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PERSPECTIVES

Faculty Tenure in US Academic Medical Institutions: A Critical Review of Controversy and Debate

Anish Bhardwaj

Department of Neurology, University of Texas Medical Branch (UTMB), Galveston, TX, USA

Correspondence: Anish Bhardwaj, Department of Neurology, 9.128 John Sealy Annex, Route 0539, 301 University Blvd, University of Texas Medical Branch (UTMB), Galveston, TX, 77554, USA, Tel +1-409-772-8068, Email anbhardw@UTMB.EDU

Abstract: For over a century, tenure has been a foundational tenet in American academic institutions, being synonymous with the concept of academic freedom. This concept has been extrapolated to US Academic Medical Institutions (AMIs) in multiple domains including teaching and research, sharing opinions as private citizens and on matters of institutional governance as well as providing clinicians, educators, scientists, and scholars opportunities for secure employment. In recent decades, however, there has been a steady erosion of the tenure system in US AMIs, and constituents suggest that this archaic construct would benefit from reform or even its complete abolition. The present treatise offers a historical perspective on the tenure system in AMIs, reviews the enthusiastic debate and controversies including the concomitant advantages, disadvantages, challenges, and the underlying reasons for its decline over the last few decades, and expounds on the ramifications of such trends. This exposition also discusses alternatives and reform to the tenure system which, if implemented, would still guarantee freedom in academic medicine.

Keywords: academic freedom, faculty rights, tenure reform, academic medical institutions

Historical Perspective and Precedent

The concept of tenure and academic freedom dates back to antiquity and is deeply rooted in the credos of Greek and Roman philosophers (Aristotle, Plato, Socrates, Cicero), who conceived of their respective educational academies as communities of thinkers "drawn together in the logical quest for truth" and who were "dedicated to the art of critical debate" with an emphasis on intellectual emancipation among educators and learners, shared reflection, and collective responsibility.[1–3] These epitomes of academic freedom laid the groundwork for the concept of "individual self-expression".[1] Subsequently, these foundational constructs were extrapolated to European universities (Oxford, Cambridge, Paris) with incorporation of a more formal guarantee of faculty self-expression in many academic disciplines (eg, Law, Mathematics, Medicine), even in the era of edicts by supreme sovereigns and rigid social status. With the colonization of North America by the British came an extension of this concept of academic freedom to institutions of higher learning such as William and Mary, Harvard, and Yale with time-specified contractual agreements for faculty appointments. Faculty at US universities deemed tenure the definitive guarantor of unrestricted speech in research and education that safeguarded from gratuitous imposition by institutional administration pertaining to expression of disconcerting, controversial, and ostracized ideas and opinions. Formed in 1915 by a select few influential professors from the Johns Hopkins University, the *American Association of University Professors* (AAUP) codified a set of regulations pertaining to the award of tenure and its application on campuses throughout the US which led to more pervasive adoption of the tenure system in US academic institutions between 1930–1950.[1,3–5]

The prerogative of tenure to ensure academic freedom was put to the test during the 1950s era of "McCarthyism" when US citizens were accused of spreading communistic ideology on US university campuses. Tenure proved the first line of defense against politically motivated termination of employment of university professors.[1,3] With tenure providing

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significant protection against political persecution for faculty speech, research, and publication of controversial content, the way was clear for academics to be involved in the Civil Rights movement and desegregation in US universities and colleges. Meanwhile, the tradition of tenure became more formalized with the first version of the *Recommended Institutional Regulations on Academic Freedom and Tenure* published in 1957 and continuously updated with the latest report being in 2013.[3]

Through the decades, the tenure system has stood the test of time and assumed the aura of a well-respected tradition. This framework has served as the benchmark against which most scholars and faculty have gauged their professional success. Tenure signifies a bilateral commitment between the faculty member and the institution—ie, the faculty member provides high-quality service(s) and dedication to the institutional academic mission(s), and reciprocally, the institution demonstrates its commitment by providing the rights and privileges commensurate with the faculty member's academic rank and status.[1–5] The *Statement of Principles on Academic Freedom and Tenure* by the AAUP published in 1940 underscores the following key elements:[3–6] 1) autonomy in teaching, research, and expression of opinions without extraneous pressures, control, or fear of retribution, or suppression by institutional leadership, political influencers, and donors, even if the scholar's pursuits are ostracized or economically wasteful; 2) a sufficient degree of pecuniary stability to attract and retain qualified individuals in the profession. The overarching premise is for the benefit of the "greater good" of US citizens and humanity by pursuing the unfettered search for truth and its exposition.[3–6] This literature-based descriptive review provides a 1) highlights the enthusiastic debate and controversies including the concomitant advantages, and disadvantages; 2) posits the underlying reasons for its decline over the last few decades and expounds on the ramifications of such trends; and 3) discusses alternatives to the tenure system which, if implemented, would still guarantee freedom in academic medicine.

