

Guide to Academic Advancement in the Department of Surgery



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Guide to Academic Advancement in the Department of Surgery

Purpose

The purpose of this document is to provide guidance to the process through which, and resources available to, faculty members in the Department of Surgery to achieve academic advancement. It is the department's goal that all faculty members in the Department of Surgery achieve their individual full potential as members of the College of Medicine and Medical University of South Carolina and to be rewarded for that achievement. Since the University is a place where everyone is learning, it is vital that each member of the faculty demonstrate tangible evidence of that professional growth, whether it be in the easily measured domains of writing papers for publication, writing and receiving grants, or preparing and presenting lectures for students and trainees of our colleges, or in the less easily measured aspects of teaching students, residents and fellows, mentoring young investigators and junior faculty, or developing clinical expertise by specializing in some area of clinical medicine. It is incumbent on faculty members, their mentors, Department Chairs, and the university leadership to see that tangible progress is being made and documented. This document is designed to assist faculty members to better understand this process and the expectations of faculty members that will allow them to advance.

Leadership

The department's mentoring process is directly tied to its promotion and tenure process. Therefore responsibility for both the mentoring program and the promotions process falls under the Department of Surgery's Promotions, Tenure, and Mentoring Committee. That committee is chaired by Dr. Bruce Elliott. Dr. Doug Norcross serves as the mentoring champion for the Department of Surgery.

Description of Department of Surgery Promotion and Tenure Process

1. The Department's promotion and tenure process is integrated into the department's mentoring process. Progress of faculty members toward academic advancement is reviewed annually by the Department of Surgery's Promotion, Tenure, and Mentoring Committee. (For researchers, the Promotions and Tenure Committee is expanded to include research faculty).
2. The purposes of the Department of Surgery's Promotion, Tenure, and Mentoring Committee are:
 - a. To provide guidance to faculty members as to the promotion and tenure process at the Medical University of South Carolina
 - b. To assist faculty members in preparing for promotion
 - c. To oversee the Department of Surgery's mentoring process
 - d. To make recommendations to the chair of the Department of Surgery as to whether or not a faculty member's application for promotion or tenure should be forwarded to the university's Promotions and Tenure Committee.
3. Upon joining the faculty of the Department of Surgery, new faculty members below the level of associate professor will meet with their Division Head where a discussion about career goals will be initiated. Based on that discussion and on mutually agreed upon career goals, the division head will assist the faculty member in identifying an appropriate *career mentor* from among the senior faculty in the Department of Surgery. Additional *secondary mentors* may also be suggested to assist new faculty members with meeting specific career goals that may best be accomplished with the added experience and expertise of these secondary mentors. These additional mentors may be from the Department of Surgery, other departments within the College of Medicine, other faculty from other colleges of the Medical University of South Carolina, or mentors from outside institutions. It will be the responsibility of the mentee to contact the suggested mentor(s) to obtain their consent to serve in this role.
4. Faculty members may request that these initial discussions be conducted with the Department of Surgery Promotion, Tenure, and Mentoring committee rather than with their division head should they feel that this would be a more suitable method of identifying appropriate primary and, when consistent with the mentees career goals, secondary mentors.
5. Mentees will be expected to document their teaching, research, clinical activities, leadership, and other academic activities using the College of Medicine's Curriculum Vitae format as well as the College of Medicine's Faculty Intramural Teaching Effort report keeping these forms current so that the faculty member will have the documentation necessary for promotion prepared when they are deemed eligible for academic advancement. These forms are contained within the College of Medicine's Promotion and Tenure Packets at the following link:
<http://academicdepartments.musc.edu/com/faculty/apt/musc/index.html>
A copy of these forms is attached as [appendix 1](#) and [appendix 2](#)
6. Mentees will be expected to meet informally with their primary mentor at least quarterly and formally on an annual basis for a "career review meeting" where the mentee's academic progress will be reviewed and discussed with their mentor. During this session, the up to date College of Medicine Curriculum Vitae form as well as the College of Medicine Faculty Intramural Teaching Effort report will be reviewed by the mentor with the mentee to assure accuracy and completeness. Discussions will then be held between the mentor and the mentee in which the mentee's career goals will be reexamined and revised as appropriate. The mentor and mentee will discuss the recommendations made by any secondary mentors and guidance will be provided by the mentor as to goals that should be pursued prior to the next scheduled career review meeting. It is the mentee's responsibility to

