

RESEARCH FACULTY RETREAT - 2006

WORKING GROUP #2

DISCUSS AND MAKE RECOMMENDATIONS TO IMPROVE RECRUITING INDIVIDUALS TO WFUSM (JUNIOR AND ESTABLISHED FACULTY). FACULTY RETENTION, DEVELOPMENT, AND MENTORING SHOULD ALSO BE DISCUSSED.

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EXECUTIVE SUMMARY

Charge-focus: Group 2 was charged with discussing and making recommendations to improve recruiting individuals to WFUSM (junior and established faculty) and retaining key faculty. To meet these goals, the discussion also included issues related to faculty development, mentoring, and the WFUSM research infrastructure and financial resources. These were felt to be important issues relevant to both recruitment and retention of faculty. In addition a key issue discussed was the role of faculty recruitment in anticipation of the CTSA application.

Summary of Findings: Important strengths relevant to recruitment and retention include the collaborative culture of the faculty at WFUSM, a national reputation in several key research areas, a respected clinical enterprise, a financially stable Medical Center, developing mentoring programs, and the W-S living environment. Weaknesses and barriers include a lack of sufficient numbers of physician scientists and clinical investigators, lack of protected time for research, loss of key and well-funded mid-level faculty, difficulties with co-recruitment of spouses, lack of a return of indirect dollars to departments, lack of ability to transfer VA grants, perceived inconsistencies in promotion standards, insufficient infrastructure for grant submission and clinical trial development in some departments, and lack of certain core resources for research such as proteomics and bioinformatics. The major deficiency relevant to all other weaknesses and barriers was felt to be the lack of sufficient institutional dollars available to support the research enterprise.

Summary of Recommendations:

1) An increase in the institutional investment for faculty recruitment and retention is needed:

Increase endowment and spending of endowment dollars. Use the WFU business school to assist with a plan for raising and spending endowment. Increase the number of endowed professorships/chairs and use this to recruit key faculty needed at the mid to senior level.

Use the newly created Clinical Faculty Recruitment fund to recruit clinician investigators who have >75% protected time for research.

Allow departments to maintain an R&D account that includes yearly carry over and that is supplemented by a return of indirect dollars.

2) The process of recruitment needs to be improved:

Revise the recruitment process to allow more flexibility and increased speed and efficiency.

Establish a centralized system for facilitating co-recruitments that includes the Reynolda campus.

Improve our relationship with area businesses to assist with co-recruiting and with investments in the institution.

3) Provide resources that will enhance recruitment and retention of clinical investigators and physician scientists:

Actively recruit physician scientists and clinician investigators at both the junior and more senior levels and develop a structured method to protect their research time.

Establish and implement a plan for proteomics and bioinformatics that will enhance the ability to do translational research.

Rearticulate promotion standards and make sure they are applied fairly to all.

Establish a system whereby research-oriented departments that have a successful grant preparation and submission system can assist and train clinical departments that are weak in this area.

Establish an endowed WFUHS Research Sabbatical Program to provide extended release time for research growth and enhancement.

II. Analysis

Data- Data was provided from the Office of Research on new and departing faculty from 2003-2006. Overall there has been a net increase (+78) in the number of total faculty members over the last three years. Because many clinical sections hire chief residents at the Instructor level

