below, and remove less effective ones in favor of new solutions, so that the Department's response to climate, diversity and mental health issues remains current and continues to serve the entire Department community.

The NAS report outlined 15 classes of remedies suitable in an academic setting. The top five are:

- “Improving transparency and accountability.”
- “Creating diverse, inclusive, and respectful environments, and closely related
- “Address the most common form of sexual harassment: gender harassment.”
- “Moving beyond legal compliance to address culture and climate.”
- “Diffusing the hierarchical and dependent relationship between trainees and faculty.”

There are four umbrella areas under which these crucial remedies can be classified: **Communication, Training, Expectations, and Accountability**

Communication & Transparency

The Department intends to:

- **provide a regular newsletter** through the CDD, updating students and faculty on the actions taken by the Department to improve climate and diversity;
- **give mentoring awards to faculty** who follow best practices in their research groups and promote diversity and inclusion;
- **strongly encourage faculty to devote time at group meetings** to discuss climate and diversity issues, and provide faculty with resources for that purpose;
- **designate a faculty meeting each year** to inform on and address climate issues;
- **hold regular “open houses”** hosted by the CDD to obtain feedback from students and postdocs, and to provide them with strategic information on reporting;
- **improve the Department’s diversity and climate web page** to include well-defined channels to report complaints, information about civility, climate, and diversity, information about our student organizations, and about relevant studies and outcomes such as this action plan; and
- **implement a diversity statement requirement for junior faculty applicants** to prioritize the hiring of faculty to reflect values of climate and diversity.

Training & Leadership

The Department intends to:

- **provide graduate students with training on respect and civility** in settings such as Chem 492, an Advanced Professional Development series of workshops for third-year students and new postdocs, and summer training seminars in collaboration with our student organizations;
- **conduct at least one tailored and mandatory faculty workshop** each semester, highlighting topics such as respect and civility, mental health, best practices in research mentorship/leadership, campus resources, and workplace harassment;
- **require additional training on a regular rotating basis**, such as Kognito Faculty Training (mental health problem recognition and suicide prevention, available through the Counseling Center);

- **provide leadership workshops for new faculty** on workplace management and creating a positive and inclusive work environment;
- **provide faculty with materials on positive work environments practices**, ranging from vacation leave to work conditions and workplace harassment in line with University policies; and
- **ask faculty members to create an advising statement** for their research groups.

Expectations

The Department intends to:

- **require the head to discuss expectations** with individual chemistry faculty and staff as warranted, based on input from the Diversity and climate committees, DGS and CDD collected from students, before problems escalate;
- **develop and post a code of conduct** to be prominently displayed throughout the Department, outlining common expectations of respect and civility for all its members. Proposed language for the Diversity and climate committees to consider:

The Illinois Department of Chemistry seeks to foster an environment of respect and civility that is free from all forms of harassment or discrimination and simply recognizes each other as fellow scientists regardless of anyone's gender, national origin or other characteristic. Accordingly, the Department does not tolerate any conduct that can be construed as being harassing, discriminatory, intimidating, or offensive, and our community will take appropriate action whenever necessary to address and rectify such conduct.

- **seek input from students on faculty mentoring as a criterion for annual reviews, third year reviews, promotions, and awards;**³ current and former students will be consulted by an appropriate campus office, which will condense this information into a format suitable for review, removing outliers.

Accountability Measures

The Department intends to:

- **create a confidential online reporting system** for students/postdocs to report climate cases (e.g. workplace harassment/bullying, unreasonable work conditions, faculty retaliation) with the goal to report unacceptable behavior at an early stage and pro-actively act on it;
- **require that students be given a strong voice in selecting their thesis committee**, and that committee members meet regularly with students each year (e.g. discussing final thesis progress and expectations at original research proposal time);
- **have the CDD act as an impartial ombudsperson** for students;
- **require the head to immediately review** information on faculty conduct and retaliation when problems are highlighted through information gathered by the CDD (e.g., open houses, anonymized individual reports), the diversity and climate committees, or anonymous reporting;
- **compile climate information on a regular basis, and make it available** to LAS, OAE and the Title IX Coordinator (via the diversity and climate committees); and
- **ensure that a diverse cross section of faculty** serve on committees such as the graduate program review, staff, and awards committees. Members should receive implicit bias training as appropriate, and the head should lead by example by taking training required for committees.

References

- [1] National Academies of Sciences, Engineering, and Medicine. 2018. *Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24994>.
- [2] Breaking the Barriers, Report by the Royal Society of Chemistry, 2018.
- [3] See <https://facultyaffairs-humsci.stanford.edu/handbook/chapter-3-promotion-tenure-tenure-line> at the Stanford University website.