URGE Session 5 Deliverable
Revolutionizing the Model for Diversifying MC&G Scientific Staff
By the WHOI Sustainability URGE Pod
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WOODS HOLE
OCEANOGRAPHIC
INSTITUTION

Land Acknowledgement: This document was constructed while working on the ancestral lands of the Wampanoag Nation made up of Mashpee, Aquinnah, Herring Pond Tribes (the only Tribes to be on their original lands pre-contact). I acknowledge the painful history of genocide, and honor and respect the many diverse Indigenous peoples still connected to this land and the substantial traditional and local knowledge they have to share with us.

The following deliverable focuses on the Woods Hole Oceanographic Institution's (WHOI) Marine Chemistry & Geochemistry (MC&G) scientific staff as a case study so that specifics can be discussed. However, similar techniques and considerations should be customized and implemented for every department at WHOI.

Deliverable Goals
1. Audit every step of the recruitment/retention of scientific staff* in MC&G
2. Identify parts of the process that might discriminate against URM candidates
3. List action items for the search committee for which they should be held accountable

*These guidelines should also be applied to postdoc hiring because WHOI has a significant internal candidate bias. Five of the last seven people hired ase MC&G scientific staff were WHOI postdocs.
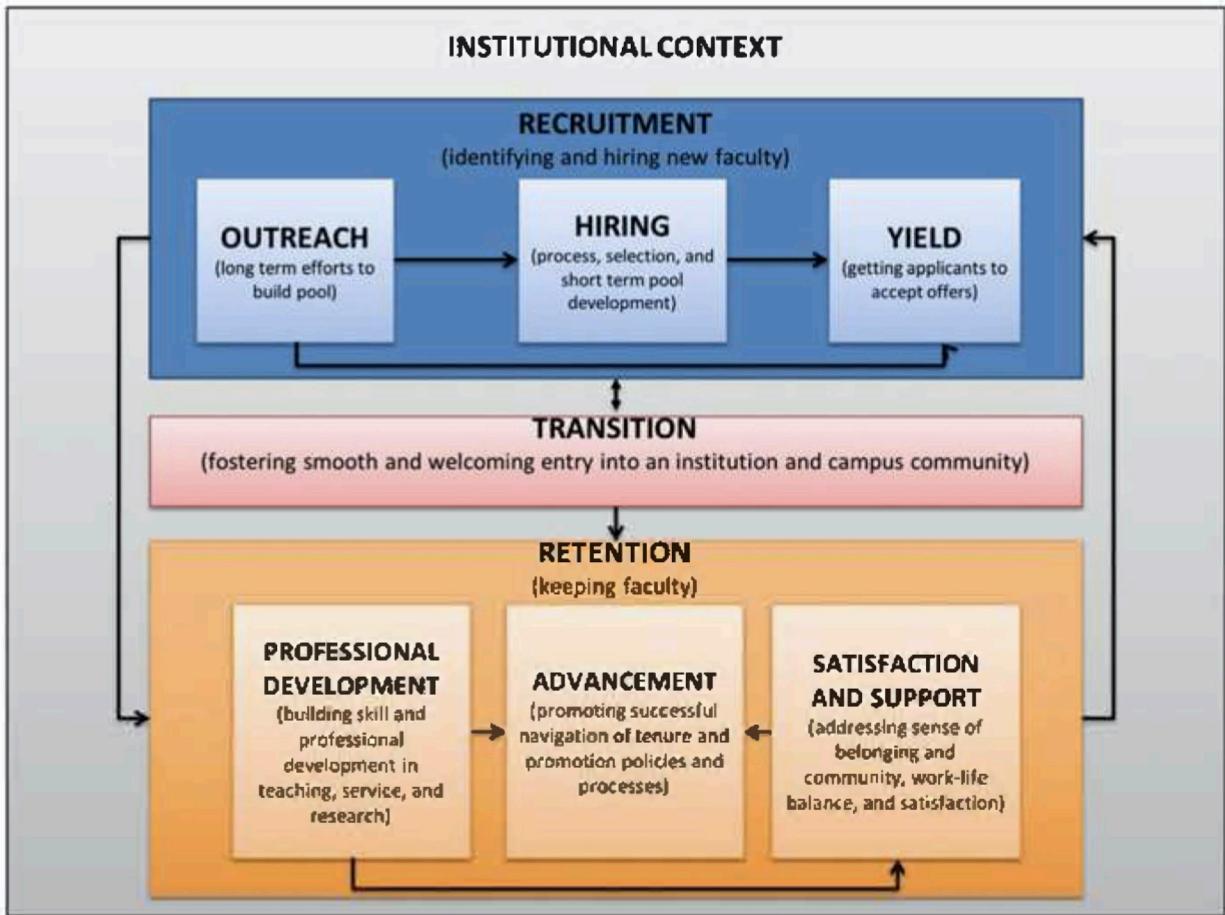
Fig. 1 The Institutional Model of Faculty Diversity