Change in WFUSM Faculty Number from 2003 to 2006 by Faculty Rank

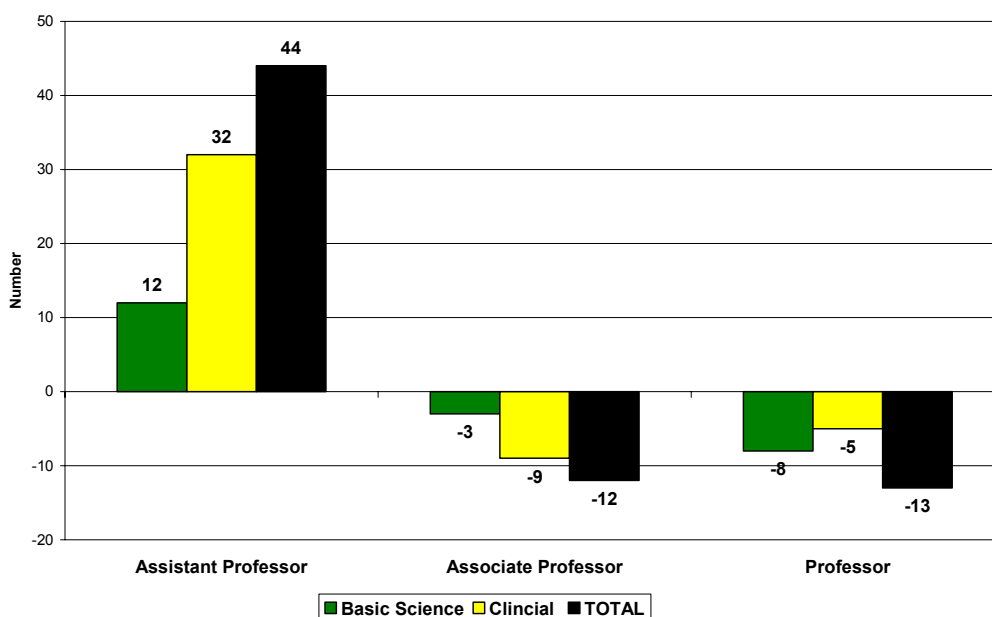
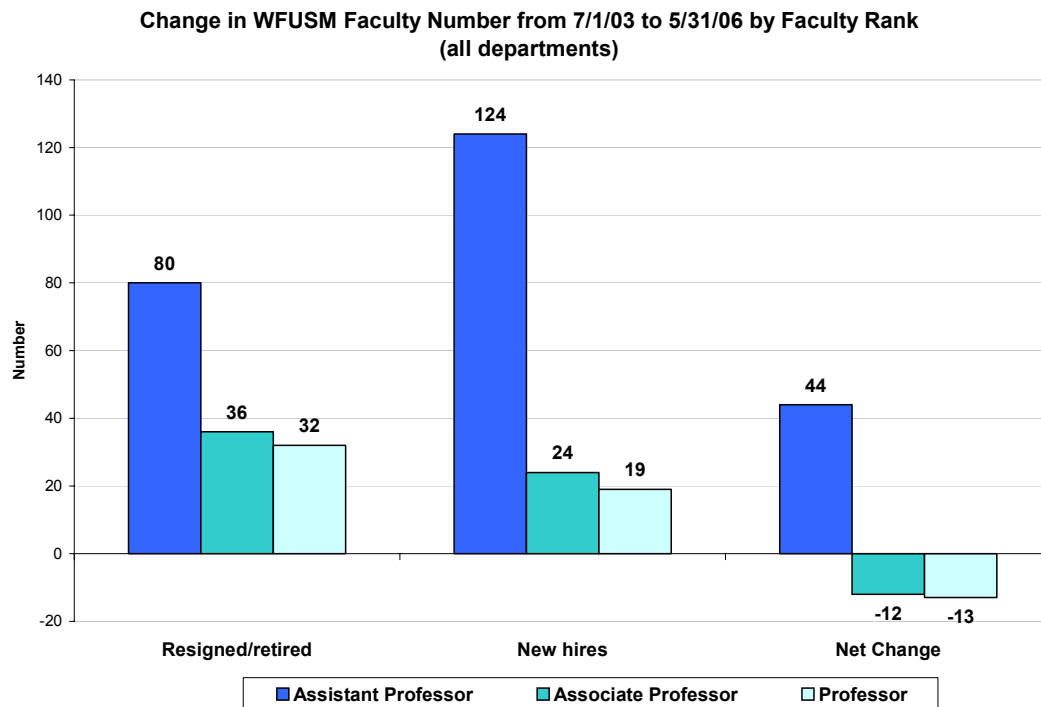


Fig.1

and these faculty are expected to turnover, further analysis was performed starting at the Assistant professor level. In Basic Science Departments there has been a net decrease (-11) in the number of associate and full professors and a net increase (+ 12) in the number of assistant professors (Fig.1). A similar trend exists in clinical departments. That is, there has been a net decrease (-14) in the number of associate and full professors and a net increase (+32) in the number of assistant professors.

