DOCUMENT RESUME

ED 235 702 HE 016 642

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TITLE The Importance of Professional Activity to Personnel

Decisions for Medical Technologists in Academia.

PUB DATE

NOTE 23p.; Paper presented at the Annual Meeting of the

American Society for Medical Technology (Los Angeles,

CA, June, 1983).

PUB TYPE Reports - Research/Technical (143) --

Speeches/Conference Papers (150) -- Tests/Evaluation

Instruments (160)

EDRS PRICE DESCRIPTORS MF01 Plus Postage. PC Not Available from EDRS. Allied Health Occupations Education; Decision Making; *Employment Practices; Evaluation Criteria; *Faculty Evaluation; Higher Education; Institutional

Characteristics; *Medical Technologists; *Personnel Policy; Productivity; *Promotion (Occupational); Publications; Questionnaires; Research; *Scholarship;

Teacher Participation; Teacher Responsibility

ABSTRACT

Criteria related to merit evaluations of medical technology faculty were evaluated, based on a survey of members of the American Society for Medical Technology's scientific section on education. Questionnaire responses were obtained from 27 academic institutions. Criteria included publications, institutional committee activity, research, clinical practice, and involvement in professional organizations. The effects of institution size, type, and level as well as program administrative placement within the institution were studied. There were some differences that related to institutional size, but generally, requirements for positive personnel decisions paralleled those of the liberal arts and sciences faculty: research and publication. The need for additional requirements of professional practice and for activity within a professional organization were apparent. It is concluded that medical technology faculty who must maintain professional competence along with the standard teaching and service responsibilities have less available time for traditional scholarly activities that are rewarded with positive personnel decisions. A questionnaire is appended. (Author/SW)

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the Importance of Professional Activity to Personnel Decisions for Medical
Technologists in Academia

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Within academic institutions personnel policies may be structured so as to discriminate against positive merit evaluations of medical technology faculty who are required to maintain current professional practice as well as activity within professional organizations. To assess how a variety of criteria relate to merit decisions, a survey of members of the Society's scientific section on education was conducted at the 1982 annual meeting. Criteria considered included publications, institutional committee activity, research, clinical practice, and involvement in professional organizations. The effects of institution size, type, and level as well as program administrative placement within the institution were studied. There were some differences found which relate to size of institution but in general, requirements for positive personnel decisions parallel those of the liberal arts and sciences faculty, that is research and publication. Further, the need for additional requirements of professional practice as well as activity within a professional organization are apparent. Clearly, medical technology faculty who must maintain professional competence along with the standard teaching and service responsibilities have less available time for traditional "scholarly" activities which are rewarded with positive personnel decisions.

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THE IMPORTANCE OF PROFESSIONAL ACTIVITY TO PERSONNEL DECISIONS FOR MEDICAL TECHNOLOGISTS IN ACADEMIA

Sharon M. Miller, PhC and Olive M. Kimhall, FdD

In most institutions of higher education positive tenure and promotion decisions are crucial to continued employment. Provision may be made by some institutions to retain a number of faculty who do not meet the criteria for advancement to senior positions but who possess a unique skill or credential applicable to a technically-oriented program. However, most faculty are on a tenure track. The degree to which this is true was reported in a 1980 study of tenure practices across the country. The researchers concluded that 90% or more of all U.S. faculty are on such a terure track (Atelsek and Gomberg, 1980).

In 1977 Holcomb and Roush reported on a survey of baccalaureate level allied health programs (Eolcomb and Roush, 1977). Ninety-five percent of respondents reported that allied health faculty could earn tenure. However, at a time when higher education overall is facing increasing hudgetary constraints, it may be expected that in 1983 fewer faculty in all disciplines will be hired in tenure track positions.

The impact of being non-tenured in a tenure track system is pervasive. First, failure to be advanced in rank or tenured may be



translated into a final year or "terminal contract" for the faculty member. Even if retention without advancement is permitted by the institution, an economic incongruity develops because major salary increments are usually tied to promotion and the granting of tenure. As substantial cost-of-living and merit increments disappear, advancement and acquisition of tenure may be the only means of obtaining a salary increase short of moving from one institution to another.