Benchmarks for Award and Continuation of Tenure

The tenure "track" can be long and arduous in academic medicine irrespective of faculty prototypes—clinicians, researchers, educators, scholars. Typically, joining an academic faculty requires 4 years of post-baccalaureate medical school, 4–6 years of residency training, and 1–4 years of postdoctoral subspecialty fellowship training for physicians and physician-scientists totaling between 13 and 15 years of education and teaching experience required for securing academic tenure.[7,8] Most AMIs model grant tenure on AAUP guidelines requiring a probationary period (usually not longer than 8 years) following the appointment of faculty on the tenure track. However, there is a considerable variability in the criteria for the award of tenure across US AMIs, and comparisons between institutions can often be challenging. In keeping with tradition and precedent, typically clinicians and basic science researchers are expected to achieve excellence in the domains of clinical practice, research and scholarship, teaching and training ("tripartite academic mission") with the goal of rising through the academic faculty ranks in the tenure track (ie, Instructor, Assistant Professor, Associate Professor, and Professor). Furthermore, to obtain successful promotion and award of tenure, specific milestone-driven accomplishments centered on peer recognition (eg, regional, national, or international reputation via presentations and invited talks); original peer reviewed publications; and an extramural funding record) are evaluated by the departmental and institutional *Appointment, Promotion*, and *Tenure* (APT) committees over a defined period through a rigorous peer review process commensurate with the AMI's policies, procedures, and by-laws. Additionally of critical importance is service to the institutional or academic community at regional, national, and international levels through participation and leadership on professional committees, governance, and editorial boards.

Evaluation of most tenured faculty is typically on an annual basis by their divisional or department heads and deans. A mandatory post-tenure review process occurs in most AMIs focused on evaluating continued accomplishments in the institution's "tripartite missions" and service domains. Tenure is a contractually enforceable institutional agreement relating to the duration of a faculty appointment. However, removal of tenured faculty from their positions can occur for a variety of reasons. The AAUP addresses this possibility in some detail: dismissal or termination of an appointment with continuous tenure, or of a probationary or special appointment before the end of a specified term may be effected by the institution only for adequate cause that encompasses the following: (1) financial exigency ("an imminent financial crisis which threatens the survival of the institution") that warrants discontinuance of a program or department not based on monetary constraints eg, not aligned with an institutional strategic plan; (2) termination for medical reasons; (3) moral

turpitude ("comportment that would conjure condemnation by the academic community"); and, (4) subpar performance in professional teaching or research responsibilities. Termination and revocation of tenure for any one of these reasons follows due peer review process with a meticulous institutional inquiry.[1,3,6]

Evolving Trends in the Tenure System

In recent decades, there has been a steady and dramatic decline in tenure and tenure-track appointments of full-time faculty at US universities (39% in 1987 to 24% in 2021). These trends parallel those in the US AMIs. For example, full-time PhD faculty who were tenured or on the tenure-track decreased from 78% in 1982 to 64% 2022 with a rapid increase in full-time faculty with non-tenure track appointments (17% to 32%).[2] There has been a concomitant decline (59% to 18% in the same period) of full-time clinical faculty in tenured positions.[2] Utilizing a 2022 survey of 118 US medical schools with review of Promotion and Tenure policies, the study demonstrated that although tenure systems remain well entrenched at US medical schools, the percentage of full-time faculty on tenured or tenure-eligible tracks has declined over the last four decades. Furthermore, significant gender, race and ethnic disparities were uncovered in tenure-eligible faculty appointments, corroborating previous reports.[9–12] The underlying causal factors for these trends are multifactorial including corporatization with the burgeoning of large healthcare systems, financialization of medical education, the pecuniary burden of state appropriations for supporting universities, and clinical enterprise representing the most robust revenue stream for AMIs to fulfill all other academic missions.[7,8] Several US states—eg Texas, North Dakota, Louisiana, Florida, and Iowa—are actively attempting to ban tenure[13] from their institutions of higher learning.[14]