We also examined how many faculty at each rank were new hires and how many at each rank left the institution (resigned or retired) (Fig.2). It is probably not surprising that 74% of new hires were at the Assistant Professor level with 14% and 11% at the Associate and full Professor level, respectively. Of the faculty that resigned or retired 54% were Assistant Professors, 24% Associate Professors and 21% Professors. Importantly, analysis of extramural funding associated with the new and departing faculty (based on WFUHS internal expenditures) indicates a loss of extramural financial support for research activity of approximately \$7.34M for basic sciences and \$3.0M for clinical for a total loss of approximately \$10.4 M. This data indicates that we are losing faculty at all levels but in particular at more senior levels and we are losing funded faculty members.

Fig.2



Members of the committee informally interviewed several research-oriented faculty members at the mid-career level who have left the institution within the past year. Their comments were taken into account in listing of the strengths and weakness provided below. A common theme for the reason for leaving was a better opportunity at another institution that includes career advancement and additional research resources. For clinicians this included a promise of more protected time for research. Others have complained about salaries being lower here than at other institutions. The standard 3% raise per year does not reward faculty who have been productive.

For issues related to recruiting of new faculty, several faculty recruits who chose not to accept offers at WFUHS were interviewed. A major issue appeared to be the start-up package. The start-up package is an important factor for recruiting. Packages vary widely depending on the

type of position (clinical /basic, wet-lab/office-based/clinic-based). Most packages at WFUSM are for 3 years and provide salary support (average of about 60% support for the 3 years), and supplies/equipment/staff salary (about \$250,000-750,000 depending on level of faculty from junior-senior) as well as the appropriate space and office support. Other institutions offer better start-ups and it was felt that some important recruits have been lost because we could not match the start-up. Packages for a junior wet-lab researcher at other institutions range up to \$900,000 with 100% salary support for 3 years followed by up to 75% salary support thereafter.

An important factor for faculty recruitment and retention was felt to be departmental resources available to assist faculty with grant submissions. A survey was conducted in order to determine how WFUSM departments are currently providing these services (see attached appendix). Most departments provide assistance for grant and budget preparation although the level of support varies. Some departments have highly trained staff who assist with all aspects of grant preparation while others mainly help by updating biosketches and putting the final grant package together for mailing. Few departments provide assistance with regulatory issues. Departmental funds are used for providing these services.

As this report was being prepared two announcements were made that are important for faculty recruitment and retention. The first is a new "Clinical Faculty Recruitment Initiative". A fund with combined dollars from WFUHS and NCBH was announced to be used for supplementing the early phases of clinical academic careers. This fund could be an excellent source of dollars needed for recruitment of clinical investigators.

The second announcement was that WFUBMC received more than \$41.2 million in gifts for 2006 which was a 58% increase over the prior year. In addition, the WFU **Sustaining the Miracle** campaign achieved its goal of \$600 million in June 2006 and the WFUBMC portion exceeded its goal of \$200 million by \$88 million including \$92 million designated to new endowments for research, student aid and faculty support. Therefore, new funds should be available to support the recommendations made below.

Strengths:

-Collaborative culture of the faculty at WFUSM - investigators work well together and help each other with projects, little-to-no backstabbing or stealing of ideas

-National reputation in several key research areas (alphabetical so no-one should care about the order!)

-Aging, Atherosclerosis, Cancer, Genomics, Neuroscience, Non-human primates, Public Health/Epidemiology, Regenerative Medicine, Substance abuse, and Women's Health.

-Respected clinical enterprise- for clinical investigators (and others) it is important to work at a medical center that has a reputation for clinical excellence

-Institution has been financially stable - we have not been in the news as a Medical Center in danger of collapse and have not been visited by the "we will save you before you bleed to death" consultants

-The Medical Center is the largest employer in the region

-Mentoring programs - several in place and growing in the Office of Research; Women's Health Center of Excellence for Research, Leadership, Education; Pepper Center; and in several departments.

-Faculty services - more attention is being paid to faculty needs, town-hall meetings and faculty development programs have been successful

-Winston-Salem/North Carolina living environment- if you don't mind living in a "bucolic" town where else could be finer? NC is also becoming a popular retirement area (global warming may make us the new Florida and we have mountains!)

-Tuition reimbursement program- a real plus for faculty with kids nearing college age

-Child care on site- a must have for some faculty

Weaknesses/barriers:

The major deficiency relevant to all other weaknesses and barriers was felt to be the lack of sufficient institutional dollars available to support the research enterprise.

-Lack of sufficient numbers of physician scientists and clinical investigators - we have a critical deficit in this area which will severely compromise our ability to do translational research, compete for a CTSA, and remain in the top 30-35 Medical schools in the country. There is a small pool of these people nationally and we are not "growing our own" here.