Another serious impact of being non-tenured relates to faculty participation in governance. Untenured faculty are usually not eligible to participate on institutional committees or hodies which are most likely to influence decisions in areas of academic planning, policies and standards. Mature, professionally oriented faculty are interested in desireable institutional changes and it is through the actions of key governing hodies that faculty have the greatest impact on the future of the institution. Denied participation of this kind, faculty find themselves forced to be reactive to institutional change rather than proactive. Furthermore, a "survivalist" mentality is fostered.

Ance-tenure status may also deprive a faculty member of the opportunity for sabbatical leave, for consideration of faculty development initiatives, and in some cases, for research support from the institution. This is because they may be employed for only a short time and hence are not candidates for investment of scarce institutional resources.



If these effects do not lead to a second class status, they surely lead to low morale. A recent study of college faculty concluded that it is faculty members' involvement in planning and governance that has the greatest positive effect on morale (Magarrell, 1982). Further, it may be concluded that lack of involvement, compounded by the other factors cited, will affect morale and productivity in an adverse way and eliminate much incentive for practitioners to become faculty.

Positive merit evaluations are the antecedents of positive tenure and promotion decisions. Merit evaluation is potentially a guide for faculty growth and development as well as a means of recognizing and rewarding current achievements. How merit decision criteria are applied to medical technology faculty should be related to criteria utilized in tenure and promotion decisions. Consistency in the application of criteria for all personnel decisions is therefore essential.

Clirical laboratory science as a body of knowledge has only recently achieved academic visibility and credibility. Consequently, it is important that the process of personnel decision-making within the discipline be addressed. There is a need to identify criteria used by institutions in personnel decisions and to assess the impact of these criteria on faculty. A pilot survey was developed to initiate such a study for the purpose of collecting data on promotion, tenure and merit policies as well as hiring practices applied to medical technology faculty in academe.



special interest was the extent to which professional activity was considered important.

METHOD

The survey instrument consisted of '8 questions related to personnel activities in the respondents' institutions. Effects of institution size, type, level and administrative placement of the program on hiring practices and criteria utilized in personnel decisions were studied. For this preliminary study, a sample of convenience was used. The questionnaire was personally distributed to educators attending the Scientific Section on Education of the American Society for Medical Technology during the annual meeting in June of '982. Fifty questionnaires were distributed. Mail returns from 27 different academic institutions were analyzed, constituting a 54% rate of return.

RESUITS

1. Descriptive Characteristics

At the time of initial appointment as clinical laboratory science faculty, slightly more than half (52%) of survey respondents possessed a masters degree and had been practitioners for seven or more years. However, almost 60% had three years or less of higher education teaching experience when hired for their current position.



This profile suggests that when medical technology faculty enter academe they possess ample professional expertise but have very limited experience with the personnel process in higher education and need to be initiated into the personnel process system.

Respondents in this study were predominately from institutions with student bodies greater than 5000 (59%). Four (15%) programs located in institutions whose student body exceeded while eight (30%) had a student body of 10,0(0-20,000. Twenty-four or 89% of the represented institutions were public and three (11%) were private. Four institutions (15%) were two year colleges: three (117), four year colleges; nine (33%), universities and 11 (414), universities with Medical Centers. Although it is clear that respondents were typically from to large moderate public universities, the administrative placement of the medical technology program within the institution varied. Eight (304) respondents indicated location in a College of Liberal Arts and Sciences: seven (26*) in a professional college on a university campus: three (11%) in a Health Science Center and three (19%) in a Medical School. Six respondents (22%) indicated administrative placement in a variety of other academic units but did not elaborate.

To determine the status of tenure track positions the question was asked about the proportion of medical technology faculty currently holding such positions. Only 50% of medical technology programs in university Medical Centers reported 90% or more of faculty were on tenure-track, while sixty-seven percent of four year



colleges and 78% of university respondents reported 90% or more of the program faculty held tenure-track positions. This is in contrast to the Atelsek study cited earlier which showed 93% of all life science faculty were on a tenure-track.