schedule these formal sessions annually and informally on an as needed basis as determined either by the mentor or the mentee (preferably at least quarterly). It is suggested that the annual review be held in conjunction with completion of the MUSC required annual report.

7. After the annual career review meeting between the mentor and mentee, an electronic copy of the up to date College of Medicine promotion and tenure form will be submitted to the Department of Surgery Promotions, Tenure, and Mentoring committee by the mentee. That committee will review the document and, after discussing the mentee's progress, may
 - a. determine that the mentee is making satisfactory progress towards academic advancement and requires no additional guidance from the committee beyond that being provided by the mentor
 - b. make additional recommendations to the mentor to be discussed with their mentee.
 - c. invite the mentee and, when deemed appropriate by either the committee or the mentee, their career mentor to attend a subsequent meeting of the committee to discuss the mentee's progress.
 - d. recommend that the mentee initiate the promotion process as described below.
8. Any faculty member may request the opportunity to appear before the Department of Surgery Promotion, Tenure, and Mentoring Committee to discuss their preparation for academic advancement or to seek additional guidance in their efforts to achieve academic advancement. An up to date copy of the College of Medicine Curriculum Vitae form as well as the College of Medicine Faculty Intramural Teaching Effort report must be submitted to the Department of Surgery Promotion, tenure, and Mentoring Committee prior to any mentee requested appearance before that committee.
9. The Department of Surgery Promotion, Tenure, and Mentoring Committee will not review any faculty member's progress until an up to date copy of the mentee's College of Medicine Curriculum Vitae form as well as the College of Medicine Faculty Intramural Teaching Effort report has been reviewed with their mentor in a "career review meeting" and submitted to the committee by the mentee.
10. Prolonged failure to submit an up to date College of Medicine Curriculum Vitae form as well as an up to date College of Medicine Faculty Intramural Teaching Effort report to the Department of Surgery Promotion, Tenure, and Mentoring Committee will be considered a failure of the mentoring process and will result in a request for immediate compliance from the committee with an explanation provided by the mentee as appropriate. Failure to submit either the required paperwork or a satisfactory explanation may result in documentation in the faculty members records.
11. Mentors may make recommendations directly to the Department of Surgery Promotions, Tenure, and Mentoring Committee when they feel their mentee is prepared for promotion. The mentee will be asked, by the chair of the committee, to submit an up to date copy of the College of Medicine Curriculum Vitae form, an up to date copy of the College of Medicine Faculty Intramural Teaching Effort report, and completed copies of any other documents required by the Medical University of South Carolina's Promotions and Tenure Committee.
12. Junior faculty members may apply directly to the committee for consideration for review of their readiness for promotion. An up to date copy of the College of Medicine Curriculum Vitae form, an up to date copy of the College of Medicine Faculty Intramural Teaching Effort report, and completed copies of any other documents required by the Medical University of South Carolina's Promotions and Tenure Committee must be submitted along with any such request.
13. The Department of Surgery's Promotion, Tenure, and Mentoring Committee will review the documents described above for faculty members who have been proposed for promotion, or who wish to be considered for promotion, as described above. The Department of Surgery's Promotions, Tenure, and Mentoring Committee will then review these documents and make a recommendation in the form of a letter to the department chair as to whether or

not the faculty member's application for promotion should be forwarded to the Medical University of South Carolina's Promotion and Tenure Committee. The ultimate decision as to promotion and tenure lies with the university's Promotion and Tenure Committee.

