

## 2017 PSM Strategic Plan for Diversity, Equity, and Inclusion

Our Department is well aware of the value of genetic diversity in supporting plant breeding and the benefits of microbial and plant diversity in supporting ecosystem services, but do we appreciate the value of diversity in personnel? Lack of diversity limits the effectiveness of institutions, just as it limits processes in nature. Substantial evidence demonstrates the vital role that human social diversity plays in innovation, creative problem-solving, and higher-quality science, as measured by high-impact publications and citation rates. Seeking diversity is thus not only an equity decision, but also a collective-intelligence decision to build a thriving professional community with expanded impact. Gender diversity has been a source of strength in our Department (although we still have plenty of room for improvement), and our substantial international diversity (in sociocultural background and ethnicity) has also greatly enriched PSM. However, our Departmental demographics do not yet reflect much of the diversity of the US, which is 18% Hispanic, 13% Black, and 2% Native American. The US public school system in 2017 is already “majority-minority,” since 52% of pre-Kindergarten-to-High-School students are non-White as defined by the US Census. These are our MSU/CANR/PSM students, stakeholders, and scholars of the future. Thus, our strategic plan seeks to address recruitment of faculty, staff, and students from these groups, while building and drawing upon our strengths in gender- and international-diversity. Normalizing and encouraging diversity will make PSM a better place for all to work and study.

### Historical Data – Ethnic/racial and gender (request historical data).

1. Faculty
2. Staff—field and office
3. Grad Students
4. Undergrads
5. Ag Tech

### Plan of Action (in no particular order)

1. Add diversity, equity, and inclusion to the PSM mission and vision statements ([http://www.canr.msu.edu/psm/about\\_psm/mission\\_statement](http://www.canr.msu.edu/psm/about_psm/mission_statement) ). Document these changes.
2. Make a Departmental strategic plan for diversity and put it on our website (make this a collaborative document that is updated at least annually)
3. Keep the PSM Chair accountable for working to diversify PSM. Jim Kells attended the workshop on “White men as full diversity partners” (<https://wmfdp.com/>) in 2017 at the request of the Dean. PSM needs to capitalize on this momentum provided by CANR leadership by encouraging follow-through in our Department. Encourage the chair to make “Diversity, equity, and inclusion efforts” a part of his year-in-review at the annual PSM faculty meeting.
4. We currently have no undergraduate recruitment scholarships in PSM, despite a large total pool of scholarship money. Could some of our current scholarship pool be repurposed for recruitment of first-generation college students? If not, could this

become a focus for PSM/CANR development? We also need to compile other applicable on-campus scholarship resources that could be drawn upon. Recommend that the PSM Chair approach both CANR and Provost with request for matching dollars for scholarships for incoming students. Also, PSM needs to take advantage of NSF-funded recruiting programs (e.g., Foster et al.) for up to \$10,000 for low-income, high-achieving students (via STEM-FEE Academy, etc.).

5. Make sure Phillip Seaborn (CANR recruiter in Kelly Millenbah's office) knows our majors and has our materials and some contacts.
6. Improve our search and hiring processes in all possible ways to make them more inclusive:
  - a. Encourage and reward faculty/staff efforts to diversify our undergraduate and graduate student enrollments (under current #9). Document all such efforts by members of our Department, since the Dean is in process of drafting guidelines on how to incentivize diversity efforts in CANR.
  - b. Implement and monitor (and document, if this is allowable) the PSM implementation of new CANR requirements (or are they suggestions?) to examine the attitudes and experiences of faculty candidates in regard to diversity, equity, and inclusion, and thereby to preferentially hire faculty candidates who are committed to inclusive excellence (under current #9; see attached Faculty\_Diversity\_Process\_memo).
  - c. Develop a list of go-to sources for advertising job announcements to reach diverse audiences. Keep on file in PSM and update, and include MANRRS, SACNAS, and AISES.
  - d. Improve relationships with the Historically Black Colleges and Universities (HBCUs), the 1890 Land-Grant Universities, the Hispanic Association of Colleges and Universities (HACUs), and other minority-serving institutions.
  - e. Improve relationships with community colleges and small teaching colleges where many non-traditional students start their college careers.
  - f. Stay mindful as possible of designing search committee processes in order to reduce the impacts of implicit biases. Write these processes down, keep updating them, and share them widely
  - g. Stay mindful as possible of designing grad student and postdoc selection processes in order to reduce the impacts of implicit biases. Write these processes down, keep updating them, and share them widely
  - h. In streamlined hiring processes like the Global Impact Initiative, make sure that the "special" nature of the process does not circumvent efforts to diversify the faculty and staff. For example, leaders of such searches need to access much more than their own (self-similar) professional networks in search of targeted hires.
7. PSM has a long history of white students gaining admission to the major via community-college routes. Expand such relationships to more community colleges and work to attract their students from under-represented groups.