Interesting differences in response to tenure status by size of student body and administrative placement of the program were found. Over 3/4 of the institutions (7) with a student body of 1000 to 5000 had less than 25% of their faculty in tenure-track positions. was found to be significant at the .04 level with df=20 using the chi square test for independence. The most striking limitation of tenure-track positions was noted when program the wa s administratively located in a Medical School or a Health Science Center. Cnly 1/3 of the respondents from Health Science Centers indicated 90% or more of the medical technology faculty were Medical tenure-track and in Schools, respondents considerably less. When administratively placed in any other setting, 2/3 indicated more than 90% of faculty were on tenure track. In a recent paper, Eiserloh (1982) reported 73.8% of CAHEAaccredited medical technology programs had all faculty appointed to tenure-track positions. When compared to Folcomb and Roush's 95% figure for 1977, the possibility of a reduction in the number of tenure track positions for medical technology faculty is suggested.

In some institutions rank may be held regardless of the availability of tenure. In this study, all faculty of medical technology programs in four year insitutions with or without a



Medical Center (23) were found to hold academic rank. Ore-half (2) of faculty at two year colleges held academic rank. Further, criteria for personnel decisions appear to be available. Seventy-eight percent (21) of respondents indicated that criteria for appointment and promotion to academic ranks were described in a specific personnel document. Five programs (18.5%) reported that the administrative unit in which the program is located has written tersonnel policies separate from those of other administrative units in the institution. Clearly, the majority of medical technology faculty hold rank and are evaluated by institution-wide policies.

2. Criteria for Personnel Decisions

Although personnel documents were said to be available and specific criteria delineated, it was of interest to determine how consistent application was across institutions. Approximately 3/4 of respondents indicated that medical technology faculty were evaluated in decisions on promotion and tentre by the same criteria as all other institutional faculty. However, when merit evaluation alone was considered, 92% indicated that the same criteria were applied throughout the institution. It might appear that programs have less internal flexibility to modify criteria for merit decisions than they have for promotion and tenure decisions. Since merit evaluations are viewed as supporting documents for promotion and tenure decisions, the results suggest that annual merit evaluations are more likely to be based on institutional criteria while promotion and tenure criteria may be more discipline specific.



However, subsequent responses related to clinical practice and public service as institution-wide criteria indicate otherwise. Professional activity plays somewhat less of a role than other criteria as we shall see.

Specific criteria utilized in making various personnel decisions were next addressed as well as whether or not a pattern was discerrible that could be used in career counseling of faculty.

For promotion to the rank of assistant professor the most frequently cited criterion (67%) for advancement was graduate study. An advanced degree was not specified but is implied. The next most frequently cited criteria are research or creative, scholarly activity (56%) and service on university committees (56%). Professional certification was reported as a requirement by 14 (52%) respondents. Less than half (48%) reported active participation in a professional organization as a criterion for advancement. Surprisingly, only 37% (10) indicated publications were required. This is contrary to generally perceived academic requirements for advancement. Public service requirements were also minimal (37%) and crly 14% (3) identified a need for active clinical practice.

Promotion to the levels of associate or full professor call for a different prioritizing of activities. Advanced graduate study, research or other creative scholarly endeavor and service on university committees are required by 70% or more of the institutions. A fairly large proportion require publications and



professional organization. The demand that the individual be a certified professional drops to 41% of responding institutions.

Active clinical practice is not considered a major criterion for promotion to any rank. Nor is it valued highly when awarding tenure (11%). The absence of a consistent requirement for current clinical competency was surprising. The strength of professional education for redical technology lies in a balanced delivery of theoretical knowledge and applied problem-solving skills. allied health professionals deem clinical competency to be an essential outcome of educational programs and maintenance of such competency to be a central issue in continuing certification. Higher education, however, appears not to value one of the discipline's unique strengths.

