

AWARD	TITLE	Institution	EDI Webpage	Links	SUMMARY	TYPE	KEYWORDS	NOTES
	American Association of Sleep Medicine Foundation Diversity Supplement Grant	AASM	Additional Resources - Diversity-Specific Grants	https://foundation.aasm.org/awards-program/diversity-supplement-award/				
	Academic Pediatric Association Research in Academic Pediatrics Initiative on Diversity (RAPID) Research Grants	Academic Pediatric A	Additional Resources - Diversity-Specific Grants	https://www.academicpediatrics.org/programs-research/rapid/				
	American Heart Association Research Supplements to Promote Diversity in Science	American Heart Assoc	Additional Resources - Diversity-Specific Grants	https://www.heart.org/health-topics/research-research-researchers/american-heart-association-research-supplement-to-promote-diversity-in-science				
	Burrighs Wellcome Fund Postdoctoral Diversity Enrichment Program	Burrighs Wellcome	Additional Resources - Diversity-Specific Grants	https://www.burfund.org/funding-opportunities/Wellcome-Fund-Postdoctoral-Diversity-Enrichment-Program				
	Howard Hughes Medical Institute Hanna H. Gray Fellows Program	HHMI	Additional Resources - Diversity-Specific Grants	https://www.hhmi.org/programs/hanna-h-gray-fellows-program/overview				
	Lupus Research Alliance Administrative Supplements to Promote Diversity in Lupus Research	Lupus Research Alliance	Additional Resources - Diversity-Specific Grants	https://www.lupusresearch.org/wp-content/uploads/2018/12/2018-Diversity-Supplement-RAA_Final.pdf				
	National Institutes of Health Administrative Supplements to Recognize Excellence in Diversity, Equity, Inclusion, and Accessibility (DEIA) Mentorship	NIH	Additional Resources - Diversity-Specific Grants	https://grants.nih.gov/grants/guide/notice-files/NOTICE-DI-2019-001.html				
	National Institutes of Health Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) program	NIH	Additional Resources - Diversity-Specific Grants	https://www.nih.gov/biointegritystrategy/awards/MOSAIC/index				
	National Institutes of Health Mentored Career Development to Promote Diversity	NIH	Additional Resources - Diversity-Specific Grants	https://grants.nih.gov/grants/guide/notice-files/NOTICE-DI-2019-001.html				
	National Institutes of Health Research Supplements to Promote Diversity in Health-Related Research	NIH	Additional Resources - Diversity-Specific Grants	https://grants.nih.gov/grants/guide/notice-files/NOTICE-DI-2019-001.html				
	Robert Wood Johnson Foundation Harold Amos Medical Faculty Development Program	Robert Wood Johnson	Additional Resources - Diversity-Specific Grants	https://www.rwjf.org/about				

	Michigan Job Description - Diversity Statement	University of Michigan	Faculty Recruitment & Promotion		Michigan Medicine seeks to recruit and retain a diverse workforce as a reflection of our commitment to serve the diverse people of Michigan and to maintain the excellence of the University. We welcome applications from anyone who would bring additional dimensions to the University's research, teaching, and clinical mission, including women, members of minority groups, protected veterans, and individuals with disabilities. The Department of Internal Medicine, the University of Michigan as a whole, is committed to a policy of nondiscrimination and equal opportunity for all persons and will not discriminate against any individual because of race, color, national origin, age, marital status, sex, sexual orientation, gender identity, gender expression, disability, religion, height, weight, or veteran status. The University of Michigan is an Equal Employment Opportunity/Affirmative Action Employer.	program example
	Search Committee Best Practices - UWSDM Center for Health Equity, Diversity, and Inclusion	University of Washington	Faculty Recruitment & Promotion	http://www.washington.edu/diversity/diversity-statement http://www.washington.edu/diversity/faculty-advancement/ http://www.washington.edu/diversity/faculty-advancement/ http://depts.washington.edu/cehd/wp_content/uploads/2016/08/2016-2017-search-committee-best-practices.pdf	The UW Faculty Recruitment Initiative provides departments with supplemental funds to enhance faculty recruitment packages aims to build a diverse and inclusive faculty. Assessment of diversity is gleaned from the CV, not based upon the person's background (there have been awards for health sciences departments) *Greater Washington State Higher Education Recruitment Consortium (GWS HERC) University of Washington now collaborates effort to help institutions recruit diverse faculty and staff and assist dual-career couples seeking employment throughout the state* (UW, the Bill and Melinda Gates Foundation, Fred Hutchinson Cancer Research Center)	program example
3463709	Defining Clinical Effect for Hospital-based Pediatricians	Federal	Faculty Recruitment & Promotion, Institutional Resources Distribution		Every academic medical center aims for excellence inpatient care, teaching, and research; this includes quality and safe patient care, patient and family satisfaction, provider engagement and wellness, and cost-efficient utilization of resources. Optimal staffing schedules are important for achieving these aspirations. Creating an optimal-based physician staffing model has been problemmatic, because no universally agreed-upon method to measure physician work effort or productivity exists. Although non-time-based physician staff equality may be particularly challenging given the unpredictable variation in the clinical care workload of shifts. Metrics of physician work effort that have been used include measurement based on work relative unit (WRU), value measurement (ie, safety metrics, patient outcomes, and satisfaction), time-based work houring, hours on service per day, week, or budget-based (eg, number of physicians based on income with possible profitability). Metrics that have been developed to compare physician effort in ambulatory settings do not translate well to hospital-based services. Here we review various models used in neurology bedside work settings for a full-time equivalent (FTE) faculty member. These models are based on similar principles but vary in ways that may be unique to the specific settings. We present examples of how these approaches are used to address equity in physician staffing.	evaluation