Trends suggest that many older US AMIs have abandoned tenure due to its detrimental effects and newer AMIs are modulating or not instituting a tenure system at all.[15,16] At several AMIs there has been a change in basic assumptions in that they have instituted a tenure and non-tenure system with multiple sub-tracks. Such a multi-tiered system often creates a divide among faculty members whereby only tenured faculty can serve in certain institutional committees or be involved in faculty governance. This can exacerbate the divide between basic science faculty on the tenure-track and clinicians who are mostly on the non-tenure or clinical track and can deter effective collaboration among faculty across the spectrum of mission-defined prototypes. Many AMIs have instigated a manifold track system (ie, non-tenure track; clinical, research, and educator tracks) to underscore excellence in a unified primary academic mission for archetypical clinicians, researchers, or educators. This change in basic assumptions is becoming increasingly common because of emphasis on revenue-generating activities focused on clinical productivity, as well as resource constraints that include both monetary support and protected time for research and teaching for clinicians. Repercussions of such an alteration has been a discernable diminution in clinician–scientists as an indispensable important subgroup that many depict this archetype as a "dying breed".[7,8,17] Similarly, the conventional archetypal "triple threat" (with excellence in all three academic missions) is in danger of becoming extinct with discovery, innovation, and teaching being given less importance.[17] Appointments as "adjunct" faculty or those on the "non-clinical track" are becoming increasingly common and are typically courtesy (ie, without salary), time-limited appointments, particularly for community physicians who desire to maintain an academic affiliation.[18–21]

Support for and Case Against Tenure

As per the original intent of tenure, its advantages include safeguarding academic freedom, ensuring academic accountability, augmenting a shared commitment towards institutional community, providing expertise, stability and directional growth for academic programs, ensuring constancy and security of employment for faculty, fortifying long-term faculty commitment, enriching faculty as well as student and trainee recruitment, and heightening institutional stature (Figure 1).[1–5]

Disadvantages and challenges for the tenure system include augmenting ineptness, academic sloth, and complacency ("Dead Wood" phenomenon) following the award of tenure, making employment termination exceedingly difficult, incurring a heavier financial burden, accentuating resistance to change with impedance of innovation, weak periodic post-tenure review, indefinite continuation of tenure status without retirement, unclear or inconsistent application of policies or procedures as well as potential for discrimination (gender, race, etc.) in awarding tenure. Many such cases result in tenure appeals and legal proceedings and may result in discrimination in the award of tenure (Figure 2).[10–12]

Figure 1 Advantages of tenure system in AMIs.

Other challenges and disadvantages of the tenure-track system include the following: 1) AMIs tend to favor extramural funding (especially federal with high indirect costs) and grantsmanship over educational mission for the award of tenure. With a strict timeline toward meeting the "tenure-clock", there is an implicit shift from quality to quantity with potential stifling of innovation and creativity in research endeavors with resulting compromise of the educational mission; 2) diminished productivity of faculty after being granted tenure because the incentive to perform at a high level is significantly reduced leading to complacency; 3) financial burden on the institution of having to fulfill financial obligations and commitment of large compensation portfolio without any discernible end date because of the elimination of age limits for retirement commensurate with the *Age Discrimination in Employment Act*, which in effect is essentially having a guaranteed job for life even for part-time faculty; 4) lack of incentive to remain productive with a mandatory but weak post-tenure review process coupled with non-punitive annual formal evaluations.[1,3–5] As alluded to above, even a post-tenure review deemed as "does not meet expectations" requires a protracted process of remediation and lingering corrective course of action and does not allow for automatic revocation of tenure status; 5) the onerous task of terminating a tenured faculty member unless there are violations of the institutional code of ethics (eg, sexual harassment, discriminatory behaviors, repeat offenders under the rubric of professionalism).[1]

Economic Constraints and Tenure

The financial corollaries of the tenure system in AMIs warrant closer consideration. US healthcare costs continue to soar with an exponential escalation over the past few decades (~18% of gross national product)[7,8,22] and with pervasive implications, exerting a colossal burden on myriad stakeholders (patients and their families, healthcare providers, state