Some criteria for tenure seem not to be independent of level of institution. Publications are not required for the awarding of tenure in two and four year colleges. On the other hand, slightly over half (55%) the respondents from universities and 82% of those from universities with medical centers have a publication requirement. One-third or less of two and four year colleges require advanced graduate study or research and creative, scholarly activity for tenure. Over two-thirds of universities and 91% of universities with medical centers have such requirements. This same response pattern is seen in criteria for advancement to associate professor.



The importance of research and other creative, scholarly activity in the assessment of faculty is apparent in Table 1. The extent to which the academic institution provides facilities and access epportunities for faculty to carry out these activities was of Slightly more than half (59%) cf all respondents indicated cn-campus research facilities were available to program Yet approximately 75% indicated research and creative scholarly activity were required to advancement to associate and full rrofessor and the awarding of tenure. Institutional expectations appear to exceed available resources in the area of The availability of on-campus facilities for faculty research was significantly related to level of the institution at the .04 level. At the extremes, 100% (4) of two year colleges report€d no facilities available while 100% (3) of four year colleges did have such a rescurce on-campus. Two-thirds of both university (6) and university with medical center (7) programs have on-campus research facilities for medical technology Fifty-six percent of respondents indicated that released time was given to medical technology faculty to conduct research or engage in scholarly activity. There was no relationship between released time availability and any of the institutional variables identified in the study.

The importance of specialization in career development of the clinical laboratory scientist is acknowledged within the profession. But the extent to which professional specialization is recognized as



a creative or scholarly activity for personnel decisions is unclear. In the study, 55.6% of all respondents indicated that such specialization may be considered as scholarly activity by the institution. The acknowledgment of specialization as creative scholarly activity was significantly related to level of institution. At four year colleges and universities fewer programs indicated institutional acceptance of specialization. Two year colleges and university medical center programs were more likely to view professional specialization as acceptable in this category.

Professional identity and external credibility are often achieved through active participation in societies which determine future directions, levels of define practice, assure practitioner competence and regulate entry into the field. Such activities are important to guarantee continuing delivery of quality health care. Professional societies view their members as directly accountable for the quality of service rendered to the patient and the physician. Given the central role played by professional organizations in practitioner education and competence assurance, it is appropriate to consider the manner in which higher education evaluates active participation in these societies. Over 96% of all respondents indicated that active participation was of some value in personnel decisions. Seventy percent of respondents identified such societal activity as of value for promotion, and we say on Table 1 some evidence to corroborate this, particularly to the more senior academic ranks. It was reportedly most valuable in merit decisions



(74.1%) and least valuable for tenure (66.7%). The value of such participation for merit decisions was significantly related (at the .05 level) to the size of the institution's student body. Smaller institutions, with fewer than 1000 students, did not consider societal activities valuable. However, institutions with student bodies greater than 1000 did routinely value such activity.

CONCLUSIONS

Because of the nature of the sample examined in this filot study, generalizability may be limited. However, some conclusions may be drawn about criteria for personnel practices related to clinical laboratory science faculty.

First, it appears that faculty in the programs considered are relatively new to academia. These faculty must be educated about institutional policies and procedures by which their performance is judged and should be assisted in development of their credentials and personnel documents through thoughtful direction of activities. Failure on the part of administrators and senior colleagues to do this may lead to non-reappointment and denial of tenure, accentuating what may already he a trend toward more limited tenure track employment in the discipline.

Policies used for judging performance relate directly to criteria and a second conclusion to be drawn pertains to the inferred difference between criteria used by the institution for promotion



and tenure decisions and those permitted or encouraged by programs for merit decisions. Although a large proportion (75%) respondents stated that criteria used for program personnel decisions were the same as those used across the university, difference between that figure and the figures for merit (92%) suggests that some criteria for promotion and tenure are not used institution-wide. The answer may lie in the importance placed upon clinical practice and professional activity by the profession. have indicated, these are highly valued in the professional world. However, the low proportion of respondents actually indicating that in practice they are so considered suggests that the profession reassess the value of them to academic faculty. effect, programs demand of faculty the professional activity and continuing competence. Other institutional faculty do not have the same mandate in these areas and focus their energies on scholarly activity and publication. This discrepancy clearly requires further study. In the meantime, clinical laboratory science faculty, the help of administrators and senior colleagues, must take the responsibility for determining when, in their own institution, a shift occurs in the ordering of criteria used in personnel decisions and then focus their personal energies and resources accordingly.



