**Plan for Diversity and Inclusion**

**Department of Molecular and Structural Biochemistry**

**Purpose**: to promote success of underrepresented minority doctoral students in completing the PhD and preparing for faculty careers.

**Faculty assessment of obstacles for URM doctoral students in the program**

The program has had very few URM students in the PhD track throughout its history. We compete heavily with Biochemistry programs nationally and locally. The best qualified students typically do not apply to our program and/or do not enroll. Because of the low numbers, we have not had much opportunity to identify challenges at the doctoral level. Students admitted at this level are vetted by a departmental admissions committee that considers their qualifications and assesses the likelihood of their success in our program prior to admission. All of our URM students recently admitted to the PhD program have been successful in completing their degrees and pursuing postdoctoral studies.

We do have a new NSF-funded Interdisciplinary Biochemistry Masters Program, the goal of which is to increase diversity in the workforce. All admitted students are URM and complete a MS degree. Through this program, we have become aware that several obstacles may stand out including: lack of strong background preparation, insufficient peer level support, poor understanding of expectations and rigor in graduate studies, and challenges in their home lives that create distractions. These obstacles are addressed in our current practices and proposed actions below.

**Elements of the program that enhance the success of URM students**

Graduate Handbook. The department’s policies and expectations are clearly defined and explained in a handbook for graduate students, which is given to them as a hard copy during student orientation, the week before classes start, and available to them electronically through the departmental shared drive. This is a valuable resource for both faculty and students to ensure success by providing transparency.

Student mentoring. Multiple levels of mentoring occur in our department to ensure success of students and faculty, including both formal and peer mentoring. For students, each incoming student is assigned a peer mentor from among the more senior students. This person is their informal contact point for questions about anything related to academic, research, departmental or graduate life acclimation. Once a research advisor is selected, this faculty member becomes the chair of the student’s thesis committee and serves as a formal mentor as well as, in many cases, a personal and professional mentor.

Faculty mentoring. Pre-tenure faculty members meet with the department head monthly throughout the first year and quarterly or as needed thereafter. They are encouraged to identify an appropriate team of at least two faculty mentors for research and teaching within the first semester, at least one of whom is a member of the department. The mentors receive a formal acknowledgement from the department head for their service.

Advising. Our Directors of Graduate Programs provide coursework and research advising for graduate students during orientation week, and throughout the first year until a faculty advisor is selected. They continue to provide support throughout the student’s graduate training as the neutral point of contact for conflict resolution and by holding students accountable for completing annual committee meetings and comprehensive examinations on schedule.

Seminars. Our department hosts a weekly external seminar series in which invited speakers present their research, meet with faculty, and attend lunch or a reception with the graduate students. Each student presents one seminar per year on a current top tier peer-reviewed research article of their choosing and once per year (after year 1), they deliver a seminar on their own research project and progress. Seminars encourage networking, foster collegiality and build presentation skills.

IBMP. Within the Interdisciplinary Biochemistry Masters Program, which is exclusively for URM students, core tutoring and support are formally organized to bring students of diverse backgrounds to a common (high) level of academic competence in core coursework. The goal is to increase diversity in the workforce and higher professional programs such as the doctorate.

In general, our approach is to focus on transparency and proactive timelines to ensure students can find necessary forms and keep on track with program milestones. We have built new documents and program revisions to benefit all students, such as an updated program web site, graduate handbook, and core coursework. Our department also now participates in diversity-oriented programs such as Building Future Faculty to increase external interactions with URM trainees at all academic levels.

**Actions to promote success of underrepresented minority doctoral students in completing the PhD and preparing for faculty careers.**

The Department revised its Reappointment, Promotion, and Tenure rules to include language that explicitly assesses the culture of inclusion in the laboratory and classroom environments of all faculty. These revised rules will constitute the new standard as of 2020.

