



Tomorrow's Doctors, Tomorrow's Cures®

APR

**Association of American Medical Colleges
Advisory Panel on Research
Research Issue Briefs
2013-2014**

About the APR

The Advisory Panel on Research was formed in 1991 to guide the AAMCs efforts in biomedical research advocacy, education, policy formulation, and strategy development. The panel is charged with providing input on the resources needed to utilize the full scope of research to meet the health and health care needs of the nation; advising AAMC on how to facilitate a socially responsible and sustainable research mission at our medical schools and teaching hospitals beyond AAMC's advocacy for NIH funding; identifying innovative research models, including strategic resource reallocation, shifts from acquisition to access in core facilities, new non-traditional partnerships, aggressive integration and alignment to address new models of community outreach or health care delivery; identifying innovative models of research training to prepare a medical research workforce equipped to engage in the full scope of research from fundamental discovery to implementation science; as well as weighing-in on specific issues as requested by the AAMC President or Chief Scientific Officer.

The Panel is composed of nationally respected leaders in the broad scope of research and representatives from schools of medicine, nursing, public health and engineering. The Panel meets at least twice each year to review contemporary issues in biomedical and health sciences research and recommend actions relevant to AAMC positions and priorities.

2013-2014 AAMC Advisory Panel on Research Research Issue Briefs

About this Document

Given the national landscape and challenges for sustaining a vibrant academic medicine research enterprise, at the November, 2013 meeting, the Association of American Medical Colleges (AAMC) Advisory Panel on Research began to address major issues and opportunities confronting the academic medicine research community, Uncertainties about future federal funding for the NIH and medical research plus concerns about increasingly fragile clinical margins which have historically been a major source of institutional support for medical research triggered conversations around maximizing efficiencies in research operations, meaningfully engaging and supporting faculty throughout transitions in their research careers, focusing research portfolios to ensure ongoing support for the creativity of individual researchers and research teams, and providing opportunities for trainees to help prepare them for research-related positions beyond the traditional academic pathways.

These [AAMC Advisory Panel on Research Issue Briefs](#) are intended to provide examples and bright spots of institutional efforts in three areas:

- 1. Maximizing development, engagement and potential of faculty engaged in research during career transitions**
- 2. Strategies for recognizing and rewarding team-based research**
- 3. Trainee community outreach: providing community value through graduate education in medical research**

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AAMC Advisory Panel on Research Issue Brief