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- 3. Macarrel J:Decline in faculty morale laid to governance role, not salary. Chronicle of Higher Education XXV (11):1,28, November 10, 1982.
- 4. Fiserloh F:"A study of medical technology faculty in universitytased programs," in <u>Topics in Clinical Laboratory Science</u>
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SURVEY QUESTIONS

- 1. Do Program faculty hold academic rank in your institution?
- 2. Are criteria for ranks described in a personnel document?
- 3. Approximately what proportion of Program faculty are on tenure track?
- 4. Are criteria for evaluating Program faculty the same as those applied to other faculty in your institution?
 - ... for tenure
 - ... for promotion
 - ... for merit
- 5. Does the administrative unit which houses your Program have written personnel policies apart from those of other administrative units in your institution?
- 6. Which of the following criteria are applied for personnel decisions of promotion and tenure? At what levels?
 - ... certification/licensure
 - ... publication
 - ... advanced graduate work
 - ... rese ch or other creative/scholarly activity
 - ... institution committee activity
 - ... active clinical practice
 - ... public service
 - ... professional association activity
- 7. Are on-campus research facilities available for Program faculty?
- 8. Is released time for research or scholarly activity available for Program faculty?
- 9. Is professional specialization considered to be research or creative/scholarly activity?
- 10. Is active participation in a professional society considered positively in personnel decisions of promotion and tenure? for merit?
- 11. Profile of responents:
 - ... degree held at time of initial appointment to Program faculty
 - ... professional practice experience at time of initial appointment
 - ... higher education teaching experience at time of initial appointment



PROFILE OF RESPONDENTS

(INITIAL APPOINTMENT AS PROGRAM FACULTY)

ACADEMIC PREPARATION:

<u>Degree</u>	<u>%</u>	<u>N</u>
BACHELORS	14.8	(4)
MASTERS	51.9	(14)
MASTERS PLUS	7.4	(2)
DOCTORATE	25.9	(7)

LENGTH OF PROFESSIONAL PRACTICE:

<u>YEARS</u>	<u>%</u>	<u>N</u>
< 1	11.1	(3)
1 - 3	14.8	(4)
4 - 6	22,2	(6)
7 - 9	14.8	(4)
> 9	<i>3</i> 7.0	(10)

TEACHING EXPERIENCE IN HIGHER EDUCATION:

<u>YEARS</u>	<u>%</u>	<u>N</u>
0 .	34.6	(9)
1 - 3	23.1	(6)
4 - 6	23.1	(6)
7 - 9	15.4	(4)
> 9	3.8	(1)



INSTITUTIONAL CHARACTERISTICS

SIZE OF STUDENT BODY:

	<u>%</u>	<u>N</u>		
1000	7.4	(2)		
1000 - 4999	33.3	(9)		
5000 - 9999	14.8	(4)		
10,000 - 20,000	29.6	(8)		
20,000	14.8	(4)		
TYPE:				
Public	88.9	(24)		
PRIVATE	11.1	(3)		
LEVEL:				
2 YEAR COLLEGE	14.8	(4)		
4 YEAR COLLEGE	11.1	(3)		
University	33.3	(9)		
UNIVERSITY W/MED. CENTER	40.7	(11)		
ADMINISTRATIVE PLACEMENT OF PROGRAM:				
LIBERAL ARTS AND SCIENCES	29.6	(8)		
PROFESSIONAL COLLEGE	25.9	(7)		
HEALTH SCIENCES CENTER	11.1	(3)		
MEDICAL SCHOOL	11.1	(3)		
OTHER	22.2	(6)		