Figure 2 Disadvantages and challenges of tenure system in AMIs.

and federal governments, medical schools, and AMIs). Heightening the matter is mounting administrative costs (~20–30% of all healthcare costs),[22] and ever-diminishing reimbursements by the third-party payer system. Principal revenue streams for AMIs include clinical services, research grants (eg, federal, foundations, and contracts), philanthropic support (ie, gifts and endowments), tuition fees, and institutional and state appropriations (Figure 3). Of these streams, clinical services are the most robust and pliable revenue source for an AMI's budget representing a major portion of cross-subsidy for overall institutional missions and programs. However, most AMIs have razor-thin contribution margins from clinical revenue. Research revenue emanates from federal sources like the National Institutes of Health (NIH) with fluctuations in funding growth; both the current federal deficit and political divisions continue to cloud and influence the NIH budget. The NIH pay cap requires institutional cost-sharing for faculty with salaries above this threshold, which frequently includes senior tenured faculty. Furthermore, there are issues related to indirect cost recoveries (facilities and administration) such as developing and maintaining research programs (eg, protected time for faculty, unfunded as well as startup costs for new recruits and bridge funding for research, facilities maintenance, depreciation costs, and supporting research core facilities).

Typically, state appropriation and tuition support the core educational mission of medical schools, their basic administrative and infrastructure costs, and are typically the primary source for department-based budget allocation. State budget deficits have led to reduced support to AMIs from public and state universities[7,8] and is now negligible as a subsidy for teaching and training missions or in bridging shortfalls in research funding. There are limitations in mitigating cuts to the educational mission via generation of additional tuition revenue because of restraints on increasing tuition and student debt-load coupled with a finite medical school class size. This culminates in faculty being under unrelenting strain to meet their compensation via extramural research grants and clinical undertakings. Consequently, the