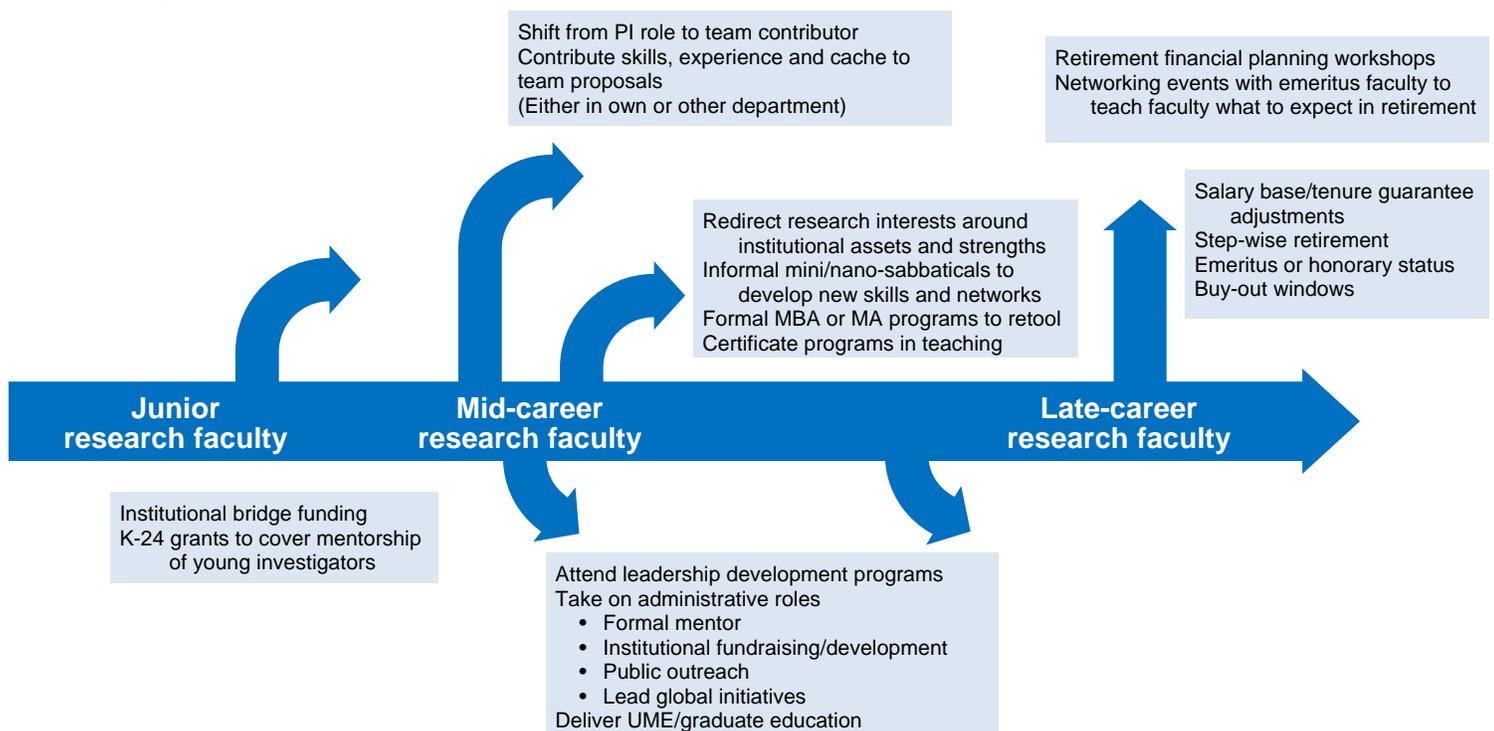
Maximizing faculty development, engagement and potential during career transitions

May 2014

At the November 2013 meeting of the AAMC Advisory Panel on Research, panelists discussed strategies to promote faculty vitality throughout the career lifecycle. The discussion focused on how best to present avenues for re-tooling and reinvention of faculty with declined research productivity, whether precipitated by the strained funding environment, linked to the decreased relevance of or interest in a field of inquiry, or related to diminished morale. To inform this conversation, the AAMC has gathered a selection of promising practices reported in this [Research Issue Brief](#) to help nurture and develop research faculty across transition points.

Between January and March 2014, AAMC conducted semi-structured interviews with leaders at seven institutions identified as having a robust approach to faculty development, particularly as it relates to career transitions for mid- and late career researchers with declining grant support. These bright spot institutions were identified through a call for suggestions distributed via emails to three AAMC affinity groups: the Graduate Research Education and Training Group, the Group on Research Advancement and Development and the Council of Faculty and Academic Societies.¹ Figure 1 displays the range of activities and approaches in place at these institutions.

Figure 1. Institutional strategies for maximizing faculty development, engagement and potential during career transitions



¹ The full call and semi-structured interview questions are included in Appendix A.

General Findings

1 There is no gold standard set of practices; most institutions employ ad hoc, individualized, high-touch approaches

Teaching, mentorship and administrative roles should not be treated as consolation prizes or parking spots. These functions are essential for top-notch research programs and often require a unique set of traits, aptitudes and experiences.

2

3 Both faculty and their institutions should be thinking about preparing for the future throughout the career arc. These should be ongoing conversations, not crisis interventions.

To anticipate productivity declines before they become acute, the individuals or teams responsible for guiding career transitions need access to current data on the funding status of all research faculty, and should have a sense of the institution's current administrative needs.

4

Bright Spots

- Both a personal and a business planning process must occur when considering if, where and how to redeploy underproductive research faculty, whether to teaching positions or administrative functions. As part of this process, the return on investment should be measured. For example, at University of Utah Health Science, a new Vice Dean for Research position was created, and having an experienced faculty researcher dedicated to thinking strategically about research paid off. The institution was able to double their research portfolio from \$50M to \$100M in 5 years and get over 50 new investigators funded.
- It is not possible for every transitioning faculty member to move into an administrative or teaching role. Another pathway is to join a research team as a co-investigator, often by contributing 10-30% effort as key personnel. Researchers taking this path who have a history of mostly solo work will need to exhibit skillful collaboration and communication. This

may also require the home department, center or institute to provide partial salary coverage to subsidize another team for taking on the researcher. At Virginia Tech Carillion Research Institute, one approach that has worked is to offer a future spot for a spousal hire in exchange for another department, center or institute adopting a researcher during this transition, until they can ideally get written into a future grant.