8. Improve the diversity of people in our PSM media (brochures, web sites, pictures in the hallways, conference rooms, etc.) to help normalize diversity and make PSM more welcoming to diverse others. Document these changes.
9. Compile (from the literature) evidence on how diversity affects academic-type outcomes and continue to develop “better science through diversity” arguments that all new perspectives are value-added because robust “truthiness” only comes from summing many perspectives. Thus, for the good of our science we need to engage very diverse perspectives. When doing so, our work should tend to involve more stakeholders and should have a broader impact.
10. PSM Student Organizations could become more welcoming of non-traditional students (urban, suburban, current community college students we’re seeking to recruit). Encourage collaborations between Agronomy Club and students of color: Groups include Minorities in Agriculture, Natural Resources, and Related Sciences (MANRRS), Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), and the American Indian Science and Engineering Society (AISES), for example. Help all students see that many Hispanic, Black, Native American, and White students share something in common: Many are 1st generation college students that can help and learn from each other. Efforts should be made, with department support, to have some meetings and events during the work day. Many non-traditional students have additional calls on their time, and having the majority of the meetings and events in the evening limits access for students with families, those who need to work, and those who travel long distances between home and school.
11. Work with the Greening of Detroit and other organizations seeking to recruit and groom non-traditional students
12. Improve our Annual Review and Promotion and Tenure processes in all possible ways to make them more inclusive and transparent:
  - a. Work with CANR Faculty Excellence Advocate (currently Rebecca Grumet from HRT) to see if improvements in our processes are obvious to her.
  - b. PSM has long been an MSU leader in our mentoring of early-career faculty. Is this currently going well, or are there improvements we could make to remain leaders? Do we need a call for constructive self-criticism?
13. Develop a PSM Diversity Think Tank to meet at least once a semester –
  - a. Think tank is composed of -
    - i. President of OR other member of Agronomy Club, Turfgrass Club, ACRS, and SPORES
    - ii. PSM Chairperson or one of the PSM Associate Chairs
    - iii. Representative from the office staff AND the field staff
    - iv. Several faculty members who have a passion or commitment to diversity – e.g., Brian Teppen, Linda Hanson, and Eunice Foster
    - v. Possibly representative from DAC
  - b. Charge for the think tank –
    - i. To assess current recruitment efforts with regard to diversity of faculty, field and office staff, and grad, undergrad, and certificate students in PSM

- ii. To research and brainstorm additional recruitment efforts both those at other institutions or in other CANR units and innovative efforts developed by the think tank
- 14. Work on ourselves, as faculty and staff, to better understand resistances to diversity
  - a. Add flexible, self-chosen “diversity learning goals” to our annual review process and share progress as a Department to gradually change our norms, change our behaviors, and improve our climate and attitudes.
  - b. Collaborate, communicate, and pool resources with those involved in diversity, equity, and inclusion efforts in other units
  - c. Collaborate, communicate, and pool resources with those involved in diversity, equity, and inclusion efforts in our professional societies. Whenever possible, PSM should participate in diversity-related professional-society events.
  - d. Make sure all faculty members are aware of the CANR Faculty Excellence Advocate (currently Rebecca Grumet from HRT), who can provide confidential counseling on tenure-stream issues but also advice to the Department. Rebecca worked on the NSF ADVANCE grant that MSU had 5-10 years ago, with a goal of diversifying the professoriate by making institutional processes more transparent. Also, Suzanne Lang is CANR Associate Dean for Faculty and Administrative Affairs and Director of CANR Faculty Development, and is also a source for confidential counseling and advice.
  - e. Build bridges to CANR since Dean Hendricks seems supportive of diversity, equity, and inclusion efforts and is hiring a new Associate Dean in that area. All CANR Chairs have now attended at least one three-day diversity workshop in 2017. Take advantage of this beginning and contribute all we can to developing some CANR/PSM momentum in this area.
  - f. Document when leaders (Chairs, Deans, etc.) encourage diversity and participation in related activities. Hold Chair and Dean responsible for following through with actual efforts to change the Department and College
  - g. Work with Dean’s group to formulate metrics to hold Chairs and faculty accountable for diversity, equity, and inclusion efforts. This will encourage documentation of faculty effort, collaboration, service, recruitment, mentoring, etc.
  - h. Catalogue and discuss PSM microaggressions to raise public awareness
  - i. Since we are experimentalists, let’s take an evidence-based experimental approach to improving the Department and College. Gather baseline data and description of our current situation, develop hypotheses, try some initiative, and measure the changes that occur. Each Department should be cataloguing, measuring, and reporting on initiatives and what works or does not. This could be called a “scholarship of administration” that is written up in peer-reviewed journals for sharing with other units. The University should demand a “scholarship of administration” to satisfy the public trust and to improve knowledge and impact, just like it demands scholarship in teaching, research, and extension.