-Lack of protected time for research (particularly for clinician investigators) - this is one key factor contributing to our lack of funded clinical investigators and physician scientists.

-Lack of established research goals/benchmarks for clinical departments so that the need to generate clinical revenue takes precedence over research. This is closely related to the availability of protected research time for those that also do clinical work. It is also due to a lack of return of indirects to clinical departments that serves to reduce the incentives to obtaining grants.

-Conflicting needs and resources of Departments and Centers. Departments are ultimately responsible for faculty recruitment, retention, and promotion. Centers have varying roles in this process and sometimes Center and Department needs do not match or there is tension between the two over control of a faculty member.

-Difficulties with co-recruitment of spouses - two career couples are becoming more common in research and it is often difficult to find a position for both either in the institution or in some cases in the area business including biotech. Funds often not available for start-ups for both.

-Lack of certain core resources for research such as proteomics and bioinformatics. These are key resources for modern day and future basic, clinical, and translational research. Institutions in the top 25 and our competitors are all on board or getting on board. We have lagged behind and this will hamper recruitment and retention efforts not to mention the ability of current faculty to do research.

-Insufficient infrastructure for grant submission and clinical trials development in some departments. Not all departments are equally adept at assisting faculty in grant preparation and submission while others have grant factories.

-Inability to transfer VA grants- some faculty that would have been excellent recruits chose not to come here because they would have had to give up a VA grant

-Perceived inconsistencies in promotion standards - some faculty who chose not to come here or who have left did so because they felt that they would not be/were not being promoted in a timely manner.

Opportunities

-The NIH Roadmap initiatives have provided resources to specifically encourage "translational" research. In addition, new grant mechanisms are available to support faculty at early stages in their careers such as the expanded types of K awards. We need to be in the position to take advantage of these funds for faculty recruitment and development. A particularly important resource will be the CTSA, which will have funds for development of junior investigators at multiple levels from residents to junior faculty.

-We have new research space just finished or under construction that would be attractive for recruiting and retention.

-The institution has just completed a successful fund raising campaign with the Medical Center exceeding its goals for increasing the endowment.

-Availability of endowed research positions in basic and clinical departments would attract successful investigators at the more senior levels who are looking for a great place to continue their established work.

Threats

-If we do not train, recruit, and promote clinician investigators and physician scientists we cannot compete for grants such as the CTSA. If we can't compete for a CTSA we will fall below the top 50 medical schools in the country.

-If we do not initiate a plan for the development of key resources such as proteomics and bioinformatics we will be unable to attract top recruits and will lose faculty who need these resources to be successful. We will lose our competitiveness for large Center grants such as the CTSA, Comprehensive Cancer Center, and Pepper Center.

-Loss of key and well-funded mid-level faculty- some other institutions (with greater resources) have been using WFUSM as a training ground for faculty that they can grab at the mid-career level just as they hit full-stride

-Faculty that have been successful and want more resources for their research are resorting to the "find a better offer elsewhere and then look for a counter offer" strategy. This is extremely disruptive to programs in which key faculty participate and encourages others to try the same technique.

-Decline in reimbursements has resulted in loss of revenues for clinical departments and loss of funds that might have been used for faculty recruitment and retention

-Faculty and Departments are becoming divided on multiple campuses, which can hamper the unplanned interactions that contribute to new ideas and collaborations. This division also hampers mentoring junior faculty in departments split into multiple locations.

III. Summary/Conclusions. We have a bright and energetic faculty dedicated to their research work. We have many strengths that have allowed us to be among the top 30-35 medical schools in overall research which is quite an accomplishment given our size. But "crumbling is not an

instant act." We must anticipate where the future directions of research are going and recruit and retain the faculty needed to take us there. If not, we are in danger of losing our position and status among medical research institutions. We have identified key areas of weaknesses/barriers relevant to faculty recruitment and retention that need immediate attention.