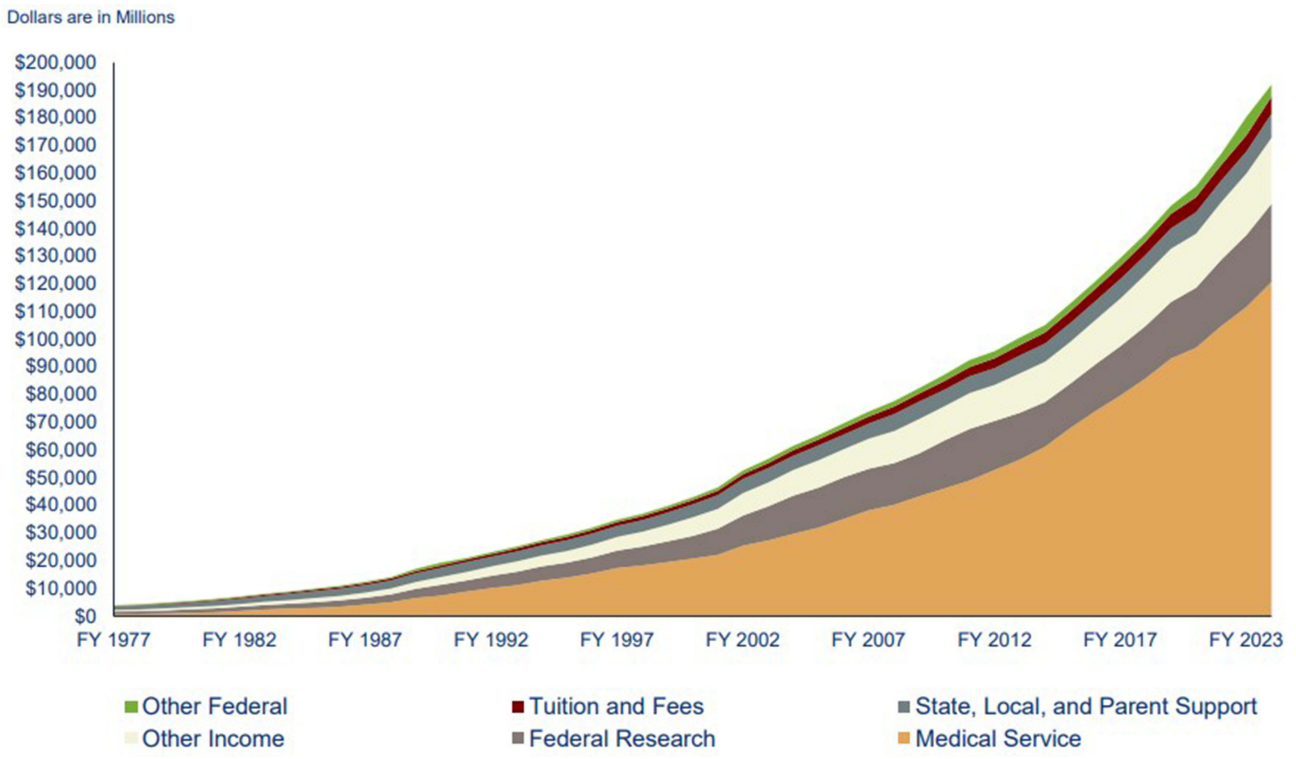

Figure 3 Revenue by source for medical schools with full accreditation, FY 1977 through FY 2023. Reproduced with permission from AAMC.org. Data and Reports. IV. Revenue b Source, FY 1977 through FY 2023. LCME I-A Annual Financial Questionnaire © 2024 Association of American Medical Colleges. Available from: https://www.aamc.org/search?keys=Revenue%20by%20source%20for%20medical%20schools%20with%20full%20accreditation%2C%20FY%201977%20through%20FY%202023.[23]

affordability of administrative and other non-revenue generating activities (eg, teaching) is becoming exceedingly challenging via cross-subsidy from clinical revenues. While the clinical faculty are the dominant revenue generators in AMIs, the traditional approach has been to view research productivity as the key metric for award of tenure and a surrogate for academic advancement. Tenure has therefore become less attractive to clinicians over the past few decades.[24] It is to be underscored that tenure does not signify fixed or guaranteed compensation. The vast majority of AMIs dissociate tenure-associated financial guarantees from practice incomes, although cumulative expenses for such compensation can be substantial for AMIs. Thus, tenured senior faculty add to the financial burden of AMIs with employment guarantees owing to their sizable cumulative compensation.

Proposed Solutions and Future Directions

Debate over the tenure system in US academic medicine rages on.[24–30] Many thought leaders suggest that academic freedom is under grave threat in terms of the acquisition of new knowledge and its dissemination toward educating the citizenry in a democratic society through research and teaching.[27] Additionally, as AMIs struggle to meet their missions coupled with worsening constriction of revenue and resources, reform of tenure policies and procedures will continue to be analyzed for possible change. Supporters of the tenure system posit that protection of academic autonomy provides insulation from being terminated from employment which does not fall under the rubric of the First Amendment of the US Constitution.[1,31] It would be prudent and befitting that the award of tenure as well as mandatory post-tenure review[31] be scrutinized and have more stringent guidelines that should be followed with rigor and transparency. Revamping *Promotion and Tenure* Committee constructs to include participation and membership of all faculty prototypes including clinicians, educators, and researchers is highly desirable as opposed to creating "silos" among faculty prototypes. There is a dire need for comparable guidelines across US AMIs, although this is an ambitious goal.

The case against abolishing the tenure system is that it provides faculty rights to certain due process guarantees that protect them from nepotism, discrimination, cronyism, ineptitude, and unfair termination of employment. Administrators and

leadership of AMIs require a system that is fair, equitable, transparent, and fiscally responsible to meet the needs of AMIs in fulfilling their academic mission(s) that in turn will have significant positive downstream effect in circumventing the challenges of the changing terrain of US healthcare and academic medicine. To stave off an "us versus them" mentality,[22] it is critical that duly elected representatives—eg, faculty senate and senior institutional academic leadership—participate in a dialogue with AMI administration to address unsubstantiated concerns about the tenure system and faculty employment. Similarly, state and federal legislative bodies should join in this debate and bring about iterative as opposed to tectonic or precipitous changes to the tenure system in US AMIs. Additionally, some lessons for US AMIs can be extrapolated from challenges being encountered in academic institutions in Europe. For example, three of the ten European countries (France, Spain, and the UK) do not have an academic tenure track, while seven countries (Belgium, Finland, Germany, Italy, The Netherlands, Sweden, Switzerland) have continued a tenure system since the turn of the century.[32] *The League of European Research Universities* (LERU) has recommended that traditional academic career paths be expanded to be more innovative with development of alternate tracks that offer attractive positions for researchers and educators through merit-based recruitment with term limits and rigorous performance evaluations. This system would allow for easier academic mobility between universities and other sectors of society (eg, pharma, and other private enterprises). It has been posited and inferred from the European experience that the traditional academic career in general is marred with many uncertainties that deters viable candidates from pursuing such a career with derisory compensation, and job insecurities. All these factors have a cumulative deleterious effect on faculty recruitment and retention in academic medicine[33] akin to US AMIs.