- It is not always financially tenable to support year-long sabbaticals for retooling. University of Alabama at Birmingham School of Medicine (SOM) uses what they call “nano-sabbaticals” to help faculty learn new skills or techniques that will make existing research teams more competitive. The cost of such approaches is comparable to conference attendance and can be incentivized with matching funds from the dean’s office or department/division. For instance, one institution we interviewed had identified a strength in imaging at the cell level and smaller using advanced microscopy techniques. To take advantage of this capacity, future nano-sabbatical opportunities will focus on this area, to increase utilization of the imaging core’s facilities and build this capacity into grants.
- At another of the interviewed institutions, it was an individual investigator skilled with high tech imaging equipment identified by the institution as a strength that could be further leveraged. The institution ultimately morphed the researcher’s role into core management.

- The University of Utah has an MBA program and an MA in bioinformatics, which allows Health Sciences faculty to gain additional training at lower expense while remaining at the institution to continue contributing. Utah also has cultivated a portfolio of in-house leadership trainings from one-hour sessions to a year-long management essentials course, most of which are free to participating faculty.

A portfolio of in-house leadership trainings helps faculty retool while remaining at the institution to continue contributing

- Similarly, faculty wishing to transition into teaching at the Cleveland Clinic Learner College of Medicine can attain a distinguished educator certificate through an acclaimed in-house training program on the essentials of clinical and classroom teaching and assessment.
- Institutions can use targeted retreats or workshops to plan for future directions and align skills development and grant writing to be prepared for where science is going. For instance the University of Alabama at Birmingham School of Medicine recently ran a workshop on genes and pathogenesis for department and division chairs to anticipate future research needs.
- The University of Colorado SOM is exploring the feasibility of transitioning senior faculty into internal leadership/executive coaches. This would offset what is currently a major external expense for these services.

- At one institution, a senior researcher was presented with the opportunity to transition into a post-doctoral supervisory position. In consultation with chairs and colleagues, with consideration of what the salary and other support resources would be for this position, the individual ended up opting to retire. After a few encouraging examples of faculty peers transitioning into part or full-time administrative roles, others began to approach leadership to seek their own redirections.

“A proactive and positive approach to career transitions can yield unexpected outcomes...”

In most cases, faculty who had gone, 3, 4, 5 years without a funded grant were happy that someone noticed and came to talk to them. They more than anyone are feeling the guilt and concern that they're not contributing to the institution in the same way and are desperate to find a way to be a solid contributor again. Once you help put them on a path where they can see a future, their level of contribution and engagement increases.”

Easing the Transition

Some senior researchers who are no longer funded but guaranteed a salary under legacy tenure may require additional transition approaches if the options listed above are not available, desirable or appropriate. This is more than an issue of individual entitlement, for public institutions, it is an issue of public accountability.

- Senior faculty will need help acclimating to the end of their careers. This may be particularly challenging for faculty who have had a long career in research. Tufts University SOM has convened workshops for faculty nearing retirement to hear from emeritus faculty on what it's like to be retired and what issues came up for them to paint the transition in a realistic but positive light. Another promising practice is to offer training for department and division chairs and other relevant leaders on the finesse required to broach these difficult conversations around research productivity and career transitions.
- At the University of Colorado SOM, faculty base, supplemental and incentive pay was renegotiated several years ago with the concession that tenured faculty could no longer be terminated. Base salary was set at 70% of average pay by rank and not attached to inflationary or merit increases. Tenure became only a guarantee of base salary with supplemental pay guaranteed on a rolling annual basis. To manage the financial impact of tenured faculty who are no longer productive or willing to retool the institution can drop 15% of supplemental income per year and with the approval of the dean, salary for tenured faculty can be reduced all the way to the base.
- Dartmouth Medical School has three options for easing the transitions of late career faculty.
 - Phased retirement: Individuals between 59-67 with 15 or more years of service are allowed to work the equivalent of one year of time for 3 years of salary. This facilitates a transition out of the lab or classroom without a loss of salary. This period

does not prohibit faculty from seeking employment elsewhere and some have found alternative full-time positions during this transition, though only a few faculty per year take advantage of this option.