(Griffin, 2020)

RETHINK THE ENTIRE STRUCTURE AT EVERY STAGE
(York's Four Frames)
1) Equipping the individual
2) Creating equal opportunities
3) Valuing difference
4) Managing culture

PRIOR TO RECRUITMENT (THE SETUP)

President/Director Action

- Set the values and priorities of the institution. Re-define what it means to be successful at WHOI. Re-define criteria for tenure.
  - Pros: Re-defining success will allow URMs that were previously overlooked to be considered; sets the tone for the rest of the institution; each department will look to these values when they hire a candidate based on the expectations of what it takes to achieve promotions and tenure.
  - Challenges: It is difficult and requires buy in from the larger scientific community; w*hat are the new metrics of success that are more equitable and freer of implicit bias?*

- Define how WHOI's values will be interpreted against the historical values of the larger scientific community. For example, when requesting an external review of a candidate's tenure file, how much will the WHOI's values be weighted against the assessment of an external scientist that may value different metrics?

- Create materials/handouts (print & digital) about WHOI for distribution to colleagues, at conferences, to visitors that communicate what WHOI is, describes the broad collaboration/inter-disc/core discipline of the departments, how to find job postings, and our commitment to diversity (clear and detailed overview and instructions to counter-act the "in the know" barriers to first generation scientists/students)
  - Pros: These materials will remind WHOI travelers that it is their responsibility to advocate for WHOI; remind them to be looking for people to invite; leave visible reminders of WHOI behind in these places; build recognition and welcome interest.
  - Should be available to all WHOI employees
  - HR may have something similar? Tailor it to departments/relationships
    - Like an engaging business card for the department

Department Head or President/Director Action
- Create a mechanism to try and recruit a URM scientist that has already received an offer or been hired elsewhere and counter-offer. Other universities compete for candidates, even if they already have an offer or a job. If they are being competed over and WHOI doesn't show interest, the URM candidate won't feel valued by WHOI.
  - Pros: the URM scientist can pick the best startup and lifestyle for them, setting them up for more overall success. WHOI's proximity to Boston may be advantageous for some URM scientists.

- Create a mechanism that enables cluster hires.
- Create a strategic vision for each department that puts JEDI at the forefront.

RECRUITMENT (THE SEARCH)

The perceived problem at WHOI: Applicant pool is not diverse.

Why? Most credit a 'pipeline issue,' but people tend to recruit from their narrow social or scientific communities that excludes URM candidates. Most people at WHOI were brought into the WHOI circle through a personal connection.

Search Committee Action

- Before the job search starts, the committee should agree upon shared values that will be evaluated in the candidate. What defines a strong candidate?
    - Pros: Everyone can start evaluating for a new definition of success
    - Challenges: Requires forethought and agreement.