Conclusions

The tenure system in academic medicine is a long-standing tradition deeply rooted in the concepts of freedom of thought and self-expression. While there is anticipation of continuing enthusiastic debate on the value of the tenure system due to tectonic changes in healthcare and the rapidly evolving terrain of academic medicine, it is likely that the tenure system will endure in US AMIs for the foreseeable future. However, evolutionary iterative changes are also likely despite resistance from the academic medical community owing to the economic realities of healthcare coupled with generational shifts embedded in pragmatism as opposed to tradition and historical precedent. Such changes will require legislative and administrative cooperation that is acceptable to the academic community at large.

Disclosure

The author reports no conflicts of interest in this work.

References

1. Loope DR. Academic tenure: its origins, administration, and importance. *South Carolina Commission on Higher Education Staff Position paper*. Available from:https://files.eric.ed.gov/fulltext/ED382149.pdf. Accessed April 02, 2025.
2. Balch B. Tenure is declining in U.S. medical schools. Could this threaten academic freedom? Available from: https://www.aamc.org/news/tenure-declining-us-medical-schools-could-threaten-academic-freedom#:~:text=Academic%20freedom%20in%20a%20polarized%20political%20climate&text=As%20health%20systems%20face%20increasing,big%20business%2C%E2%80%9D%20he%20says. Accessed April 02, 2025.
3. Asbill S, Moultry AM, Policastri A, Sincak CA, Smith LS, Ulbrich TR. Debating the effectiveness and necessity of tenure in pharmacy education. *Am J Pharm Educ*. 2016;80(6):94. PMID: 27667831; PMCID: PMC5023986. doi:10.5688/ajpe80694
4. American Association of University Professors. 1940 statement of principles on academic freedom and tenure with 1970 interpretative comments. *Policy Documents and Reports, 1990 Edition*. Washington, DC: American Association of University Professors; 1990. Available from: https://www.aaup.org/file/1940%20Statement.pdf. Accessed April 02, 2025.
5. American Association of University Professors. Tenure in the medical school. *Academe*. 1996;40–45.
6. Marks ES. Does tenure still fit the needs of medical school faculty. *Am j Med*. 2000;108:751–775. doi:10.1016/S0002-9343(00)00446-0
7. Bhardwaj A. What's new in academic international medicine? The evolving terrain of 2019 American academic medicine. *Int J Acad Med*. 2019;5(2):85. doi:10.4103/IJAM.IJAM_25_19
8. Marks L. The landscape of academic medicine and health care in the United States. *Pharos*. 2020;2–8.
9. William T, Naatalya C. Promotion and tenure policies and practices at U.S. medical schools: is tenure irrelevant or more relevant than ever? *Acad Med*. 2024;99(7):724–732. doi:10.1097/ACM.0000000000005689
10. Murphy M, Callander JK, Dohan D, Grandis JR. Women's experiences of promotion and tenure in academic medicine and potential implications for gender disparities in career advancement: a qualitative analysis. *JAMA Network Open*. 2021;4(9):e2125843. PMID: 34542616; PMCID: PMC8453318. doi:10.1001/jamanetworkopen.2021.25843
11. Franks AM, Calamur N, Dobrian A, et al. Rank and tenure amongst faculty at academic medical centers: a study of more than 50 years of gender disparities. *Acad Med*. 2022;97(7):1038–1048. doi:10.1097/ACM.0000000000004706