- Active emeritus: Faculty are eligible if they have reached the rank of full professor, are recommended by their chair and approved by the dean's and provost's office. Active emeriti can maintain their lab space and other resources, and in some cases even supplemental salary as long as they retain grant funding. About 15 individuals have taken advantage of this option.
- Honorary faculty: This status applies to retired faculty from Dartmouth or other institutions who have moved to the area and want to stay engaged in academia. It keeps people engaged at little or no salary but a title and currently accounts for 7-8 contributors.

Conclusion

Preparing for successful transition points in the careers of research faculty is a key part of maximizing the ability of faculty to make valuable contributions at all stages of their careers. Helping faculty at all stages on the career continuum—from entry to senior levels—prepare for periods of constrained funding or to take advantage of inevitable disruptive innovations and structural reorganizations will be key to maintaining a dynamic and productive research enterprise.

Going forward, several of the queried institutions expressed an interest in exploring ways to set expectations around career trajectories during the onboarding process (e.g. a few ways careers typically develop, how much space and other resources you'll have allocated at various phases of your career, tenure thresholds, activities and behaviors that support lifelong learning).

AAMC Advisory Panel on Research Issue Brief

Attributing credit for team based research in merits and promotions

May 2014

The question of how best to support, promote and incentivize team science in medical research has been raised at multiple AAMC forums in recent years. At their November 2013 meeting, the AAMC Advisory Panel on Research (APR) discussed the status of merits and promotions in a research environment that is increasingly a team activity, while still recognizing the importance of individual creativity. Valuing collaborative and interdisciplinary science is challenging traditional systems for developing, evaluating, and advancing faculty.

To inform this conversation, the AAMC analyzed recent data on the status of institutional merits and promotions and provides examples of promising avenues to further enhance the use of merits and promotions processes to reward team science both are reported in this [Research Issue Brief](#).

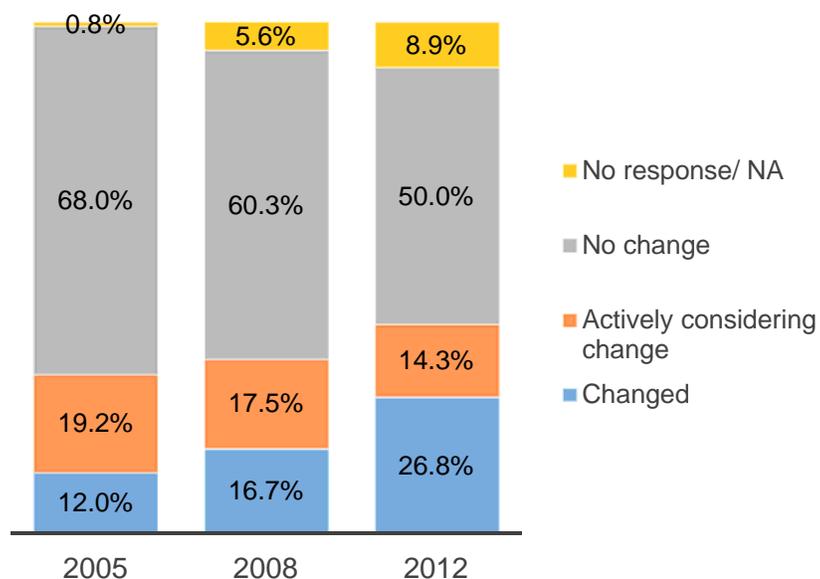
Trend data on the increasing prevalence of faculty promotion policies and guidelines related to team research

Data from the AAMC Faculty Personnel Policies Survey, administered to LCME accredited institutions every 3 years, illustrates a promising upward trend of formal promotion and tenure guidelines related to team science.

Figure 1.

Institutional responses to the following survey item:

“In the past 3 years, has your institution revised promotion and tenure guidelines to include an emphasis on interdisciplinary team science?”¹



¹ Respondents are LCME accredited institutions: 2012 (n=112), 2008 (n=126) and 2005 (n=125)

To better understand the challenges associated with implementing these policies, the AAMC interviewed leaders at 8 academic medical centers identified as **bright spots** in this space by Advisory Panel on Research members and Scientific Affairs leadership. These findings were supplemented with other best practices examples brought to light at recent AAMC meetings.



