

Sponsored Program Salary Support to Medical School Faculty in 2009

Recently, leaders in the scientific community have suggested that the current system of federal funding may incentivize institutions to encourage faculty to obtain up to 100% of their salary from grants and that the federal government should consider requiring institutions to pay a greater share of salaries for faculty involved in extramural sponsored research.^{1,2}

Sponsored-program expenditures—research funded by grants or contracts—at LCME-accredited medical schools in the United States reached \$23.8b in FY2009 and represented more than 28% of total medical school revenues.³ More than 70% of sponsored programs (\$17.3b) in FY2009 were associated with federal grants and contracts. Sponsored program awards from NIH more than doubled over the past decade, and in federal FY2008, more than half of all NIH extramural awards were to U.S. medical schools.⁴ This *Analysis in Brief* (AIB) presents data on the extent to which medical school faculty salaries are supported from sponsored grant and contract funds.

Methodology

Salary data in this AIB come from the Research Metrics Survey developed by the AAMC's Group on Business Affairs. This survey has been fielded annually since FY2006 to Principal Business Officers (PBOs) of U.S.

medical schools yielding a four-year data set. For FY2009, 74 (56%) PBOs completed the survey.

Data collected by the survey include the number of full-time medical school faculty (headcount) whose salaries are supported by sponsored-program funds and the percentage of salaries derived from sponsored-program funds. (See supplemental information⁵ for survey definitions of full-time medical school faculty, sponsored programs, and faculty salaries.)

This AIB focuses on the survey's most recent data (FY2009), represents institutional averages, and does not address the variation in individual faculty salaries supported within an institution. The percentage of faculty who received salary support from sponsored programs was calculated by dividing the number of full-time faculty who received any salary support from sponsored programs at any time during fiscal year 2009 by the number of faculty who held full-time appointments in the medical school on January 1, 2009. In aggregate, institutional responses were based on data for 55,460 full-time faculty, and a subset of 26,407 research faculty.

The percentage of salary derived from sponsored programs funds was calculated for each medical school by

dividing the sum of salaries paid from sponsored-program accounts by total salaries paid from all fund sources during the fiscal year. The results reported below represent the average percentage for schools participating in the survey.

Data were collected separately for all full-time faculty and for the subset of full-time faculty who received at least \$1 in salary from sponsored-program funds during FY2009. For this report, this subset is referred to as "research faculty." Beginning in FY2009, data were collected separately for full-time faculty members who hold M.D. degrees and non-M.D. faculty (predominantly Ph.D. faculty).

Results

Medical schools participating in the survey reported that about half (47.6%) of their full-time faculty received salary support from sponsored-program funds. As shown in Figure 1, the average percentage of salary derived from sponsored-program funds for all full-time medical school faculty was 15.4% (median = 12.9%). The proportion of salary funded by sponsored programs is much less for faculty with M.D. degrees (average = 12%) than it is for faculty who do not hold M.D. degrees (average = 32%).

¹ Collins F. "Opportunities for research and NIH." American Association for the Advancement of Science, *Science* January 2010, 327;36-37.

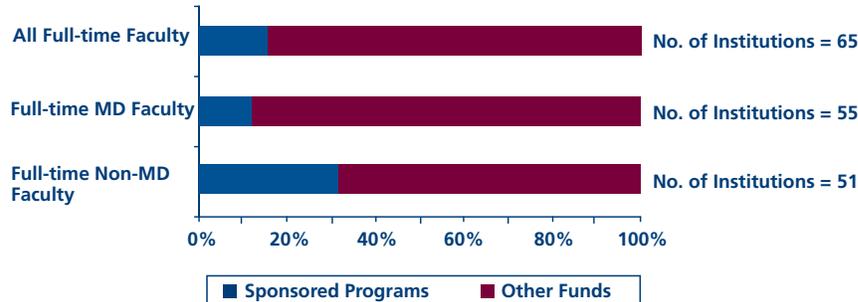
² Alberts B. "Overbuilding research capacity." American Association for the Advancement of Science, *Science* September 2010, 329;1257.

³ LCME Part I-A Annual Medical School Financial Questionnaire (AFQ), FY2009.

⁴ Table I2 in AAMC Data Book: Medical Schools and Teaching Hospitals by the Numbers 2010. Washington, DC: AAMC, 2010; 124.

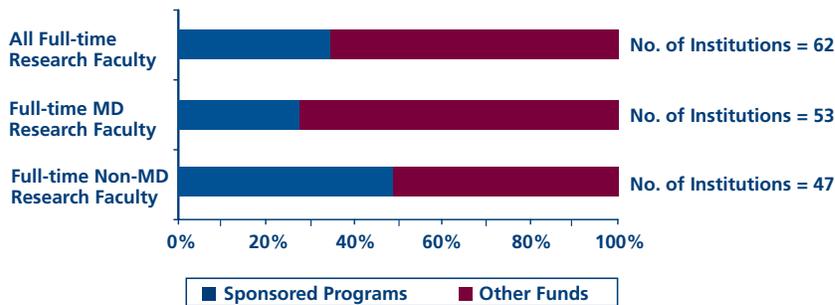
⁵ Supplemental information is available at www.aamc.org/aib/supplemental

Figure 1. Average Percentage of U.S. Medical School Faculty Salaries Derived from Sponsored-Program Funds, FY2009



Source: AAMC Group on Business Affairs Research Metrics Survey

Figure 2. Average Percentage of Salary Derived from Sponsored-Program Funds for Research Faculty* at U.S. Medical Schools, FY2009



Source: AAMC Group on Business Affairs Research Metrics Survey

*Research faculty are the subset of full-time faculty who derived at least some of their compensation from sponsored programs during the fiscal year.

Predictably, the percentage of salary derived from sponsored-program funds for research faculty was higher than it was for all full-time faculty. The average sponsored-program salary support for research faculty was 36% of total salary (see Figure 2). Research faculty with M.D. degrees derived 29% of their salary from sponsored programs compared with 49% for non-M.D. research faculty

Analysis of the four-year data set suggests a high degree of consistency in how schools are interpreting the instructions and reporting the data. The total average percentage of salary

derived from sponsored-program funds for research faculty ranged from a high of 40% to a low of 36%. Eighteen schools participated in all four years of the survey. The average salary derived from sponsored programs for research faculty in this cohort was between 36% and 37%. Additional analyses suggest that the data are representative by control (i.e., public vs. private), region, and research intensity.

Conclusion and Discussion

The data on which this *AIB* is based strongly suggest that medical schools have been far less reliant on sponsored

research support for full-time faculty than some have asserted. However, the data are based on institutional averages. As such, they belie the fact that the percentage of salary derived from sponsored program funds by individual faculty varies widely within institutions. The most highly productive faculty, as judged by the NIH peer review process, for example, likely would be the most directly affected by any changes in policy that limit sponsored program salary support. Consequently, placing a cap on the percent of salaries that could be charged against sponsored research could have a devastating effect on the research enterprise.

While the U.S. economy shows signs of recovery, medical schools are bracing for a period of declining resources across their tripartite missions of education, research, and patient care. The end of funding under the American Recovery and Reinvestment Act and anticipated changes in health care reimbursement will stress the medical schools' ability to support research faculty, even at current funding levels. Reductions in salary support for federally sponsored research could require workforce reductions, redirection of faculty effort, and a re-examination of the balance between medical school missions.

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