	Diversity Effort CUSDM	CUSDM	Faculty Recruitment & Promotion, Mentorship, other contributions		<p>FACULTY INITIATIVES: Dean's support for minority faculty (D3PTE (NH cap) 3 years), Recruitment and Search Committee Strategies (updated unconscious bias training), Equity representatives, Search network (post), USCORE curriculum review, Colorado Consortium for Multiracial Diversity (Diversity Council), Senior (Recruitment, mentorship, educational programs), Faculty dialogues around microaggressions in the clinical setting (UCHealth led initiative, Children's Hospital Partnership), Departmental Diversity Leadership (Medicine, OB/GYN, Surgery, Radiology, Pediatrics, Otolaryngology), Center for Women's Health Research, WME, D3E collaboration (Dialogue with Women Professors, Partnerships around gender equity)</p> <p>GAIE INITIATIVES: Data collection (Annual program evaluation, including multicultural data), Recruitment strategies (DMAA national meeting - Surgery, Family Medicine, OB/GYN, Medicine, Pediatrics, Diversity Council, website, etc), C3 students are a great pipeline to programs), Coordinator training (Unconscious bias, holistic review), PD programming (Unconscious bias, microaggression, holistic review), Minority and Adult Resident Council (MARC), Second Year for Residents and Fellows, Consultation for programs (Resident experience, Rank and match issues, aftercare meeting)</p> <p>STUDENT FOCUSED INITIATIVES: Student groups (DMAA, NSCA, WCAE, PRISM, Regional MSMA meetings, national meeting), Recruitment (Admissions, MSMA, NAC, Pre-Health AAMC), Diversity Scholars (Dean's Distinguished, CU/Medicine, George Lopez Scholars), Events (Fourth Annual Die In, Diversity Matters Lunch and Learn, Student led programming), Mentorship and advising (Friedrich, OD programming), Curriculum Review of PE Cases, Post graduate review, "bold to examine and limit bias in curriculum, What happened and Why? - President's Diversity Award), Curriculum Reform (Health and Society Pillar - Health Equity, Health Disparities), Community advisory board to reform assessments by patients, Mentorship year to year learning</p>	program example
3435432	A Year in Review: Are diversity, equity, and inclusion initiatives fixing systemic barriers?	Neuran	Faculty Recruitment & Promotion, Mentorship, other contributions		Are current diversity, equity, and inclusion initiatives addressing systemic issues? This article highlights progress thus far and emphasizes the systemic and cultural shifts needed to support and retain historically excluded scientists	evaluation
	Diversity Efforts (Handout)	CUSDM	Institutional Resource Distribution			program example, data
	Required LOME Follow-up After April 2023 Status Report	CUSDM	Institutional Resource Distribution		Four items deemed satisfactory with a need for continued monitoring (Element 3.3 (Diversity/Equity) programs and partnerships), Element 5.11 (Study/Young/Strategic special/ rooms), Element 12.1 (Financial aid/debt management counseling/student educational debt), and Element 12.4 (Student access to health care services).	program example
	MGH DEI Details from Kila B	MGH	Institutional resource distribution		To summarize, there are 2 major initiatives that appear to be diversifying and advancing the scientific workforce. 1. They have a summer research program that aims to recruit URM and begin them on a scientific career path. There are multiple anecdotes from alumni who are now physician scientists in the full report. 2. They have faculty development awards specific for URM. They have awarded up to \$20,000 per faculty over 3 - 4 years. They said these awards have led to a 4-fold gain in grants to MGH	program example
2008203	The Health Equity Leadership Institute (HELI): Developing Workforce Capacity for Health Disparities Research	Journal of Clinical Investigation	Institutional resource distribution, mentorship, faculty recruitment and promotion		INTRODUCTION: Efforts to address health disparities and achieve health equity are critically dependent on the development of a diverse research workforce. However, many researchers from underrepresented backgrounds face challenges in advancing their careers, securing independent funding, and finding the mentorship needed to support their research. METHODS: Faculty from the University of Maryland at College Park and the University of Wisconsin-Madison developed and evaluated an intensive week-long research career development institute—the Health Equity Leadership Institute (HELI)—with the goal of increasing the number of underrepresented scholars who consider their ongoing commitment to health equity research. RESULTS: In 2020–2021, HELI brought 145 diverse scholars (78% from underrepresented backgrounds, 81% female) together to engage with each other and learn from supportive faculty. Overall, scholar feedback was highly positive on all survey items, with average agreement ratings of 4.4–4.8 based on a 5-point Likert scale. Eighty-five percent of scholars remain in academic positions. In their first three cohorts, 75% of HELI participants have been promoted and 23% have secured independent/federal funding. CONCLUSIONS: HELI includes an evidence-based curriculum to develop a diverse workforce for health equity research. For those institutions interested in implementing an institute to develop and support underrepresented early stage investigators, a resource toolbox is provided.	Health equity research, Career development, Health disparities, Diverse research workforce
2018222	An Innovative Program to Train Health Sciences Researchers to be Effective Clinical and Translational Research Mentors	Acad Med.	Mentorship		The creation of the Clinical Translational Science Awards for academic health sciences campuses in 2006 was implicitly accompanied by a call for a new paradigm of faculty development and mentoring to train the next generation of researchers and students in this new approach to research. Effective mentoring is critical to help early career investigators become successful, independent researchers, and a new approach to mentoring is vital to recruit, advance, and retain fellows and junior faculty engaged in clinical and translational research. However, in addition to the many rewards of mentoring, there are numerous substantive barriers to effective mentoring. These barriers include a lack of training in how to be a mentor, lack of time and structural and financial support for mentoring, competing personal, administrative, and clinical demands. The authors describe an innovative program, the University of California, San Francisco Mentor Development Program (MDP), established in 2006 and designed to train mid-career academic health sciences researchers to be more effective as clinical and translational research mentors. Using a framework for promoting innovations in academic research, they present the program's design, implementation, and mechanisms being used to evaluate and sustain the MDP. Specific details of the objectives and content of the MDP sessions are provided as well as evaluation criteria and a link to specific curriculum materials.	program example