How team science is making its way into faculty promotion policies and guidelines

Within this small sample of institutions, there is a wide variety of approaches and degrees of application. Some institutions include very general language valuing team science with few specifics on how that is to be evidenced or how large a role it plays in the overall evaluation. Others have more extensive policy language which includes guidance on how to document individual contributions to research teams.

- At the University of Alabama, Birmingham School of Medicine (SOM), team science is considered part of faculty's service to and citizenship of the institution, and participation on research teams with a documented critical contribution is one of the criteria considered to demonstrate research excellence for promotion.
- University of North Carolina SOM's policy is explicit in both its acknowledgement of the value of team science and in its description of when and in what manner team activities are to be considered. A detailed excerpt follows.

"While the evaluation of accomplishments...has traditionally focused on a faculty member's individual achievements...it has become increasingly clear that the present and future of biomedical science is placing more and more emphasis on interdisciplinary team activities. Therefore, when relevant, a faculty member's contributions to interdisciplinary teamwork will be given careful consideration. Factors such as originality, creativity, indispensability, and unique abilities will be considered when making this evaluation. The candidate is expected to include in the promotion packet a description of his/her role in the overall activities of the team. The departmental review process will include a solicitation of information regarding the candidate from the director of the project, the principal investigator, as well as any others who have first-hand knowledge that would clarify the candidate's role in the overall team effort. Finally, the Chair's letter must spell out such collaboration(s) in considerable detail, especially if interdisciplinary team activities are felt to be an important aspect of the case being made for the specific promotion."

- At Hofstra North Shore-LIJ SOM, peer recognition is the main determinant of promotion. Effort is recognized for scholarly pursuit in all academic missions—research, clinical care, education—and in addition to the faculty member’s principal endeavor, “evidence of active, collaborative engagement” must be demonstrated in at least one other mission area. Peer recognition goes beyond publications or grants to look at invitations for talks, requests for assistance, and other indications that the faculty member is a sought after resource in a specific area.
- The University of Utah SOM is currently revising their policy language, replacing references to researcher ‘independence’ with ‘individual excellence and unique contributions’. Collaboration can be evidenced through partnerships with multiple other investigators and/or as expertise pertinent to multiple potential areas of investigation.

One institution is replacing references to researcher ‘independence’ with ‘individual excellence and unique contributions’.

Changing the policy language is not enough

While including language on team science in promotion policies and guidelines is important, it is not sufficient to incentivize team science. This theme was emphasized by all of those who were interviewed. At present, merits and promotions criteria related to team science are either too broadly defined, subject to variable interpretation, or not uniformly applied. The current funding environment makes it particularly hard to implement these changes.

At present, merits and promotions criteria related to team science are either too broadly defined, subject to variable interpretation, or not uniformly applied.

At Washington University SOM in St. Louis, for example, Department Chairs nominate their faculty for consideration by subcommittees that evaluate and make a recommendation for promotion. One chair may view a faculty member engaged in team science as a co-PI on an R01 as sufficient for promotion whereas others may not.

Also, the absence of supportive language in the formal policy does not necessarily mean team science isn’t valued at an institution.

For instance, Vanderbilt SOM does not have a policy promoting team science, but the promotions process does make a concerted effort to consider measures beyond authorship position. The institution’s committees rank letters from PIs and other leaders very highly, though it is not sufficient to recognize faculty as contributors or good team players, the candidate must demonstrate that they were uniquely able to make the needed contribution.

Keys to building a culture that supports team science

Even where detailed policies exist and a track record of fair application of evaluation and promotion standards has been established, there remain organizational barriers, cultural inhibitors and individual opponents to the recognition of team science. Policies and guidance alone are an insufficient lever for change. Our research revealed five keys to enhancing the use of merits and promotions processes to boost team science.

1 Create resources to encourage intra-institutional collaboration

Institutions can be proactive in promoting collaboration by providing supportive tools and programs.

