

ADVANCING HEALTH EQUITY THROUGH ORGANIZATIONAL MENTORING POLICIES AT MINORITY- SERVING INSTITUTIONS

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Objective: Morehouse School of Medicine, a collaborative partner in the National Research Mentoring Network, established the Mentoring Academy Institutional Planning Forum (MA Forum) to help minority-serving institutions (MSI) optimize research mentoring. In this commentary, we describe the policy workshop and review survey data from six MSIs to assess the current state of organizational policies and activities that advance research mentoring.

Participants: Twenty-eight institutional leaders, representing six MSIs, participated in an MA Forum between May 20, 2016 and May 11, 2017.

Methods: After describing the MA Forum's background, design and recruitment strategy, we present a synthesis of institutional summaries built from responses to a 45-item survey that explored existing mentoring infrastructure, policies, and activities at each institution.

Results: There is a heavy reliance on extramural funds to facilitate research mentoring initiatives. Mentoring policies and activities were most often governed by individual programs rather than the institution. Thus, the research mentoring expertise was concentrated at the local level, which may prevent opportunities for future scalability and optimization.

Conclusions: Given these findings, we offer recommendations to help MSIs establish a mentoring culture backed by institutional policy. *Ethn Dis.* 2019;29(Suppl 2): 371-376; doi:10.18865/ed.29.S2.371.

Keywords: Mentorship; Organizational Policy; Workforce Diversity; Change Management

INTRODUCTION

Building research capacity at minority-serving institutions (MSI) is important to the US Department of Health and Human Services (HHS) Action Plan to Reduce Racial and Ethnic Health Disparities.¹ MSIs play a unique role in the advancement of health equity, as they have a long-standing commitment to public service in racial and ethnic minority communities² and to educating students from groups underrepresented in the sciences.^{3,4} Accordingly, those who pursue careers at MSIs often conduct research and serve in minority communities affected by health and other social disparities.⁵⁻⁸ Thus, the community orientation of the MSIs places them at a critical nexus between the people who bear inequitable

burdens and the research community poised to develop and evaluate evidence-based solutions to resolve them. Mentoring improves the quality of research, productivity and successful competition for research funding.⁹⁻¹² However, at MSIs, which are often teaching-intensive universities versus research-intensive universities, there are few independently funded investigators^{10,13,14} to provide research mentoring. To these ends, optimizing research mentoring at MSIs is essential to advancing health equity and reducing disparities.

Academic institutions that support and facilitate mentoring programs increase the likelihood of successful mentoring relationships while deriving the institutional benefits of research productivity and student and faculty retention.¹²

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While some decry the limitations of tackling mentoring at the institutional level, structured mentoring is, in fact, a cost-effective means to reach organizational goals.¹⁵ Though mentoring is often a local (eg, program, departmental or center/institute) priority that is not centralized by an institution's administration, we contend that MSIs who adopt

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policies to support and incentivize mentoring at the institutional level can overcome localized challenges, which would otherwise be insurmountable. For example, when mentoring is embedded in institutional policies, values and rewards systems, the quantity and quality of mentoring improves.¹⁶

As a core institutional partner in the National Research Mentoring Network (NRMN),⁹ Morehouse School of Medicine (MSM) established the Mentoring Academy Institutional Planning Forum (MA Forum) to help MSI institutional leaders explore opportunities to structure and incentivize research mentoring through organizational policies and activities. The MA Forum builds on the MSM Mentoring Academy principles and disseminates evaluative tools developed by Keyser¹⁷ and Tillman¹⁸ to gather stakeholder perspectives on MSIs challenges in building mentoring infrastructure and optimizing mentoring activities. Given that MSM is a relatively small institution and an MSI, it had recently grappled with improving the quality and consistency of research mentorship, despite a limited pool of senior investigators prepared to serve in research mentoring roles. Through a self-study process, MSM leaders found that research mentoring and training funneled through multiple standalone programs diluted efforts and compromised effectiveness. The MA Forum was shaped from their reflections and lessons learned while implementing the MSM Mentoring Academy.