3249230	Program Evaluation of the Research in Academic Pediatrics Initiative on Diversity (RAPID) Impact on Career Development and Professional Society Diversity	Acad Med.	Mentorship		<p>Purpose: Despite a demographic surge in U.S. minority children, pediatric workforce diversity has failed to keep pace. The study aim was to evaluate the Research in Academic Pediatric Initiative on Diversity (RAPID), a research-education program aimed at recruiting, retaining, and professionally advancing diverse early-career faculty in general pediatrics who are pursuing research careers.</p> <p>Method: RAPID includes the following components: small research grants, mentoring by nationally renowned senior investigator, mentoring and networking at an annual breakfast, an annual career-development conference, and monthly mentoring conference calls. Outcomes data from the first 5 years (2012–2017) of RAPID were analyzed. Data sources were Academic Pediatric Association (APA) membership data and post-conference, baseline, and end-of-program/follow-up surveys. Outcome measures included mentoring quality, presentations, publications, subsequent grants, impact on career success, conference ratings, and APA membership diversity.</p> <p>Results: For the 30 scholars from the first 4 cohorts, mean scores were 4.5 (1 = strongly agree) for RAPID helps in mentoring, developing research skills, and helping scholars feel more comfortable as underrepresented minority (URM) faculty. 78% delivered posters or posters presentations on their projects. They published 56 total articles and received a mean of 2.5 subsequent grants. Their mean score for RAPID "advancing my career by facilitating promotion or getting a job" was 4.6. The first 4 RAPID conferences were highly rated (mean scores = 4.2–4.8) and brought in 33 additional URM young investigators. Pre-RAPID, URM APA membership stagnated at 6% for 5 years. In RAPID's first year, URM APA membership rose to 8%, then to 20% by 2017 (83% increase; $P < .002$).</p> <p>Conclusions: RAPID Scholars generated multiple presentations and publications. RAPID mentoring and Conferences were highly rated. RAPID was associated with career advancement and increased professional society diversity. RAPID could serve as a national model for enhancing URM career development and professional society diversity.</p>	program example
16021276	The POD: A New Model for Mentoring Underrepresented Minority Faculty	Acad Med.	Mentorship		Mentoring, long recognized as a catalyst for successful careers, is particularly important to the career development of underrepresented minority (URM) faculty. In academic medicine, mentor-protégé relationships are uniquely threatened by increased clinical, research, and administrative demands, and an emphasis on scholarship over citizenship. New mentoring models are needed, and they should be adaptable to a medical school's unique structure and mission. The Peer-Oriented Diversity (POD) model, developed in 2002 by the authors and introduced at the College of Medicine at the University of Arkansas for Medical Sciences, is a targeted, multilevel mentoring prototype that is built on a solid research foundation and tailored to the unique needs of URM medical school faculty. The member's individual needs for guidance related to career goals, resources, and the content and interaction skills that are known to be critical to successful academic careers are targeted for development. The multilevel approach provides a unique network of peer and faculty mentors who provide site-specific career guidance. Also in the network are leaders in their fields who can provide scores to accurate information, academic predictions, and announcements of future resources or potential restrictions in academic medicine. Mentor commitments are clearly defined and time contributions are maximized. The POD model aims to promote retention and advance the careers of URM faculty by wrapping them in a protective cushion of interpersonal and intrapersonal support. The flexibility of the design allows for adaptation to any institution's unique structure and mission.	program example
3466709	Training mentors of clinical and translational research scholars: a randomized controlled trial	Acad Med.	Mentorship		<p>Purpose: To determine whether a structured mentoring curriculum improves research mentoring skills.</p> <p>Method: The authors conducted a randomized controlled trial (RCT) at 16 academic health centers (June 2020 to July 2021). Faculty mentors of trainees who were conducting clinical/translational research (20% of the time) were eligible. The intervention was an eight-hour, case-based curriculum focused on six mentoring competencies. The primary outcome was the change in mentors' self-reported pretest to posttest composite scores on the Mentoring Competency Assessment (MCA). Secondary outcomes included changes in the following: mentors' awareness as measured by their self-reported retrospective change in MCA scores, mentors' ratings of their mentees' competency as measured by MCA scores, and mentoring behaviors as reported by mentors and their mentees.</p> <p>Results: A total of 283 mentor-mentee pairs were enrolled; 144 mentors were randomized to the intervention; 139 to the control condition. Self-reported pre-/posttest change in MCA composite scores was higher for mentors in the intervention group compared with controls ($P < .002$). Retrospective change in MCA composite scores between the two groups were greater, and extended to all subscale scores ($P < .002$). More intervention-group mentors reported changes in their mentoring practices than control mentors ($P < .002$). Mentees working with intervention-group mentors reported larger changes in retrospective MCA pre-/posttest scores ($P = .003$) and more changes in their mentors' behavior ($P = .002$) than those paired with control mentors.</p> <p>Conclusions: This RCT demonstrates that a competency-based research mentor training program can improve mentors' skills.</p>	program example

2342590	Mentor networks in academic medicine: moving beyond a dyadic conception of mentoring for junior faculty researchers	Acad Med.	Mentorship	<p>Purpose: Career advancement for junior faculty members requires effective relationships. This review sought to generate a narrative understanding of mentoring from the perspective of a diverse national sample of faculty clinician-researchers who were all members of formal mentoring relationships.</p> <p>Method: Between February 2010 and August 2011, the authors conducted semistructured, in-depth telephone interviews with 100 former recipients of National Institutes of Health mentored career development awards and 28 of their mentors. Purposeful sampling ensured a diverse range of viewpoints. Multiple analysts thematically coded verbatim transcripts using qualitative data analysis software.</p> <p>Results: Three relevant themes emerged: (1) the numerous roles and behaviors associated with mentoring in academic medicine; (2) the improbability of finding a single person who could fulfill the diverse mentoring needs of another individual; and (3) the importance and composition of mentor networks. Many respondents described the need to cultivate more than one mentor. Several participants discussed the use of peer mentors, citing benefits such as shared resources and mutual learning. Female participants generally acknowledged the importance of having at least one female mentor. Some observed that their portfolios of mentors needed to evolve to remain effective.</p>	qualitative study		