- One well-known example of an institutional tool to facilitate collaboration is Harvard Catalyst. The tool houses profiles of faculty, including publication records and interest areas, to allow potential collaborators to find each other. It also illustrates faculty networks, which can be useful for evaluating the extent of an individual's collaborations.
- Emory University has developed a virtual center with interactive chat rooms to connect scientists interested in health services research across Emory, Georgia Tech, Morehouse and Georgia State.
- Vanderbilt has introduced "studios" to bring basic and clinical scientists together to critique research proposals. The studios are considered highly effective in strengthening research design and improving the intellectual quality of the research and proposals, while offering experiential learning on the value of interdisciplinarity.

Standardize processes to ensure fairness in the application of criteria 2

Further standardization and systematization of criteria, and how they are weighed in the evaluation process, is critical to increasing trust in the system and its value as an incentive.

- The University of Michigan Medical School policies include supporting documents and guidance on their use. The policy calls for the creation of a Research Portfolio based on 1) templates for *internal* letters of support from team members on the contribution of the team member, in addition to traditional external letters; and 2) the faculty member's own description of her/his unique role on the team.
- At Northwestern University Feinberg SOM, bibliometric analyses are used to visualize research collaboration. While this tool is not included for committee review, it is provided for the dean to review along with the committee's recommendations. This mechanism serves to ensure that each ad hoc promotion and advancement committee adequately considers team science in their evaluations.

3 Recognize that team science is not an all or nothing

Team science is only one among a number of important characteristics to evaluate and reward as part of an effective and productive research enterprise. It is increasingly important for academic researchers to be flexible, and to develop communication and collaboration skills, but working in teams shouldn't come at the expense of investigator independence. In fact, investigators who work only through collaborations may have a more difficult time advancing: "Science is a team sport, but every team needs a quarterback".

Learn from processes used in other disciplines 4

Other disciplines, particularly within the physical sciences, have made considerable progress in this area. There may be opportunities to learn from examples of collaboration in other schools and departments at your institution such as physics, astronomy or engineering. What does a highly collaborative scientific community look like, how is it fostered, what outcomes count as success?

5 Evaluate outcomes to determine the long-term effects of policy changes

Given the observed variability in approaches and outcomes, a periodic review of how effectively team work is being evaluated and rewarded by merits and promotions committees is an important priority. A broad consensus discussion and definition of collaborative scholarship will be required to successfully evaluate these efforts.

Conclusion

While this report identifies promising trends and examples of progress in aligning merits and promotions with interdisciplinary team science, it seems fair to say that there is a spectrum of progress, from a nascent recognition of the challenge of fairly evaluating team based research in the merits and promotions process, to mentoring junior faculty in when and how to engage in team science, to clear examples of language, processes, and criteria that specify the rigor and importance of team science.

Inasmuch as merits and promotions are key incentives for driving faculty activities, faculty perception of the value of team science will be influenced by merits and promotions as a leading rather than a lagging indicator.