METHODS

The MA Forum used a purposive sampling approach to recruit institutional leaders, defined as those who: a) occupy positions with access to high-value resources; b) have the ability to navigate complex systems;

and c) have the authority to take effective actions. NRMN primarily targeted principal investigators and project directors from the Research Centers in Minority Institutions (RCMI) Program given their emphasis on strengthening health disparities research infrastructure. Leaders were asked to submit a curriculum vitae, a brief statement of interest and a 45-item questionnaire adapted from Tillman's¹⁸ survey distributed to institutions receiving NIH's Clinical and Translational Science Award (CTSA). The questionnaire explored a variety of topics including faculty demographics, mentoring policies, structure, training, and program evaluation at both the local (eg, program, departmental or center/institute) and institutional level. To gain insight from multiple perspectives, participants were asked to recruit other intra-institutional leaders. All procedures were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000.

MA Forum facilitators reviewed the survey data to develop institutional summaries that were shared with participants at the in-person meetings held twice in Atlanta, Georgia and once in San Juan, Puerto Rico in May 2016, November 2016 and May 2017, respectively. The institutional summaries were used to help leaders assess the current state of research mentoring and provided an overview of three domains necessary to establish quality mentoring infrastruc-

ture: a) selection criteria; b) incentives to motivate participation; and c) facilitating the mentor-mentee relationship.¹⁷ After group discussions to identify common barriers to optimizing research mentoring, the facilitators guided participants through activities based on Kotter's change management model.¹⁹

RESULTS

Participants

Six MSIs participated in the MA Forum, including Alabama State University (ASU), Jackson State University (JSU), Meharry Medical College (MMC), University of Puerto Rico Medical Sciences Campus (UPR), Universidad Central Del Caribe (UCC), and Xavier University of Louisiana (XU). Two leaders from the University of Alabama at Birmingham (UAB) also participated given the institution's commitment to health disparities research and service to underserved minority groups. Participants (n=28) occupied various leadership positions including: deans/associate deans (n=11); principal investigators of large center grants (n=13); and faculty/staff administrators of local mentoring programs (n=4). The mentoring initiatives at most institutions were federally funded; in one case, UPR, the institution provided additional funding. All six MSIs cited that while there was a great demand for mentoring, there was limited supply of properly trained mentors to satisfy the demand. In most cases, the average number of mentees greatly

outnumbered the mentors enrolled in the research mentoring programs, by 9:1. The most common mentoring relationship structure was a single mentor as opposed to co-mentors or multiple mentors.

Selection Criteria

Mentees were typically selected through an application process that was linked to the receipt of intramural funding. On the other hand, mentors were often invited based on reputation and word-of-mouth recommendations. In a few cases, junior mentors were paired with senior mentors to establish co-mentoring structures. All institutions reported having a program-level database from which mentors could be selected; no participants reported an institution-wide database. At three institutions, UAB, UPR and XU, the institution set the mentor criteria – at minimum, mentors must be senior investigators with independent funding. For local programs at ASU, JSU, UAB, UPR and XU past mentoring experience was the top mentor criterion.

Incentives to Motivate Participation

Intramural funding was the primary incentive for mentees to participate in research mentoring. At JSU, mentees received up to 24 months of pilot funding. All programs reported incentives for mentors. The most common program incentives included: eligibility for a mentorship award; conference travel funds; special access to resources; and additional compensation (eg, bonus or support). UPR reported

institutional incentives including: consideration in annual evaluation; consideration in promotion/tenure process; and consideration in the annual salary determination.

Facilitating the Mentor-Mentee Relationship

At all institutions, individual programs instituted mentor-mentee matching policies. In all but one case, the program directors recommended the matching; in that case, the mentees submitted names of potential mentors. All programs had formal policies with respect to the expectations of mentors. No institutions had such policies. However, at ASU, JSU, UAB, UPR and XU, mentees and mentors were expected to establish a written agreement that governs the relationship.

DISCUSSION

At five of the six MSIs we surveyed, the institutions did not "own" research mentoring; research mentoring initiatives were almost entirely funded extramurally. This funding strategy might limit future scalability as the programs' scopes and objectives are narrowly defined by the funder. To overcome the scarcity of independently funded senior investigators, many support mentoring networks that help distribute the mentoring burden and fill gaps in expertise.²⁰ However, these networks often cross disciplines and might be out of an individual program's scope. From the UPR example, we learned that an institutional investment in research mentoring

was also supported by an institutional policy to offer incentives to mentors. This example helped us understand how scaling could be achieved at the institutional level but not by an individual program.