IV. Recommendations

General: In order to build and maintain a successful research enterprise at WFUSM, happy and productive faculty are key. To recruit and retain happy and productive faculty the resources they need to do their work must be readily available. The faculty must be empowered to promote new ideas, including the need for new resources, and anticipate that the administration will be supportive to these needs and act in a timely manner. The following are specific recommendations made by this task force:

- 1) Increase endowment and spending of endowment dollars. Use the WFU business school to assist with this process. Immediately dedicate at least \$20 million dollars to fulfill the recommendations made at the research retreat.
- 2) Allow both basic and clinical departments to maintain an R&D account that includes yearly carry over and that is supplemented by a return of indirect dollars.
- 3) Actively recruit physician scientists and clinician investigators at both the junior and more senior levels and develop a structured method to protect their research time. Use the newly announced Clinical Faculty Recruitment Initiative Use the newly created Clinical Faculty Recruitment fund to recruit clinician investigators who have >75% protected time for research.
- 4) Develop centralized methods to find physician investigators at other institutions that could be targeted for recruitment.
- 5) Implement a reward system for productive faculty that is just as rewarding for research successes as it is for clinical success. Clinician investigators should have an incentive package that is linked to research success. Raises in salaries should be better linked to research success. Change the current research bonus system so that it rewards a maximum % research effort so that it does not discourage placing junior faculty on grants, which might reduce the % effort of a senior PI and therefore reduce the bonus.
- 6) Find out what research resources faculty want and need and find ways to provide it before they decide they need to look elsewhere. A survey of faculty for this information may be valuable in this regard.
- 7) Conduct a detailed survey to determine the elements that would improve faculty retention.
- 8) Increase the number of endowed professorships/chairs and use this to recruit key faculty needed at the senior level or for a current senior member to support a new initiative.
- 9) Revise the recruitment process to allow more flexibility and increased speed and efficiency.
- 10) Establish a centralized system for facilitating co-recruitments. WFU is the largest employer in the region but we do not have a system to help locate positions for co-

recruits. This would most likely need to be administrated through the office of the University President since it would also involve the Reynolda campus.

- 11) Establish and implement a plan for proteomics and bioinformatics.
- 12) Rearticulate promotion standards and make sure they are applied fairly to all. Include Center directors in the yearly review process of faculty that are key members of a specific Center to allow Center input on promotion and retention decisions.
- 13) Establish a system whereby departments that have a successful grant preparation and submission system can assist and train departments that are weak in this area.
- 14) Improve our relationship with area businesses to assist with co-recruiting and with investments in the institution.
- 15) Enhance and expand the collaborative intercampus research efforts between the Bowman Gray and the Reynolda campuses. The strengthening of research ties and interactions between the campuses may be significant recruitment and retention tools. Develop ways in which faculty on both campuses can readily and easily access information about the research interests and capabilities of faculty on the opposite campus. Foster means by which faculty on both campuses can socialize/interact to identify potential collaborators.
- 16) Establish an endowed Bowman Gray Research Sabbatical Leave Program that is similar to the Reynolda Campus Leave Program. The Reynolda Program is an endowed competitive program that offers faculty extended release time for research. Considerations of this program for the Bowman Gray campus might include one program for basic scientists and another program targeted specifically for clinical investigators.

Other issues identified, but not addressed or unable to come to consensus: Won't be able to transfer a VA grant here without a local VA facility deemed appropriate for 5/8ths VA faculty appointment. Salisbury is too far and cumbersome to be workable for an investigator.

APPENDIX

Department Infrastructure Survey Summary

A concern of Group 2 in addressing faculty recruitment and retention is a lack of consistent departmental infrastructure to support research faculty. As a result, twenty-eight departments have been surveyed to discover the kind of support provided by the departments to assist them. A common thread exists in that each department is unique in its infrastructure, no two departments are alike. All departments have a basic amount of administrative support; however, more specialized support specific to research such as individuals who can assist investigators with grant writing, study design or navigate the regulatory process in conducting research on human and animal subjects is less common. While specific budget information is not provided, it appears the lack of this kind of support is almost always due to limited funds.

The following summary provides key points from the information gathered.