PROPORTION OF FACULTY ON TENURE TRACK

LEVEL OF INSTITUTION	25% OR	LESS	<u>50%</u>	<u>75%</u>	<u>90</u>	<u>%</u>	<u>100%</u>
2 YEAR COLLEGE	50.0	(2)	25.0 (1)	25.0 (1)			
4 YEAR COLLEGE	33.3	(1)			33.3	(1)	33,3 (1)
UNIVERSITY	11.1	(1)		11.1 (1)	55.6	(5)	22.2 (2)
University w/ Med Center	30.0	(3)	10.0 (1)	10.0 (1)	50.0	(5)	

CONSISTENCY OF CRITERIA USED

(PERCENT ANSWERING POSITIVELY)

ARE CRITERIA FOR EVALUATING ALLIED HEALTH FACULTY THE SAME AS THOSE APPLIED TO OTHER FACULTY:

···· FOR TENURE?	<i>7</i> 6.9	(20)
FOR PROMOTION?	74.1	(20)
FOR MERIT?	91.7	(22)



SIGNIFICANCE LEVELS (CHI SQUARE) FOR TENURE AND PROMOTION CRITERIA

- LEVEL OF INSTITUTION -

	QUESTION	SIGNIFICANCE LEVEL	DEGREES OF FREEDOM
1.	Do FACULTY HOLD ACADEMIC RANK?	.006	3
7.	CRITERIA FOR PROMOTION TO ASSOCIATE PROFESSOR:		
	CERTIFICATION		
	PUBLICATIONS		
	ADVANCED GRADUATE WORK		
	RESEARCH/CSA	.038	3
	UNIVERSITY COMMITTEES		
	ACTIVE CLINICAL PRACTICE		
,	PUBLIC SERVICE		
	PROFESSIONAL ASSOCIATIONS		
9.	CRITERIA FOR AWARDING TENURE:	-	
	CERTIFICATION	•	•
	PUBLICATIONS	.039	3
	ADVANCED GRADUATE WORK	.057	3
	RESEARCH/CSA	.039	3
	UNIVERSITY COMMITTEES		
	ACTIVE CLINICAL PRACTICE		
	PUBLIC SERVICE		·
	PROFESSIONAL ASSOCIATIONS		
10.	ARE ON CAMPUS RESEARCH FACILITIES AVAILABLE FOR FACULTY?	.043	3
12.	MAY PROFESSIONAL SPECIALIZATION BE CONSIDERED CSA?	.044	6
14.	ACADEMIC DEGREE HELD AT TIME OF INITIAL APPOINTMENT TO ALLIED HEALTH FACULTY?	.008	9



SIGNIFICANCE LEVELS (CHI SQUARE) FOR TENURE AND PROMOTION CRITERIA

- SIZE OF STUDENT BODY -

	QUESTION	SIGNIFICANCE LEVEL	DEGREES OF FREEDOM
3.	PERCENTAGE OF FACULTY ON TENURE TRACK?	.045	20
4.	ARE CRITERIA FOR EVALUATING ALLIED HEALTH FACULTY THE SAME AS THOSE APPLIED TO OTHER FACULTY;		
	FOR TENURE?	.008	8
	FOR PROMOTION?	.032	8
	FOR MERIT?	1	
13.	IS ACTIVE PARTICIPATION IN PROFESSIONAL ORGANIZATIONS CONSIDERED VALUABLE FOR:		
	TENURE?		
	PROMOTION?		
	MERIT?	.051	4



TABLE I

PERSONNEL PROCESS CRITERION CITED (PERCENT RESPONDING POSITIVELY)

	ASSISTANT PROFESSOR	ASSOCIATE PROFESSOR	PROFESSOR	TENURE
RESEARCH OR OTHER CREATIVE/ SCHOLARLY ACTIVITY	56	7 8	74	70
ADVANCED GRADUATE WORK	67	74	70	67
UNIVERSITY COMMITTEE ACTIVITY	5 5	70	74	67
PUBLICATION	37	59	63	56
PUBLIC SERVICE ACTIVITY	37	52	63	56
CERTIFICATION/LICENSURE	52	41	41	41
INVOLVEMENT IN PROFESSIONAL ORGANI	ZATIONS 48	56	56	52
ACTIVE CLINICAL PRACTICE	11	4	11	11