Our goal in the MA Forum was to help institutions develop plans that leverage existing policies and resources, while considering the unique landscape of the institution. We know that formal policy provides sustainable power to research mentoring.²¹ Moreover, we

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recognize that there are unique institutional barriers at MSIs to centralize research mentoring. For example, a leader shared, “Due to the complexity of the institution, deanships, departments, etc., a one-size-fits-all program might not be feasible. However, consideration of a program, policies and templates to frame such a program and then have each dean evaluate their respective needs will be a good starting place. The mentoring has been delegated to

each deanship, thus an institutional policy and program will be well-received. This may help standardized training across the institution.”

Our expectation is not a one-size fits all solution to research mentoring, but to offer insights on how MSIs might develop a social contract to execute a shared mission with common training and strategy. To that end, we provide the following observations: 1) The unique institutional climate and infrastructure will dictate the appropriate organizational approach to improve research mentoring; 2) The institution’s role can and should be to facilitate communication, collaboration and coordination; and 3) The institution should embed research mentoring in its values and rewards systems through policies that incentivize participation and encourage accountability.

Given our review of the data and discussion with MA Forum participants we encourage institutions to assess each of the research mentoring domains and evaluate how policies can reinforce research mentoring as an institutional priority. Leaders should evaluate how mentoring goals align with the organizational mission and research capacity needs, thus, demonstrating the clear business-case or rationale to support mentoring. The clear rationale will help the MSI identify feasible, organization-wide incentives or standards for the training, qualifications and evaluations of mentors to promote consistency in mentoring responsibilities. Adequate training, appropriate time allotments, and formal recognition

for mentoring efforts improve the quality and consistency of mentors.²² As these processes are formalized and centralized, MSIs will see more consistent research mentoring results because of the visibility of rewards and accountability.

An institution-wide assessment might also reveal overlapping programs that could provide mutual benefit to each other. We recommend that MSIs routinely evaluate research mentoring programs across consistent criteria, providing opportunities to compare effectiveness. In this governance role, the MSIs should not limit program flexibility but help establish standards for success to help all programs more consistently reach outcomes. MSIs should provide an opportunity for mentoring program leaders to convene annually to review evaluations and develop forward thinking strategies that advance professional and institutional growth.

As MSIs strive to increase external research funding, providing adequate support for mentoring at the institutional level will be transformative. We urge that MSI leaders become more aware of the benefits of structured mentoring practices that facilitate professional development. We understand the unique institutional barriers at MSIs and believe the MA Forum provides a distinctive opportunity to begin to address the barriers by identifying how resources can be pooled for success. We recognize that scarce resources may deter leaders from pursuing a central mentoring infrastructure; however, our example from MSM and others¹⁶ show how creativ-

ity and collaboration can overcome those challenges. In our experience, training and awareness among institutional leaders can be the catalyst for change. Our MA Forum helps to characterize the variability of faculty mentoring, identify opportunities for improvement, and underscores the need to learn from other successful mentoring programs. Efforts to establish mentoring academies to support and educate mentors and mentees are worthy; this forum can serve as a basis to share mentoring practices and stimulate conversation around strategies to improve faculty mentoring across a wide range of institutions.

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CONFLICT OF INTEREST

No conflicts of interest to report.

AUTHOR CONTRIBUTIONS

Research concept and design: Baez, Thompson, Stiles, Ofili; Acquisition of data: Baez, Hall, Thompson, Stiles, Ofili; Data analysis and interpretation: Johnson Hemming, Baez, Hall, Thompson, Stiles; Manuscript draft: Johnson Hemming, Baez, Thompson, Stiles; Statistical expertise: Johnson Hemming, Acquisition of funding: Ofili; Administrative: Johnson Hemming, Hall, Thompson, Stiles; Supervision: Ofili

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Organizational Mentoring Policies - Johnson Hemming et al

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