- j. Develop the idea that lasting institutions are designed (or self-assemble, if you prefer) to reproduce the existing power relations in society. Thus, the University default is reproduction of the current social order. Illustrate this by comparing candidates from different beginnings: A less-talented person from a dominant group (e.g., a middle-class white person) will tend to outcompete a more-talented person of color who comes from less mainstream origins. This is structural. Develop and teach this sort of structural competency, that a huge head start for one group, and then a color-blind “equal chance for all” after that is not an equitable game.
  - k. Push for diversity and/or desire to increase diversity as a key attribute of all new hires
15. Create new resources for students:
- a. For 1<sup>st</sup> generation (and all other) undergraduates, produce an internally reviewed “PSM advice on pathways to graduate school” so that early in their careers, undergrads can get solid advice on preparations to make and pitfalls to avoid in preparing for grad school.
  - b. Produce an internally reviewed “Pathways from community colleges to PSM/MSU” that is a guide for potential transfer students (e.g., LCC transfer students) to give solid advice on preparations to make and pitfalls to avoid in preparing for transfer.
  - c. For our graduate students, produce an internally reviewed “PSM advice on pathways to a professional position” so that early in their careers, grad students can get solid advice on preparations to make and pitfalls to avoid in their graduate studies. There should be multiple options discussed: Some of our PhD students will want to develop a faculty-candidate-type CV and search for a position in academia. Some of our students are not aiming for academia and will aim for work in the private sector, so we should also produce advice for those aiming for industry or other careers. Teach (and give experience with) the attributes that search committees look for, the social interactions to expect in an interview, and how to make the case that you “fit” the job description.
  - d. Promote the MSU Alliances for Graduate Education and the Professoriate (AGEP), which is a National Science Foundation program that supports recruitment, retention, and graduation of underrepresented U. S. minorities in doctoral programs of the natural and social sciences, mathematics, and engineering.
  - e. Compete for “Prospective Doctoral Student Recruitment and Retention Program” or similar MSU Graduate School resources for diversifying the graduate-student ranks and hence the professoriate. Compile and share a list of such resources.
  - f. Compile and share another list of graduate-student-recruitment resources from outside MSU. Get help from Jon Harrison at the MSU library.
  - g. Create new ways to recruit PSM undergrads and grad students from among the other physical science majors

- h. Work on all our syllabi to make them more inclusive and welcoming of difference. Increase faculty sensitivity to potential barriers in our courses that could be proactively minimized.
  - i. Add diversity issues and “better science through diversity” arguments to our courses, especially the professional development courses (grad, undergrad, and certificate).
  - j. Improve mentoring of early career women and people of color, as mentoring grad students and teaching can have many mine-fields and help is needed to navigate these, particularly if you don’t ‘look like’ what is many people’s (unconscious) stereotypes about what a professor looks like..
16. Another area that is related to bias and prejudice and is directly relevant to our roles as physical scientists: Some students and faculty still think we are teaching objective truth in the sciences, but anecdotally, some students are saying "You teach this like it is fact, but I have been taught in other classes that this is only one perspective and that your 'facts' are strongly biased to the status quo. Your 'facts' are socially constructed to strongly favor some power interests over others, and you are not acknowledging that." Many physical scientists would benefit from training in the social construction of representations of reality more generally, so that they could better understand their own unconscious motivations, so they could present a broader spectrum of perspectives on science, and so they could answer their smart young students. In other words, our science will get better and more encompassing as we get a better handle on the unconscious bias that underlies how we choose research problems, what methods we employ, and how limited is the frame within which we interpret results.
17. An extension of the previous idea is the role of power in science and science in power. Knowledge leads to power and vice-versa, so scientists are strongly implicated in upholding the status quo and the interests of the powerful, yet scientists prefer to believe that they are being objective and disinterested. No, they are very interested, even if their motivations are not conscious. Analysis of power is very slippery and hard to do. Faculty, staff, and students could all benefit from learning approaches for understanding and communicating about power.