2342589	Mentoring programs for underrepresented minority faculty in academic medicine centers: a systematic review of the literature	Acad Med.	Mentorship	<p>Purpose: Mentoring is critical for career advancement in academic medicine. However, underrepresented minority (URM) faculty often receive less mentoring than their nonminority peers. The authors conducted a comprehensive review of published mentoring programs designed for URM faculty to identify "promising practices."</p> <p>Method: Databases (PubMed, PsycINFO, ERIC, PsycLIT, Google Scholar, Dissertations Abstracts International, CINAHL, Sociological Abstracts) were searched for articles describing URM faculty mentoring programs. The IR-AM Framework (Reach, Effectiveness, Adoption, Implementation, and Maintenance) formed the model for analyzing programs.</p> <p>Results: The search identified 73 citations. Abstract reviews led to retrieval of 38 full-text articles for assessment. 18 articles describing 13 programs were selected for review. The reach of these programs ranged from 7 to 329 participants. Most evaluated programs on the basis of the number of grant applications and manuscripts produced or satisfaction with program content. Programs offered a variety of training experiences, and adoption was relatively high, with minor changes made for implementing the intended content. Barriers included time-restricted funding, inadequate evaluation due to low participation, significant time commitments required from mentors, and difficulty in addressing institutional challenges faced by URM faculty. Program sustainability was a concern because programs were supported through external funds, with minimal institutional support.</p> <p>Conclusions: Mentoring is an important part of academic medicine, particularly for URM faculty who often experience unique career challenges. Despite this need, relatively few publications exist to document mentoring programs for this population. Institutionally supported mentoring programs for URM faculty are needed, along with detailed plans for program sustainability.</p>	systematic review		
2370234	The Mentoring Competency Assessment: validation of a new instrument to evaluate skills of research mentors	Acad Med.	Mentorship	<p>Purpose: To determine the psychometric properties of the Mentoring Competency Assessment (MCA), a 26-item skills inventory that enables research mentors and mentees to evaluate six competencies of mentors: maintaining effective communication, aligning expectations, fostering understanding, addressing diversity, fostering independence, and promoting professional development.</p> <p>Method: In 2010, investigators administered the MCA to 285 mentor-mentee pairs from 15 universities participating in a trial of a mentoring curriculum for clinical and translational research mentors. The authors analyzed baseline MCA data to describe the instrument's psychometric properties.</p> <p>Results: Cronbach's alpha scores for the MCA showed reliability (internal consistency). The hypothesized model with its six latent constructs (competencies) resulted in an acceptable fit to the data. For the instrument completed by mentors, chi-square = 663.20, df = 284, P < .001; root mean square error of approximation (RMSEA) = 0.069 (90% CI: 0.062-0.076); comparative fit index (CFI) = 0.95; and Tucker-Lewis index (TLI) = 0.93. For the instrument completed by mentees, chi-square = 680.22, df = 284, P < .001; RMSEA = 0.080 (90% CI: 0.083-0.077); CFI = 0.91; and TLI = 0.93. The correlations among the six competencies were high: 0.45-0.87 for mentors, 0.58-0.92 for mentees. All parameter estimates for the individual items were significant. Standardized factor loadings ranged from 0.32 to 0.81 for mentors and 0.56 to 0.86 for mentees.</p> <p>Conclusions: The findings demonstrate that the MCA has reliability and validity. In addition, this study provides preliminary norms derived from a national sample of mentors and mentees.</p>	quantitative study		
3138203	Scholarly Collaboration, Mentorship, and Friendship: A New Model for Success in Academic Medicine	Acad Pediatr.	Mentorship	<p>Mentorship can be one of the most important factors in helping faculty members successfully advance academic careers. Finding effective mentorship, however, is extremely challenging and lack of mentorship may negatively impact productivity, promotion, and retention. Women, in particular, identify lack of mentorship as a major factor inhibiting career advancement, which in turn may be one element contributing to the significant gender gap existing in academic medicine. Here, we describe a model of mentoring drawn from our personal experiences at 4 female faculty that has resulted in a successful collaboration spanning nearly a decade. This model combines different elements of mentoring models previously described in the literature into a single model of network mentoring. Our model aims to promote longitudinal, collaborative scholarship around a broad common research theme, provide long-term mentorship focused on successfully navigating personal and academic hurdles, and create a form of mentorship for faculty at all academic ranks. Key to the success of our model: the Academic Scholarship through Personal Engagement with a Collaborative Team (ASPECT) Model, and 1) a shared overarching research goal that allows for multiple projects to be worked on over time; 2) regular, structured meetings; 3) a collaborative yet flexible arrangement with "group accountability"; and 4) a focus on the human connection. Our goal in writing this paper is to describe, in detail, lessons learned from our experiences and reflect on why and how this model may be effective in addressing mentoring gaps many faculty members, particularly women, experience.</p>	program example		