- Develop two rubrics that will be used to evaluate applicants' files in accordance with the agreed upon shared values. One rubric for the overall application and one specifically for the Diversity Statements [and actions?] (because they are so new).
    - Pros: Forces the search committee to search applications for the shared values; provides structure and goals for what is being evaluated
    - **Creating the rubrics is best done before the job advertisement is posted so that the advertisement can target specific qualities and members of the search committee begin on the same page before seeing any applicants. It also helps with targeted recruitment.**
    - Notes: In the 2021 search, we evaluated 16 qualities for each application to create the short list, 16 was a lot. Perhaps it would be easier and yet still equitable to narrow the criteria for the first pass of applicants. Then perhaps have additional or different criteria/rubric during the second/third stage of the interview or when narrowing the short list further.

- The search committee should agree how the contributions to JEDI in the diversity statement and URM status will be "weighted" in the rubrics. Is URM status or JEDI efforts a tiebreaker between candidates?
    - Pros: Prevents biased opinions or "feelings" from forgetting about JEDI issues when the short list is developed after reading all applications.

- The search committee should agree how the diversity statement will be treated in the context of the larger external scientific community. Do we include the diversity statement when sending the application out for external review? If included, how do we ask external reviewers to assess the diversity statement?
  - Pros: The diversity statement is part of the complete application and contains information that is valued by WHOI.
  - Challenges: The diversity statement may contain private information that should not be shared publicly. External reviewers may not know how to properly comment on the diversity statement or may hold different values regarding JEDI topics
  - Notes: Diversity was included in the 2021 MC&G rubric, but there was disagreement or uncertainty amongst search committee members about how much it should "count" toward the overall assessment of the file.

- All job advertisements and appointments must identify, solicit, invite, and consider minority, underrepresented, and persons of color populations to ensure equity and inclusion.
  - Pros: This is one of the variables statistically shown to increase the diversity of the applicant pool.

- State the qualities that each candidate will be judged on (according to the agreed upon values) in the description of the research statement in the job advertisement. [Perhaps include specific prompts to target specific qualities or criteria.]
  - E.g., add a sentence such as "The research statement will be evaluated on the following criteria: [list categories on the rubric.]"
  - Pros: Can target specific qualities that are hard to quantify
  - Challenges: Many candidates may ignore prompts and submit a more generic application; could limit applicant pool if extra effort is required to apply.

- Continue requiring a Statement of Diversity and state in the job description the criteria on which the statement will be evaluated (same as on the rubric).

- Re-consider the wording of "successful externally funded research program" in the job advertisement. Having "success" right next to "externally funded" makes it seem like acquiring funding is the most important criteria for success. Consider stating that there are rigorous and available internal funding opportunities too. Be more specific about what success means.

- In the job advertisement, consider stating that salary is guaranteed for the first XX years. Some soft money models don't pay you if you don't bring in funds and this deters applicants from low-income backgrounds who don't have a financial safety net.
    - Women in particular tend to gravitate toward more teaching positions than research positions. Teaching positions sound less stressful and more stable than pure soft money research positions, in part because there is this notion that failure to bring in grant money would mean failure at your scientific staff role.

- Run the job listing through an implicit bias calculator and correct language if necessary.
    - https://www.totaljobs.com/insidejob/gender-bias-decoder/

- Advertise position broadly. There should be a fixed list of places to advertise that specifically reach URM candidates. If not, create one.
    - Pros: Reach broader audience; reach people who've never heard of WHOI; Increase access to job opportunities, which are not equitable across the U.S.
    - Challenges: Expensive to post on multiple job sites/boards (~$600 for one site?); most people are brought into the WHOI circle through a personal connection, not posted advertisements.