AAMC Advisory Panel on Research Issue Brief

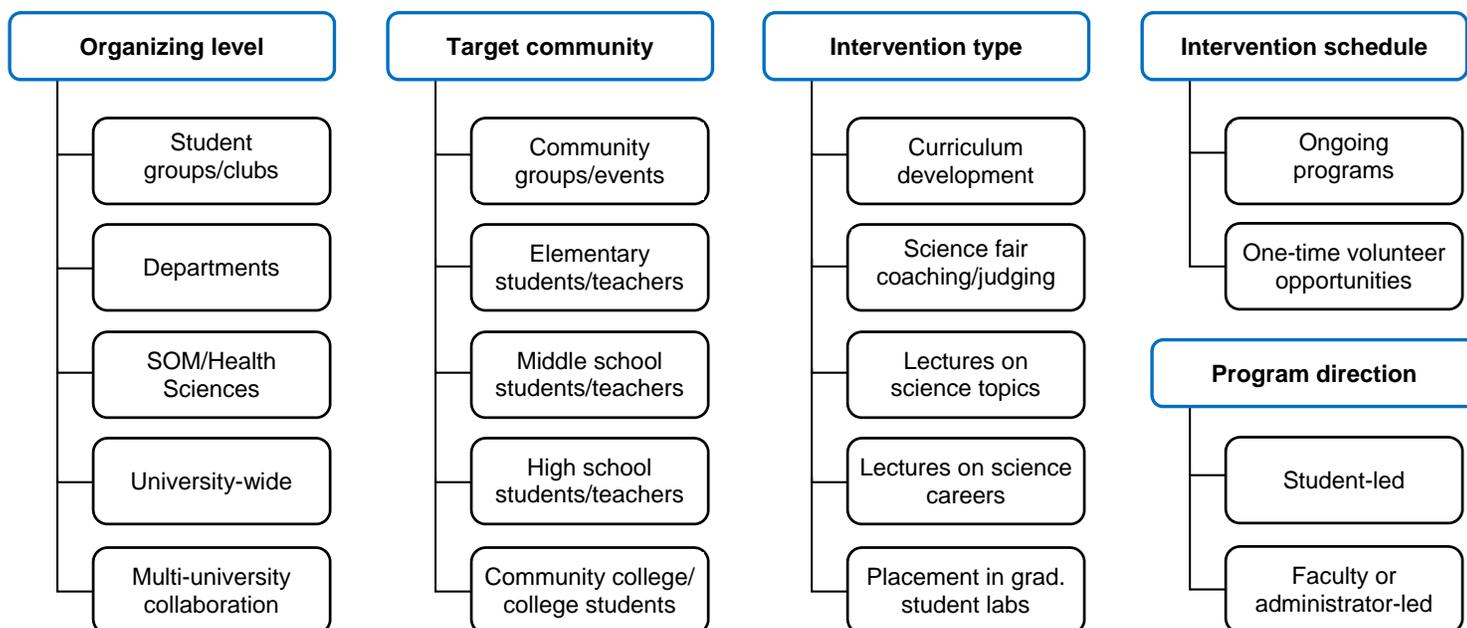
Trainee community outreach: A hidden value of graduate education in biomedical research

May 2014

At the November, 2013 meeting, the Advisory Panel on Research began to address major issues and opportunities confronting the academic medicine research enterprise, including attracting promising future scientists by helping prepare trainees for research-related positions beyond the traditional academic pathways and developing opportunities for these trainees to bring added value to the community. This has been particularly important given the recommendations of the NIH Working Group on the Biomedical Research Workforce and the recent commentary in PNAS, *Rescuing US Biomedical Research From its Systemic Flaws*.¹

To inform this conversation, in January 2014, using the Graduate Research, Education, and Training (GREAT) and Group on Research Advancement and Development (GRAND) listservs, AAMC sought examples of research trainee engagement in outreach programs.^[2] A total of 22 institutions responded to the query, from which we derived an overview of the variety of outreach programs (see Fig.1) as well as a set of common characteristics, both reported in this [Research Issue Brief](#).

Figure 1. The listserv query returned a variety of outreach types and structures, all of which are listed below. Most responding institutions had more than one program in place.



¹ Alberts, B; Kirschner, MW; Tilghman, S and Varmus, H. PNAS, Published online ahead of print, April 14, 2014.

^[2] The full query is included in Appendix B.

Illustrative examples

- At Louisiana State University Health Sciences Center in New Orleans, graduate students, medical students, postdocs and residents from the Schools of Medicine, Nursing, Public Health, Allied Health and Dentistry collaborate on an anti-drug workshop program. Over the course of the academic year, they travel to 3 local high schools to educate youth on the harmful genetic, physiological and psychological effects of alcohol and drug abuse.
- At Tufts University School of Medicine, PhD and MD/PhD students are given the opportunity to develop a health disparities-focused course with faculty mentorship and training. They then deliver the course to senior biology majors at a local minority serving college.

- At Virginia Commonwealth University, the School of Medicine Women in Science organization partners with the Regional Girl Scouts Council for an annual Medical Science Career Day. Over 100 scouts circulate among stations at different lab and demonstration sites for hands-on opportunities to discover a variety of health sciences research-related careers. At the end of the experience, scouts receive a special VCU Medical Science Career Day patch.

Girl scouts from across the region receive a special patch for discovering health sciences research-related careers

- The Wake Forest University Neuroscience Graduate Program supports monthly visits to county K-12 classrooms and large-scale demonstration events at local children’s museums. During their second year, graduate students are *required* to commit 10 hours per semester to these activities.
- At UC Davis Medical Center, a program called *Get Real* coaches graduate trainees on effective ways to communicate research to lay audiences, then matches them with a community group to practice discussing their research.