24816424	The Value of Speed Mentoring in a Pediatric Academic Organization	Acad Pediatr.	Mentorship	<p>Objective: A reliable and supportive mentor is indispensable to the career development of successful academic professionals. The Academic Pediatric Association (APA) utilized a speed mentoring format at the 2012 Pediatric Academic Societies meeting to enhance mentoring potential. We sought to evaluate the structure of the speed mentoring event and to determine the benefits and impact from the perspectives of the mentors and mentees.</p> <p>Methods: Only mentees were matched with 60 mentors with various topics. Each mentee met with 6 mentors for 10 minutes for each dyad. Participants were then asked to complete a survey 1 to 4 weeks after the event. Survey items included expectation, impact, and value of the experience along with potential for ongoing mentoring relationships.</p> <p>Results: Fifty-four (90%) of the 60 mentees and 52 (87%) of 60 of the mentors completed the evaluation. Mentees stated that the event allowed them to receive advice from multiple mentors in a short time period. Mentors appreciated that they gained new insights, reflected on their own careers, and were able to give back to their field. Both mentees and mentors agreed that the time was well spent, would participate again, and identified chemistry as a major factor in pursuing an ongoing relationship.</p> <p>Conclusion: This national speed mentoring event provided an innovative, fun, and time-efficient mechanism to establish connections, network, and determine whether chemistry existed for potential mentor-mentee relationships. Further study should evaluate whether it can be used in other venues and lead to the development of lasting mentor-mentee relationships.</p>	qualitative study	mentee; mentor; national organization; networking; speed mentoring	
23274417	A mentor training program improves mentoring competencies for researchers working with early career investigators from underrepresented backgrounds	Adv Health Sci Educ	Mentorship	<p>Mentoring is increasingly recognized as a critical element in supporting successful careers in academic research in medicine and related disciplines, particularly for trainees and early career investigators from underrepresented backgrounds. Mentoring is often executed ad hoc; there are limited programs to train faculty to become more effective mentors, and the few that exist have a dearth of empirical support of their impact. In 2013, we recruited 14 faculty from across the US engaged in HIV-related clinical research to participate in a 2-day Mentoring the Mentors workshop. The workshop included didactic and interactive content focused on a range of topics including: mentorship communication, leadership styles, emotional intelligence, understanding the impact of diversity (consciousness bias, microaggressions, discrimination, bias/minority), and specific tools and techniques for effective mentoring. Pre- and post-workshop online evaluations documented high rates of satisfaction with the program and statistically significant improvements in self-rated mentoring skills (ie, addressing diversity in mentoring, communication with mentees, aligning mentor-mentee expectations, as assessed via a validated mentoring competency tool). This is the first mentoring training program focused on enhancing mentors' abilities to nurture investigators of diversity, filling an important gap, and evaluation results offer support for its effectiveness. Results suggest a need for refinement and expansion of the program and for more comprehensive, long-term evaluation of distal mentoring outcomes for those who participate in the program.</p>	program example		
19246662	A call for training the trainers: focus on mentoring to enhance diversity in mental health research	Am J Public Health	Mentorship	<p>There is a widening disparity between the proportion of ethnic minority Americans in the population and the number of researchers from these minority groups. One major obstacle in this arena relates to a dearth of mentors for such trainees. The present academic settings are not optimal for development and sustenance of research mentors, especially for mentees from underrepresented minority ethnic groups. Mentoring skills can and should be evaluated and enhanced. Universities, medical schools, and funding agencies need to join hands and implement national- and local-level programs to help develop and reward mentors of junior scientists from ethnic minority groups.</p>	call to action		
30081899	Independent investigator incubator (I ³): a comprehensive mentorship program to hasten productive research careers for junior faculty	BMC Med Educ.	Mentorship	<p>Background: In the highly competitive environment of academic medicine, junior faculty investigators face high attrition rates due to challenges in finding effective mentorship, securing grant funding, and obtaining resources to support their career development and research productivity. The purpose of this study was to describe the centralized, cost-sharing design of the independent investigator incubator (I³) program as a novel approach to junior faculty mentoring and to evaluate quantitative outcomes for program improvement.</p> <p>Methods: In September 2014, the I³ pilot program, a comprehensive mentorship program targeting junior faculty pursuing research careers, was launched. Participants included junior faculty during the crucial first three years of their research careers or during their transition from career development awards to more independent research. Following initial screening, the 13 mentees were paired with a senior faculty "super-mentor" with expertise in either basic science or clinical research. Mentees were provided with robust transitional one-on-one mentoring, targeted feedback from a super-mentor review committee, as well as biostatistical and grant writing support. To assess the effectiveness of the I³ program, we tracked outcome measures via baseline and 12-month mentee surveys. Data collected assessed program diversity, mentee self-assessments, evaluation of the mentoring relationship, scholarship and productivity metrics. Raw data were analyzed using a paired t-test in Excel (P < 0.05).</p> <p>Results: Results of the baseline mentee self-assessment survey found that the 13 mentees indicated common "barrier deficits" including navigating the organizational and institutional culture, clear direction in achieving promotion and tenure, among others. When baseline mentee survey responses were compared to 12-month responses, we identified strong "perceived growth" in categories such as Research and Professional Skills and Career Development Skills. Further, productivity metrics at 12 months revealed that roughly 80% of 13 mentees successfully published a manuscript(s). The I³ program has helped generate roughly \$12.1 million dollars in investigator-initiated funding after two years in the program.</p> <p>Conclusion: The I³ program allows for shared costs between institutions and increased availability of successful subject matter experts. Study results imply that the I³ mentoring program provides transformative mentorship for junior faculty. Using our findings, we developed courses and an annual "snapshot" of mentee performance for mentors.</p>	program example	junior faculty; Mentoring; Professional Development; Translational research	