- Searches should be active not passive.
    - How WHOI works or "what it takes" to be a successful scientist at WHOI is mysterious to all but those who have already been successful at WHOI. Postdocs know it is difficult to get funding and consistently winning 12 months of funding seems nearly impossible. Postdocs may remove themselves from the applicant pool thinking that they don't have what it takes to succeed at WHOI as they don't know how their CV/application compares to their peers or how their past experience feeds into a staff scientist position at WHOI. The search committee is a far better judge of who is capable rather than the postdoc themselves. <u>Proactively reaching out gives people confidence that they have what it takes to succeed at WHOI.</u>

- Make sure that all postdocs at WHOI (especially URM postdocs) know that they are expected and encouraged to apply for WHOI jobs. This seems trivial, but postdocs do not inherently think that WHOI wants to hire them and miss out on hiring opportunities. Check with the postdocs in other departments too as many may have research overlapping with MC&G.

- Even post-pandemic, keep remote/virtual (Zoom) interviews an option.
    - Pros: Zoom has increased accessibility to all interviewees.

- [Similar to the ongoing efforts of DEI talent search committees] Create (or update) a list of URM grad students (and postdocs) that are rising in the ranks and could potentially fit in the department after they graduate. Ask everyone in the department to identify possible URM candidates from their specific field. Assign people in the department to follow-up with or check in on each of these possible candidates to see what stage they are at and if they are applying to postdocs or faculty positions. This is an opportunity to mentor. Reach out to DEI coordinators at various universities. Plant seeds that WHOI is interested in them. Grow a relationship.
    - Pros: Personal relationships and trust are far more effective than anonymous job advertisements.
    - Challenges: Long-term plan and effort.
    - Notes: everyone in the department must be involved in growing long term relationships with URMs in their field. Start EARLY! Three to five years out from hiring is not too soon.
        - Should be part of the annual review process to promote DEI.
        - *You can still recruit people you know, but you have to know different people.*
    - MC&G needs to recruit a diverse pool of postdocs if we continue to hire them onto the scientific staff and/or we need to recognize the advantages applicants have being a postdoc, getting to know people in the dept, and knowing how WHOI operates from the inside. Five of the last seven people hired onto the MC&G staff started as postdocs.

- Discuss with development office and apply for funds to grow community or support remote technology to increase accessibility.

- Disseminate WHOI materials and handouts (virtually and physically) to
    - People who are going to conferences/meetings
    - People who are going to give an invited talk
    - People who are visiting collaborators' campuses

HIRING (APPLICATION ASSESSMENT)

The perceived block to increasing diversity at WHOI: "We don't want to lower our standards." "We want to hire someone that will succeed at WHOI." "We want to hire someone who will succeed in the expectations of the role for which they are being hired." – comments from WHOI employees

Why? Many argue that the URM candidates aren't up to WHOI's standards. However, this is a misconception. These comments are judging on a very narrow definition of success based on metrics that strongly favor very privileged students and often discriminates against URMs. Privileged communities have easier access to elite and expensive ivy league colleges and universities. Letters of recommendation can have implicit bias. Women and URM scientists get cited less so citation numbers are a biased metric. We are naturally drawn to people like us who would emulate our model of success and perceive them as having greater potential for success. Assessing "a good fit" for a given department is an easy way to justify discriminating against candidates different to yourself.

Search Committee Action

- Review the recruitment process – a failure to show demonstrated effort and evidence of substantial outreach and process should result in a "failed search" (i.e., non-hire, cancellation, or an unfilled seat).

- Review the demographics of the applicant pool. Make sure the selected short list at least reflects the demographics of the total applicant pool and includes females and URM.

- Before review of applications, run every letter of recommendation through an implicit bias calculator BEFORE it is read.
    - https://www.tomforth.co.uk/genderbias/

- Before reviewing the application, each individual on the search committee should review the list of common (implicit) biases or cognitive errors.
    - Pros: Reminding oneself of biases prior to application assessment will hopefully help reduce common pitfalls.

- Complete a rubric for each applicant.
    - Pros: Sticking to the rubric reduces biases from feelings or intuition and encourages seeking evidence for the agreed upon values
    - Challenges: Takes A LOT of time to read ALL the applications and assess intangible qualities and metrics; still susceptible to being judged favorably for pedigree or "they are like me"

- After completing the rubrics, reflect as an *individual* where implicit biases may have crept in. Re-visit the list of implicit biases and cognitive errors.