Infrastructure Support:

- The majority of departments have infrastructure that includes one or all of the following positions: Academic Secretary; Administrative Assistant; and Business Manager.
- The baseline support all faculty receive is access to Academic Secretary and Business Manager. Academic secretary duties vary based on the individual's skills and the structure of department, however, most secretaries assist with biosketches, other support and publications. Administrative Assistants assist with more intricate proposal tasks such as formatting, completing forms, routing paperwork for signatures. Business Managers minimally provide monthly financial statements of funded grants to faculty; however, some provide more support based on the department support structure.
- Additional or alternate positions represented in some departments are Word Processor, Editor, Financial Coordinator, Accounting Clerk, Research Administrative Coordinator, Project Manager, Grant Manager, and Research Nurse and Clinical Studies Coordinator. These positions represent additional infrastructure which has typically evolved from department growth or a need for more "specialized" support.
- Of the eighteen departments who responded to the survey, a total of eleven departments have specialized support. Two departments have Word Processors who type grant proposals and assist with routing paperwork. One department has a Staff Editor to assist faculty with editing and compiling the complete grant. Two departments have Research Administrative Coordinators (RAC) that is completely devoted to assisting with pre-award and post-award process. Two departments have Financial Coordinator positions to assist the Business Manager with post-award financial management of grants. One department has a Grant Manager who serves in a capacity similar to that of a research administrative coordinator, and one department has a Project Manager who handles some financial post award and regulatory issues. Additionally, there are two departments who provide a Clinical Studies Coordinator and a Research Nurse to assist with clinical trial management and regulatory issues related to grants.
- Two departments have unique situations in that one has hired a Physician Assistant at .50 time to conduct physical exams and pre-screen subjects for clinical trials. Another department supports a Research Fellow who assists with clinical trials including trial design and IRB submissions. In both instances, the department administrator conveyed that these positions are not permanent and will end when the projects end even though they are supported by department funds.

Inconsistencies/Challenges:

- Lack of financial support to incorporate more specialized positions, such as the Research Administrative Coordinator to department infrastructure.
- No clear definition of support for research faculty (i.e. most assistance comes from individuals who are performing other job functions and are not specifically designated for research administration).
- Grants.gov will be a considerable factor in looking at infrastructure support and not many Business Managers are sure how this will affect them, most conveyed that it is still too early to assess.
- Inconsistency in infrastructure among departments. Titles are not necessarily reflective of job description. (i.e. some Academic Secretaries are very adept at assisting with grant proposals and handle all components where others handle only specific tasks)
- Lack of communication among departments.

Suggestions/Recommendations:

- Increase in communication among departments and possible proposal to create a cross-training program to reinforce departments who are understaffed or have lack of administrative research experience. One department has established a cross-train infrastructure among the support staff and has reported positive feedback from both staff and faculty on giving/receiving support.
- A basic science department currently has a peer-reviewed program to internally fund pilot studies within the department. More departments should establish this kind of program and infrastructure to support it.
- The majority of departments stressed the need for a high level research position to be created for individuals who have extensive expertise in science and grants but are not on a faculty track. This position could provide more advanced support for faculty on study design, grant proposals and protocol writing.

WFUHS Department List:

Contact Person: Department Business Managers

Summary: (28 total departments: 18 responded with comments; 4 were not contacted; 6 received no response)

X = Department administrator provided a response to inquiry on infrastructure support provided by the department.

Basic Sciences:		Clinical Sciences:	
Bio-Structural Biology	No-response	Anesthesiology	X
Biochemistry	X	Dentistry	No response
Cancer Biology	No-response	Dermatology	No response
Comp. Med/Lipid Sciences	X	Diagnostic Radiology	X
Microbiology/Immunology	X	Family and Community Medicine	X
Neurobiology and Anatomy	X	Internal Medicine	No response
Pathology	X	-Infec. Disease	
PHS-Biostatistics	X	-Pulmonary	
PHS-Epidemiology	X	-Rhumat/Immuno	
PHS – Social Sciences and Health Policy	X	-Endocrinology	
Physician Assistant Studies	Did not contact	-Gastroenterology	
Physiology/Pharmacology	X	-Gerontology	
Wake Forest Institute for Regenerative Medicine (WFIRM)	Did not contact	-	
		Hematology/Oncology	
		-Cardiology	
		-Molecular Med.	
		-Nephrology	
		Neurology	X
		OB/GYN	X
		Pediatrics	X
		Psychiatry & Behavioral Sciences	X
		Radiation Oncology	X
		Radiology-BME	Did not contact
		Radiology-PET	Did not contact
		Surgical Sciences	No response
		-Cardiothoracic	
		-Emergency Medicine	
		-Orthopedics	
		-Urology	
		-General Surgery	
		-Neurosurgery	
		-Ophthalmology	
		-Otolaryngology	
		Hypertension	X