31502080	Mentoring as an intervention to promote gender equity in academic medicine: a systematic review	BMC Open	Mentorship	<p>Background: Mentoring is frequently suggested as an intervention to address gender inequalities in the workplace.</p> <p>Objectives: To systematically review evidence published since a definitive review in 2006 on the effectiveness of mentoring interventions aimed at achieving gender equality in academic medicine.</p> <p>Design: Systematic Review, using the Template for Intervention Description and Replication as a template for data extraction and synthesis.</p> <p>Sample: Studies were included if they described a specific mentoring intervention in a medical school or analogous academic healthcare organization and included results from an evaluation of the intervention.</p> <p>Eligibility criteria: Mentoring was defined as (1) a formally organized intervention entailing a supportive relationship between a mentor, defined as a more senior/experienced person and a mentee defined as a more junior/less experienced person; (2) mentoring intervention involved academic career support; (3) the mentoring relationship was outside the management or supervision of performance and was defined by contact over an extended period of time.</p> <p>Outcome: The impact of mentoring was usually reported at the level of individual participants, for example, satisfaction and well-being or self-reported career progression. We sought evidence of impact on gender equality via reports of organization-level effectiveness, of promotion or retention, pay and academic performance of female staff.</p> <p>Results: We identified 20 publications: 8 review articles, 20 primary observational studies and 4 randomised controlled trials. A further 19 discussed mentoring in relation to gender but did not meet our eligibility criteria. The methodology used, and the structures and processes reported at conducting mentoring, varied greatly. We identified that mentoring is popular with many who receive it; however, we found no robust evidence of effectiveness in reducing gender inequalities. Primary research used weak evaluation designs.</p> <p>Conclusions: Mentoring is a complex intervention. Future evaluations should adopt standardised approaches used in applied health research to the design and evaluation of effectiveness and cost-effectiveness.</p>	systematic review	human resource management; medical education & training; organizational development; statistics & research methods	
22029808	Evaluating Research Mentors Working in the Area of Clinical Translational Science: A Review of the Literature	Clin Transl Sci.	Mentorship	<p>The goal of this paper is to review the evaluation of mentors with a focus on training new investigators in clinical translational science. These scholars include physicians and Ph.D. scientists who are generally assistant professors in clinical departments. This white paper is one of a series of articles focused on the programmatic elements of effective mentoring practices and the "current state of the art." Evaluating mentor performance and providing formative feedback can lead to stronger mentoring and ultimately lead to increased success of new clinical and translational investigators. While there is general agreement that mentor evaluation can be helpful, the process is difficult. Trainees are reluctant to share negative experiences and to rate their mentors. Mentors are not sure they want to be evaluated. Program leaders are not sure how to effectively use the information. This white paper provides metrics, mentor and program leader with new perspectives on mentor evaluation and ideas for future research.</p>	literature review		

2221226	Identifying and Aligning Expectations in a Mentoring Relationship	Clin Transl Sci	Mentorship			The mentoring relationship between a scholar and their primary mentor is a core feature of research training. Anecdotal evidence suggests this relationship is adversely affected when scholar and mentor expectations are not aligned. We examined three questions: (1) What is the value in assuming that the expectations of scholars and mentors are mutually identified and aligned? (2) What types of programmatic interventions facilitate this process? (3) What types of expectations are important to identify and align? We addressed these questions through a systematic literature review. Focus group interviews of mentees and scholars, a survey of Clinical and Translational Science Award (CTSA) K12 program directors, and review of formal programmatic mechanisms used by K12 programs. We found broad support for the importance of identifying and aligning the expectations of scholars and mentors and evidence that mentoring committees, agreements, and training programs facilitate this process. These tools focus on aligning expectations with respect to the scholar's research, education, professional development and career advancement as well as support, communication, and personal conduct and interpersonal relations. Research is needed to assess best the efficacy of formal alignment activities.	systematic review		
2237651	Evaluating and Giving Feedback to Mentors: New Evidence-Based Approaches	Clin Transl Sci	Mentorship			A comprehensive mentoring program includes a variety of components. One of the most important is the ongoing assessment of and feedback to mentors. Scholars need strong active mentors who have the expertise, disposition, motivation, skills, and the ability to accept feedback and to adjust their mentoring style. Assessing the effectiveness of a given mentor is no easy task. Variability in learning needs and academic goals among scholars makes it difficult to develop a single evaluation instrument or a standardized procedure for evaluating mentors. Scholars, mentors, and program leaders are often reluctant to conduct formal evaluations, as there are no commonly accepted measures. The process of giving feedback is often difficult and there is limited empirical data on efficacy. This article presents a new and innovative six-component approach to mentor evaluation that includes the assessment of mentor effectiveness, peer learning and mentor training, scholar advocacy, mentee-mentor expectations, mentor self-reflection, and mentee evaluation of their mentor.	multicenter study		
3403269	Introducing the MAVEN Leadership Training Initiative to diversify the scientific workforce	Elife	Mentorship			Addressing gender and racial-ethnic disparities at all career stages is a priority for the research community. In this article, we focus on efforts to encourage mid-career women, particularly women of color, to move into leadership positions in science and science policy. We highlight the need to strengthen leadership skills for the critical period immediately following promotion to associate/tenured professor - when formal career development efforts taper off while institutional demands escalate - and describe a program called MAVEN that has been designed to teach leadership skills to mid-career women scientists, particularly those from underrepresented groups.	program example		