12. Richter KP, Clark L, Wick JA, et al. Women physicians and promotion in academic medicine. *N Engl J Med*. 2020;383(22):2148–2157. PMID: 33252871. doi:10.1056/NEJMsa1916935
13. Quinn R. The growing trend of attacks on tenure. Available from:https://www.insidehighered.com/news/faculty-issues/tenure/2024/08/05/growing-trend-attacks-tenure. Accessed April 02, 2025.
14. Bauer-Wolf J. 5 state plans to restrict faculty tenure you'll want to watch. Available from:https://www.highereddive.com/news/5-state-plans-to-restrict-faculty-tenure-youll-want-to-watch/643880/. Accessed April 02, 2025.
15. Mullangi S, Blutt MJ, Ibrahim S. Is it time to reimagine academic promotion and tenure. *JAMA Health Forum*. 2020;1(2):e200164. doi:10.1001/jamahealthforum.2020.0164
16. Bunton SA, Mallon WT. The continued evolution of faculty appointment and tenure policies at U.S. medical schools. *Acad Med*. 2007;82(3):281–289. doi:10.1097/ACM.0b013e3180307e87
17. Brigham K, Johns MM. Good enough medicine: are we "averaging excellence out"? *Pharos*. 2018;324.
18. Allen J. The anachronism of tenure. *Hospital Medical Director*. Retrieved on April 22, 2024. Available from: https://hospitalmedicaldirector.com/the-anachronism-of-tenure/. Accessed April 02, 2025.
19. Allen J. Do we really need a tenure track in academic medicine? Available from: https://hospitalmedicaldirector.com/do-we-really-still-need-a-tenure-track-in-academic-medicine/. Accessed April 02, 2025.
20. Garcia SA, Thigpen SC. Tenure, and the faculty physician. *Am J Med Sci*. 2017;353(2):145–150. doi:10.1016/j.amjms.2016.12.008
21. Walling A. Understanding Tenure. *Fam Med*. 2015;47(1):43–47.
22. Bhardwaj A. Alignment between physicians and hospital administrators: historical perspective and future directions. *Hosp Pract*. 2017;45(3):81–87. doi:10.1080/21548331.2017.1327302
23. AAMC.org. Data and reports. IV. Revenue b source, FY 1977 through FY 2023. LCME I-A annual financial questionnaire © 2024 association of american medical colleges. Available from: https://www.aamc.org/search?keys=Revenue%20by%20source%20for%20medical%20schools%20with%20full%20accreditation%2C%20FY%201977%20through%20FY%202023. Accessed 4 April 2025.
24. Halperin EC. Is tenure irrelevant for academic clinicians? *South Med J*. 1995;88(11):1099–1106. PMID: 7481978. doi:10.1097/00007611-199511000-00003
25. Pettus G. How tenuous is tenure? Takers, non-takers weigh in. Available from: https://www.umc.edu/news/News_Articles/2017/October/how-tenuous-is-tenure-takers,-non-takers-weigh-in.html. Accessed April 02, 2025.
26. Benjamin E. Some implications of tenure for the profession and society. Available from: https://www.aaup.org/issues/tenure/some-implications-tenure-profession-and-society. Accessed April 02, 2025.
27. Balch B. Is academic freedom in crisis. *AAMCNEWS*. Available from: https://www.aamc.org/news/academic-freedom-crisis. Accessed April 02, 2025.
28. Mintz S. Academic tenure: in desperate need of reform or of defenders? Available from: https://www.insidehighered.com/blogs/higher-ed-gamma/academic-tenure-desperate-need-reform-or-defenders. Accessed April 02, 2025.
29. Walling A, Nilsen KM. Tenure appointments for faculty of clinical departments at u.s. medical schools: does specialty designation make a difference? *Acad Med*. 2018;93(11):1719–1726. PMID: 29979210. doi:10.1097/ACM.0000000000002346
30. Gold KJ. The allure of tenure. *Acad Med*. 2017;92(10):1371–1372. doi:10.1097/ACM.0000000000001875
31. Bunton SA, Walling A, Durham D. Post-tenure review at U.S. medical schools. *Acad Med*. 2016;91(12):1691–1695. doi:10.1097/ACM.0000000000001248
32. Myklebust JP. Facts on tenure track in Europe's research universities. *University World News*. Available from:https://www.universityworldnews.com/post.php?story=20140903091641340. Accessed April 02, 2025.
33. Huisman J, de Weert E, Bartelse J. Academic careers from a European perspective. The declining desirability of the faculty position. *J High Edu*. 2002;73(1):141–160.