- Hold each member of the search committee accountable for using the rubric.

- After completing the rubrics, the search committee *as a group* should reflect and discuss where implicit biases may have crept in. Re-visit the lists of implicit bias and cognitive errors.

- Share the results of the rubric with the rest of the department when presenting the short list. Make sure the rubric is used by the members of the department when they evaluate the short list.

- Have the search committee create a report at the end of the search to make the search committee accountable for checking implicit bias.

2021 MC&G Hiring Rubric

Name: _____

2021 Search/Hiring Matrix

Position: Asst/Assoc Sci. _____

A = Above expectation   **E** = Expected   **B** = Bel

Factors	File Evidence				Letters Evidence				Interview Evidence			
Quality of Research	A	E	B	N/A	A	E	B	N/A	A	E	B	N/A
Creativity/Independence												
Impact on field / Reputation for excellence												
Ability in interpretation of results												
Technical expertise relevant to position												
Impact on Field/ WHOI	A	E	B	N/A	A	E	B	N/A	A	E	B	N/A
Ability to sustain viable research program												
Communication skills: lectures, publications,…												
Service												
Collaborations												
Interest in/ contribution to education												
Enhancement of diversity												
Skills/ focus/ expertise new to MCG/WHOI												
Professional Qualities	A	E	B	N/A	A	E	B	N/A	A	E	B	N/A
Leadership (potential)												
JEDI Efforts	A	E	B	N/A	A	E	B	N/A	A	E	B	N/A
Understanding of DEI in STEM												
Mentoring and Teaching												
Collaboration and Leadership												
Service, engagement, and/or outreach												
Research												
Other												

For reference, here is the 2021 G&G Hiring Rubric. Note the different rubrics for each stage and the set weighted percentages. Although, they might benefit from a more specific diversity statement rubric (e.g., the one supplied by CDEI).

Search Committee Evaluation Matrix						
Stage 1: Applicant File						
CANDIDATE'S NAME:						
PHD YEAR:						
POSITION:						
REVIEWER'S NAME AND POTENTIAL CONFLICT OF INTEREST (list any information that may be perceived as COI (e.g. friendship, collaborator, co-author, etc.)						

KEY: 9 = best; 1 = worst			
A	**E**	**B**	**N/A**
7-9 points	4-6 points	1-3 points	1-3 points
Above expectations	*Expectations met*	*Below expectations*	*Not Available/Not Applicable*

STAGE 1: Applicant's file

RESEARCH	A	E	B	N/A	WEIGHT	COMMENTS
Interests/field: originality, significance of the research topic					25%	
Quality: interpretation of data, originality, significance					25%	
Experience: PhD & Postdoc; breadth, technical experience, independence					20%	
Experience in proposal writing					15%	
Publication history: national/int'l reputation, collaboration					15%	Number of publications/year (since PhD):
Score	0				*Score is automatically calculated from boxes above.*	

Search Committee Evaluation Matrix
Stage 2: Initial Interview

CANDIDATE'S NAME:		

KEY: 6 = best; 1 = worst		
Adequate/ Yes (4-6 points)	Not Adequate/ No (1-3 points)	N/A

STAGE 2: To be evaluated AFTER initial round of zoom calls

FIT TO WHOI	YES	NO	N/A	WEIGHT	COMMENTS
Strategic fit to department (potential for collaboration, integration, development of new research areas, etc.				40%	
Interest and experience in education, service, and/or promoting inclusivity and broadened community impact				20%	
Increase diversity of ideas in Department				20%	
Professional and Leadership qualities				20%	
Score	0			*Score is automatically calculated from boxes above.*	

Search Committee Evaluation Matrix
Stage 3: Summary - after final interviews

CANDIDATE'S NAME:

KEY: 6 = best; 1 = worst	
Adequate/ Yes (4-6 points)	Not Adequate/ No (1-3 points)

STAGE 3: To be evaluated AFTER final interviews

RESEARCH	YES	NO	WEIGHT	COMMENTS
Interview			25%	
Seminar			25%	
Research Direction Discussion			30%	
Communication: research statement, oral presentation			10%	
Research needs: startup, laboratory, etc.			10%	
Score	0		*Score is automatically calculated from boxes above. Each Factor is equally weighted.*

INTERVIEWS (& GETTING APPLICANTS TO ACCEPT OFFERS)

Possible perceived problems at WHOI MC&G: During candidate evaluation by scientific staff, comments like "Not a good fit"; "I didn't get a good feeling", "Would they succeed here?" "The candidate didn't seem interested"

Why? Be aware that members of the staff may be using subjective feelings or judgements that discriminate against people unlike themselves. Interview schedules are extremely rigorous and may be even more uncomfortable or inconvenient for women and URM candidates.

Search Committee Actions

- Get the interview schedule to candidates as early as possible.
    - Pros: Gives ample time for candidate to prepare for individual conversations, this is ESPECIALLY important for candidates that are not WHOI postdocs.

- Make sure to accommodate the candidate's schedule (e.g., breastfeeding breaks?). Bathroom breaks should be built into the schedule! Ask the candidate if they need accommodations for (give a list of services).
    - Pros: This is an early opportunity to creating a sense of community and belonging for the applicant; shows that WHOI values work-life balance and family

- Be kind and interested in the candidate's research.
    - Pros: This is an early opportunity to creating a sense of community and belonging for the applicant.; The candidate is interviewing us as well

- Connect women and URM candidates with a representative from their community in Woods Hole that is not related to the search during the interview. E.g., females should meet with a member of the Women's Committee. URM's should meet with a representative from the BIPOC community in Woods Hole.
    - Pros: Allows the interviewee to ask questions about lifestyle and community in Woods Hole that they would not otherwise want to ask the search committee or department members; would be an introduction to the resources and support available should they come work at WHOI; early opportunity to start growing a community; sets expectations of inclusion.
    - Challenges: A time/effort burden for the reps that meet with every interviewee.

- Offer a competitive startup package to candidates you wish to hire.
    - Pros: This is the best way to show that they would be valued and supported at WHOI

○ Challenges: May be resource limited.

● Offer additional site visits to help the candidate decide to accept the offer.

● Offer dual-career positions or support the needs of the candidate's partner and family.

ORGANIZATIONAL TRANSITION

"Early efforts to promote organizational socialization can foster long-term positive professional outcomes, such as job satisfaction, organizational commitment, and intentions to persist within the organization" (Griffin, 2020).

Existing Problem with Organizational Transitions: There are currently no formal "onboarding" workshops or resources to introduce hirees to their new roles and responsibilities. It is impossible to independently obtain information about how to complete the responsibilities of being an Assistant Scientist without continuous mentoring from administrative and scientific staff. Because of the existing informal mentoring model, the mentoring of new externally hired scientists that aren't already friends with people in the department will naturally be inferior. Women and URM suffer more from imposter syndrome and are less likely to ask for help out of fear of having it reflect poorly on their performance. As a result it will take them longer to figure out how to work within WHOI's structure and lead to actual discrepancies in scientific output.

Possible solution: More formal onboarding training would allow all candidates to understand how to work within WHOI's system more efficiently and build skills to better complete the responsibilities affiliated with their new roles. Set people up for success.

Action Items for Departments and WHOI community (who do we hold accountable for these?)

WHOI Research Transition

The following training and workshops could be completed in the first year of appointment. It could be in a series of workshops, or presented all at once in a week long intensive onboarding course (perhaps a retreat?).