https://doi.org/10.1016/j.jamcoll.2021.10.004	Mentorship in academic medicine: Competitive advantage while reducing burnout?	Health Sciences Review	Mentorship			Increased regulatory oversight, mandated use of electronic medical records, and economic constraints on health-care and research confront academic medical institutions while the core requirements for productivity in research, teaching and excellence and equity in clinical care remain. "Burnout" is an important challenge to healthcare and reflects the alienation, cynicism and decreased productivity of responsibilities in medicine that detract from individual career engagement. Mentorship is advantageous in the successful navigation of careers in academic medicine, notably for individuals in need of specialized knowledge, skills or psychological support to accelerate their development. A formalized mentorship program provides individuals with the guidance and support needed for career development and may alleviate some of the alienation associated with burnout. The interdisciplinary nature of biomedical research supports the use of multiple mentors to provide diverse perspectives for trainees and junior faculty. Mentorship programs require institutional engagement with clear articulation of institutional goals and values as well as financial and political support. Such programs will identify and train potential leaders throughout an organization's hierarchy, support innovation and faculty within the organization, increase job satisfaction and retention, and, as a result, enhance the institution's competitive position. Notably, relationships developed within a supportive environment may also mitigate the development of professional burnout.	review	Burnout leadership promotion mentorship program research innovation job satisfaction retention	
3434079	Mentoring New and Early-Stage Investigators and Underrepresented Minority Faculty for Research Success in Health-Related Fields: An Integrative Literature Review (2010-2020)	Int J Environ Res Public Health	Mentorship			Mentoring to develop research skills is an important strategy for facilitating faculty success. The purpose of this study was to conduct an integrative literature review to examine the barriers and facilitators to mentoring in health-related research, particularly for three categories: new investigators (NI), early-stage investigators (ESI) and underrepresented minority faculty (URMF). PubMed, CINAHL and PsycINFO were searched for papers published in English from 2010 to 2020, and 46 papers were reviewed. Most papers recommended having mentors and many recommended assessing baseline research skills. Barriers and facilitators were both individual and institutional. Individual barriers mentioned most frequently were a lack of time and finding work-life balance. URMF mentioned barriers related to bias, discrimination and isolation. Institutional barriers included a lack of access to resources, heavy teaching and service loads, URMF experienced institutional barriers such as devaluation of experience or expertise. Individual facilitators were subdivided and included writing and synthesis as technical skills, networking and collaborating as interpersonal skills, and accountability, leadership, time management, and resilience/ grit as personal skills. Institutional facilitators included access to mentoring, professional development opportunities, and workload assigned to research. Advocacy for diversity and cultural humility were included as unique interpersonal and institutional facilitators for URMF. Several overlapping and unique barriers and facilitators to mentoring for research success for NI, ESI and URMF in the health-related disciplines are presented.	literature review	Diversity early career mentorship development new faculty underrepresented minority faculty	
3403205	Mentoring as a Buffer for the Systemic Impact of Racism and COVID-19 among Diverse Faculty within Academic Medicine	Int J Environ Res Public Health	Mentorship			Within this article, we explore the dual impact of two pandemics, racism and COVID-19, on the career and psychological well-being of diverse faculty within academic medicine. First, we present a discussion of the history of racism in academic medicine and the identification of racial disparities due to the COVID-19 pandemic. As a result of the systemic racism and COVID-19, the outlook for the recruitment, retention, and advancement of diverse faculty and leaders within academic medicine is at risk. While mentoring is known to have benefits for career and personal development, we focus on the unique and often unacknowledged role that mentoring can play as a buffer for women and people of color, especially when working in institutions that lack diversity and are now struggling with the systemic racism and COVID-19. We also discuss the implications of acknowledging mentoring as a buffer for future leadership development, research, and programs within academic medicine and health professions.		COVID-19 academic medicine diversity mentoring racism	
31660227	Diversity and the next-generation physician-scientist	Clin Transl Sci	Mentorship			The fields in which physician-scientists work have much to gain by including people with different backgrounds and unique experiences in the search for new knowledge and solutions for existing problems. The next generation of physician-scientists will be from the millennial and Gen Z generations, which are far more diverse than previous generations and have the potential to diversify the workforce. Yet, many systemic and cultural barriers exist to limit the entry and advancement of physician-scientists from underrepresented backgrounds. Thus, while addressing the growing physician-scientist workforce has been a major focus of the last four decades, we argue that promoting diversity in the workforce and reducing barriers for underrepresented groups should also be a priority. Here, we highlight many underrepresented groups that deserve attention and provide suggestions for how to support their inclusion in the physician-scientist workforce.	editorial	Diversity Physician-scientist	