- UNC School of Medicine’s North Carolina DNA Day sends over 100 biomedical graduate students and postdocs to high school classrooms across the state. The program creates scientist “ambassadors” who present interactive lessons about genetics, genomics and biotechnology and share their own research interests with students. This program not only educates high school students and teachers about these cutting-edge topics, but also introduces them to early career scientists, which demystifies a career path that many students have not encountered or thought possible for them.

The program creates scientist ‘ambassadors’ who share their research interests with high school students

- As part of the Students and Teachers as Research Scientists program at University of Missouri-St. Louis, each year one or two rising junior or senior high school students are placed in a research lab for 6 weeks, supervised by PhD students or postdocs.

Outcomes

Query respondents shed light on the general mechanisms of impact summarized below. The potential dividends of these outreach programs on community research engagement, science literacy and STEM career interest is clear.

Benefits to community, students and/or teachers

- Exposure to science/research and its impacts
- Exposure to research and health careers
- Enhanced communication skills
- Improved trust and engagement with research and researchers

Benefits to research trainees and postdocs

- Better teaching skills
- Improved science communication skills
- Improved mentoring skills
- Community service hours or course credit

Although the query did not solicit information about how these trainee outreach efforts are measured, one institution did report using pre- and post-intervention questionnaires to evaluate program satisfaction, understanding and retention of science concepts, and future career plans.

Conclusion

The findings suggest that sustaining programs of this nature will remain a challenge, given their heavy reliance on student leaders and small external grants, though budget information was not explicitly collected. However, local media stories and individual student profiles could be valuable to demonstrate this value of having an academic medical center committed to training future scientists in the community. To make a convincing case to policy makers, institutions should apply rigorous outcome metrics, such as tracking the college completion rate of participating students or changes in the reported likelihood that participating students or their family members would enroll in clinical trials.

Finally, in this environment of constrained federal funding and ever higher standards for public accountability and transparency, it is more important than ever for institutions to better assess and communicate the value of medical research. While the traditional metrics of success (volume of grant funding, scholarly publications) are valuable and credible within the academic community, they don't present the broader benefits of research in a way that resonates with the public and other stakeholders. One novel way the academic research enterprise brings value to the community is through research trainee outreach.

Appendix A

Maximizing faculty development, engagement and potential during career transitions Call for suggestions

“As senior research faculty transition out of research, what formal opportunities does your organization offer them for continued career development? Does it offer such faculty other pathways to continue to contribute to the institution? Or provide other ways for them to remain engaged with the institution’s research and learning community?”

Interview questions

1. As a senior faculty member transitions out of research, what options are available to him/her to remain a valued and productive member of your Institution’s community?
 - a. Describe in detail.
2. Are faculty aware of these opportunities?
 - a. Are these formal or informal (e.g. case by case) opportunities?
 - b. How are these opportunities presented to the faculty? At what point in their career?
3. What infrastructure and staff are needed to support these opportunities?
4. What have been the outcomes of these programs/opportunities? (Identified benefits to faculty, trainees, institution, etc.)
5. Are these expectations and future opportunities laid out explicitly to potential and on-boarding junior faculty?

Appendix B

Trainee community outreach: A hidden value of graduate education in biomedical research
Original Query

From: GreatMail@lists.aamc.org

Sent: Friday, January 17, 2014 9:20 AM

Subject: Seeking your examples- research trainee engagement with communities

Dear GREAT Group Community:

We are seeking examples of institutions' innovations in research trainee engagement with communities, in order to highlight those bright spots and to spread innovations. To do that we would love to hear from you as to whether you have examples of systematic, ongoing research education or research outreach programs- to K-12 and college students, local residents, or patients, etc.- in which your research trainees participate. For example, K-12 STEM education outreach, clinical trial education/recruitment programs, health equity research programs.

To make this as simple as possible, we are asking 4 questions:

- Are PhD graduate students, MD-PhD students, and/or Postdocs involved in a systematic, ongoing research education and/or research outreach program at your institution?
- Please briefly describe the program in 2-3 sentences
- If available, please provide a web link or program outline
- Are you willing to be contacted for additional information about the program?

Please respond by email by January 31, 2014.