We have comprehensively revised our graduate curriculum, graduate handbooks, and developed standardized rubrics for assessment of student annual progress, and performance on comprehensive exams. The full graduate student body was involved and engaged in the development of the rubrics and discussions of performance evaluation. We will continue to devote one-two weeks of the graduate seminar course to a review of the curriculum and the rubrics each fall.

In addition, the Department underwent its 8-year Academic Program Review in September, 2019. As a component of the year-long self study that produced the report for the review team, the faculty developed a Strategic Plan, which included the following section entitled “Diversity and Inclusion”.

Goals: increase diversity and inclusivity awareness among the faculty, members of the department, and graduate and undergraduate students. Promote an inclusive and welcoming culture in the classroom and the department, particularly focused on increased interactions at the levels of peers, student-faculty, graduate-undergraduate, and MS-PhD graduate students. Strive to achieve faculty and student demographics that reflect the diversity of our population. Develop and follow best practices for recruitment, retention, and development of all members of the department, including students.

Opportunities: NSF AGEP-NC faculty fellows are developing departmental roadmaps for ensuring success of underrepresented groups in doctoral programs, IBMP is developing a support network to encourage successful MS completion and placement of underrepresented groups in the workforce. The university has a strong commitment to diversity and inclusion, with many available resources, events, and activities. The provost provides additional resources to departments and colleges for recruitment and retention of faculty of color. Our faculty and student body is increasingly diverse and vibrant, with new faces and energy that attract more diverse candidate pools. We are engaged in regular conversations as a faculty about factors that influence the perceptions about inclusivity among students.

Challenges: many strong departments and programs compete for the best students and faculty. As a department, we have not historically been intentional or consistent in use of best practices that attract and retain a diverse faculty and student body. We need to demonstrate that we are strongly committed to diversity and inclusion and produce a track record of achievement in maintaining a diverse faculty and student body that is happy and successful in the department’s environment

Actions

1. Outreach and recruitment

* + Develop outreach videos for the web site – how do you become a biochemist, etc
  + Attend conferences to advertise and promote our programs. Examples include ASBMB and other professional societies as well as MANNRS, SACNAS and conferences that showcase the work of students in underrepresented groups
  + Regularly attend the CALS diversity and inclusion retreat for faculty
  + Summer programs are an excellent way to encourage students of diverse backgrounds to engage in research and to develop the relationships that help recruit them to our programs.
* Build a summer program: funding through NSF or other sources, partner with the university to assist students with housing cost, interface with other summer programs to coordinate opportunities to help participants learn about research, disciplines, jobs, professional development, applying to graduate school, etc.
  + Participate as mentors in existing summer research experiences for rural and minority students, McNair research opportunities, offer a summer lab course targeting local high school students with diverse backgrounds
  + Interact with faculty at local universities, set up research collaborations to encourage co-mentorship of students from diverse backgrounds

2. Reduce financial burdens for students

* Improve textbook synergy/coordination and use technology to reduce financial burden
* Develop new fellowship programs by partnering with industry to support them (e.g. agriculture companies, etc.)

3. Integrate inclusive behaviors

* + Include many holidays on the department calendar
  + Use university language wherever appropriate
  + Use personal gender pronouns in written communication, email signatures, syllabi, etc
  + Build community among students (BS/MS/PhD) and between students/faculty
  + Hold departmental events during school hours – e.g. adjust departmental seminar times to mornings or early afternoons to accommodate faculty or students with school children
  + Actively encourage students/postdocs with different career goals (academics, industry, government, policy)
  + Infrastructure: Non-gender restroom(s), lactation spaces, inclusive spaces in the department
  + Once a month after the departmental seminar, hold a reception for undergraduates and graduates to interact with the speaker and faculty

4. Assess climate regularly

* + Request data to determine how students responded as incoming freshman, sophomores, or seniors to the national student engagement survey; determine how the department fares.
  + Include question(s) in student evaluations to assess perceptions of inclusion