● Leadership and Management Training should be offered for all incoming assistant scientists.
○ Pros: Gives new scientists the tools they need for their new position rather than having to re-invent the wheel. White men have more role models on how to be

successful in this position and may have an easier time "winging it". If women and URMs are naturally receiving less mentorship than white men-white men mentoring, universal/formalized training helps even the playing field.

- Every Assistant Scientist should participate in a proposal writing workshop. Currently, a workshop is offered at the postdoc level, but not at the Asst. Scientist level.

- Every new Asst. Scientist should be required to attend a workshop on accounting, finance, and grant management at WHOI.
  - Pros: Funding and budgeting are such an important part of our job, but ALL of it right now is taught through asking for help from admin (which people with imposter syndrome do not like to do) or mentorship from other scientists (who are equally confused); If close, daily mentorship (or micro-mentoring) is lacking, this process is really confusing but has significant implications for how much science you are able to achieve with the given funds and resources.

- Descriptions and how to receive alerts to WHOI's internal funding opportunities.

- Make it more transparent what a "successful research program at WHOI" looks like.
  - Providing examples funding portfolios would help Asst. Scientists understand how to balance funds from different sources.

- Make it abundantly clear to new hires that it is common not to raise 12 months of salary from external sources (despite the expectation).
  - Scientists with imposter syndrome or poor peer mentoring (more likely to be women and URM scientists) and do not realize that it is common to take bridge support may hold themselves to a different standard than the rest of the staff. Scientists who feel more guilt about not meeting the expectation of raising 12 months of salary will feel uncomfortable and stressed about their position and will be more likely to be dissatisfied with their job.

- It should be common practice to include resources in the startup package dedicated to making a website for the new Asst. Scientist's lab group.

SOCIAL TRANSITION

Problem with Social Transition: Finding employment for one's partner is difficult. Difficult to be connected to resources in the community specific to the underrepresented community. Extremely

Possible Solution: The WHOI community needs to be proactive in connecting URMs to the resources and community that they need to survive and thrive. These efforts need to be strong enough and powerful enough to overcome the negativity from the greater Falmouth community.

Action Items for Departments and WHOI community (who do we hold accountable for these?)

- Can work with the CDEI community building working group to build potential connections/groups for community development.

- Build upon and advertise more the WHOI Wiki page for community resources.

- Connect and introduce the hiree to campus culture and the community. The WHOI community can be difficult to break into. "Socially-focused onboarding" is important to foster social acceptance and belonging.

- Make sure the hiree is aware of all the social gatherings and extracurricular opportunities that occur around WHOI. There are a lot that many people don't know about. It can be very hard to meet people in Woods Hole, especially in the winter.
  - Pro: Help form a community on campus

- Help connect the hiree to communities or lifestyle resources outside of campus (e.g., churches, hair salons, finding romantic partners)
  - Pro: Help form a community off of campus

RETENTION (SATISFACTION AND SUPPORT)

Action Items for Departments and WHOI community (who do we hold accountable for these?)

Predicted problems at WHOI MC&G: URM scientists don't feel a sense of community and belonging in our department, WHOI, or the greater Cape Cod community. May not be receiving the mentoring and support that others that "fit" into the department more easily. Their partner and family may not be finding communities on the Cape.

- Department heads should regularly meet with Assistant Scientists to discuss tenure questions and requirements.
  - MC&G department head, BPE, does a "tenure tea" for MC&G Asst. Scientists and it is very helpful to checking we all feel like we are still on track.

- Quality and affirming feedback on annual review
  - BPE has done a really terrific job on this too.

- Combine annual review and mentorship committee...have the mentorship committee write a memo?[1]

- Meeting regularly with a community to which you feel you belong. (e.g., the women in MC&G get together to support the other women in MC&G)

- WHOI's family leave policy; tenure clock extension; workload modifications – and having the expectation that taking advantage of these opportunities would not hurt their tenure case.

- Create and grant awards that reflect our shared values as a community.

By promoting satisfaction and support of URM scientists within the WHOI community, it will (hopefully) become easier to recruit and attract additional URM scientist