3352959	Mentorship of Underrepresented Physicians and Trainees in Academic Medicine: A Systematic Review	J Gen Intern Med	Mentorship			Background: Though the USA is becoming increasingly diverse, the physician workforce contains a disproportionately low number of physicians from racial and ethnic groups that are described as underrepresented in medicine (URM). Mentorship has been proposed as one way to improve the retention and experiences of URM physicians and trainees. The objective of this systematic review was to identify and describe mentoring programs for URM physicians in academic medicine and to describe important themes from existing literature that can aid in the development of URM mentorship programs. Methods: The authors searched PubMed, PsycINFO, EBSC, and Cochrane databases, and included original publications that described a US mentorship program involving academic medical doctors at the faculty or trainee level and were created for physicians who are URM or provided results stratified by race/ethnicity. Results: Our search yielded 4,548 unique citations and 33 publications met our inclusion criteria. Frequently cited objectives of these programs were to improve research skills, to diversify representation in specific fields, and to recruit and retain URM participants. Subjective outcomes were primarily participant satisfaction with the program and/or work climate. The dyad model of mentoring was the most common, though several novel models were also described. Program evaluations were primarily subjective and reported high satisfaction, although some reported objective outcomes including publications, retention, and promotion. All showed satisfactory outcomes for the mentorship programs. Discussion: This review describes a range of successful mentoring programs for URM physicians. Our recommendations based on our review include the importance of institutional support for diversity, tailoring programs to local needs and resources, training mentors, and utilizing URM and non-URM members.	systematic review	mentorship underrepresented in medicine	
3611759	Mentoring Faculty in Academic Medicine: A New Paradigm?	J Gen Intern Med	Mentorship			In this paper, we discuss an alternative structure and a broader vision for mentoring of medical faculty. While there is recognition of the need for mentoring for professional advancement in academic medicine, there is a dearth of research on the process and outcomes of mentoring medical faculty. Supported by the literature and our experience with both formal dyadic and group peer mentoring programs as part of our Federally Funded National Center of Leadership in Academic Medicine, we assert that a group peer, collaborative mentoring model founded on principles of adult education is one that is likely to be an effective and predictably reliable form of mentoring for both women and men in academic medicine.			
3264152	Peer mentoring for professional and personal growth in academic medicine	J Hospitl Med	Mentorship			Mentorship is a critical component of career development, particularly in academic medicine. Peer mentorship, which does not adhere to traditional hierarchies, is perhaps more accessible for underrepresented groups, including women and minorities. In this article, we review various models of peer mentorship, highlighting their respective advantages and disadvantages. Structured peer mentorship groups exist in different settings, such as those created under the auspices of formal career development programs, part of training and/or programs, or through professional societies. Social media has further enabled the establishment of informal peer mentorship through participatory online groups, blogs, and forums that provide platforms for peer-to-peer advice and support. Such groups can evolve rapidly to address changing conditions, as demonstrated by physician listservs and Facebook groups related to the COVID-19 pandemic. Peer mentorship can also be found among colleagues brought together through a common location, interest, or goal, and typically these relationships are informal and fluid. Finally, we highlight how our experience with intentional formation of a small peer mentoring group that provides structure and a safe space for professional and social-emotional growth and support. In order to maximize impact and functionality, this model of peer mentorship requires commitment among peers and a more formalized process than many other peer mentoring models, accounting for group dynamics and the unique needs of the members. When done successfully, the depth of these mentoring relationships can produce mutual benefits for individuals with careers in academic medicine including, but not limited to, those from underrepresented backgrounds.	review	academic medical careers biomedical research education medical professional interpersonal relations	
3252043	Critical choices in mentoring the next generation of academic pediatricians: nine circles of hell or salvation?	J Pediatr	Mentorship			THE CHALLENGE OF MENTORING, GOOD MENTORING, BAD MENTORING, AND MENTOR'S HELL: STRATEGIES TO AVOID MENTORING HELL;			
32369152	Mentoring Millennials	JAMA	Mentorship			personal narrative	"a peace pf my mind?"		
3695490	Mentoring in academic medicine: a systematic review	JAMA	Mentorship			Context: Mentorship, as a partnership in personal and professional growth and development, is central to academic medicine, but it is challenged by increased clinical, administrative, research, and other educational demands on medical faculty. Therefore, evidence for the value of mentoring needs to be evaluated. Objective: To systematically review the evidence about the prevalence of mentorship and its relationship to career development. Data sources: MEDLINE, Current Contents, Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects, Cochrane Central Register of Controlled Trials, PsycINFO, and Scopus databases from the earliest available date to May 2006. Study selection and data extraction: We identified all studies evaluating the effect of mentoring on career choice and academic advancement among medical students and physicians. Minimum inclusion criteria were a description of the study population and availability of extractable data. No restrictions were placed on study methods or language. Data synthesis: The literature search identified 3640 citations. Review of abstracts led to retrieval of 342 full-text articles for assessment; 42 articles describing 39 studies were selected for review. Of these, 34 (87%) were cross-sectional/retrospective surveys with small sample size and response rates ranging from 5% to 99%. One case-control study nested in a survey used a comparison group that had not received mentoring, and 1 cohort study had a small sample size and a single loss to follow-up. Less than 50% of medical students and in some fields less than 20% of faculty members had a mentor. Women perceived that they had more difficulty finding mentors than their colleagues who are men. Mentorship was reported to have an important influence on personal development, career guidance, career choice, and research productivity, including publications and grant success. Conclusions: Mentorship is perceived as an important part of academic medicine, but the evidence to support this perception is lacking. Practical recommendations on mentoring in medicine that are evidence-based will require studies using more rigorous methods, addressing contextual issues, and using cross-disciplinary approaches.	systematic review		
24042336	Intellectual Faculty diversity: a new landscape for academic pediatricians in the 21st century	JAMA Pediatr	Mentorship				call to action		