14. If, at any time, a mentee feels that their mentor is not able to appropriately provide guidance for their academic advancement, the mentee is expected to contact their division head or the chair of the Department of Surgery Promotion, Tenure, and Mentoring Committee to request that a new career mentor be identified. It will be the responsibility of the mentee to contact the suggested mentor to obtain their consent to serve in this role.
15. If, at any time, a mentor feels that they can no longer effectively serve as a mentor for their mentee, they will be expected to notify both the chair of the Department of Surgery Promotion, Tenure, and Mentoring Committee and the mentee of their inability or unwillingness to continue to serve in this role and ask that the mentee contact their division head or the chair of the Department of Surgery Promotion, Tenure, and Mentoring Committee to request that a new career mentor be identified.

Academic Tracks

The College of Medicine has four separate academic tracks for regular faculty; all have the potential for achievement of tenure. Prior to employment, it is expected that new faculty members will have been hired into a specific academic track. The decision as to the academic track in which a faculty member will be expected to advance lies with the department chair in consultation with the new faculty member's division head. Faculty members may change academic tracks through the university's Promotion and Tenure Committee. A recommendation from the department chair is required by that committee before a change in track will be considered. The recognized academic tracks for regular faculty are:

Academic Investigator, Academic Investigator/Educator

Productive high quality basic biomedical research is of paramount importance in this track. The quality of research and productivity are judged by multiple criteria, including the candidate's role in well-focused, significant research as a participant, project initiator or leader, as well as publication of results in peer-reviewed journals and presentation of peer-reviewed research talks. There should be evidence of the candidate's ability to prepare research protocols that receive high ratings from national funding agencies. The candidate should demonstrate a consistent record of funding. However, evaluation must take into account the fact that funding can be subject to variables that lie beyond the scientific and scholarly merits of the investigator.

All faculty members are expected to be involved in educational activities related to their discipline. Teaching activities include individual, small and large group instruction of medical students, graduate and postgraduate students, and graduate medical and continuing medical education. When most of a faculty member's effort is devoted to teaching, and an unusual level of excellence has been demonstrated, or the teaching fulfills a particularly important need for the department and/or college, promotion should be under the Academic Investigator/Educator track.

Most faculty assigned to this track are in basic science departments and/or have a primary commitment to basic biomedical research. Basic scientists in clinical departments usually will be in this track. Physician faculty in clinical departments may function in this track and clinical, educational, and health care delivery research can be included. For physicians in this track the level of involvement in patient care may vary substantially.

Academic Clinician

These faculty members are clinical scholars and scientists. This track is designed to recognize clinical faculty who have a strong commitment to research (basic biomedical, clinical, educational, health services). Research and teaching are of paramount importance in this track. Involvement in patient care is expected, but is not necessarily the primary obligation and should not override the faculty commitment to research and teaching. The quality of research and productivity are judged by multiple criteria, including the candidate's role in well focused, research as a participant, project initiator or leader, publication of results in peer-reviewed journals and presentation of peer-reviewed research. There should be evidence of the candidate's ability to consistently and actively participate in research protocols that receive high ratings from national funding agencies. However, evaluation must take into account the fact that funding can be subject to variables that lie beyond the scientific and scholarly merits of the investigator. The candidate's approach to clinical medicine often will lead them into one or more areas of clinical research. They share their knowledge gained from clinical practice and research by providing high quality teaching.

All faculty members are expected to be involved in educational activities related to their discipline. Teaching activities include individual, small and large group instruction of medical students, residents and fellows and continuing medical education. Graduate and postgraduate students may also be taught. Under specific circumstances, promotion on this track may be considered based predominantly on educational activities when the majority of a faculty member's effort is devoted to this role, and the educational activity has a national or international impact and generates publications (e.g. – chapters, books, courses, electronic publications, or syllabi from conferences).⁸

In most cases physicians with a major research commitment direct their clinical activities to well-defined areas of special expertise, which often contribute to the university/college mission. Academic clinicians may be recognized experts with in-depth knowledge of the pathophysiology and management of disorders within their specialty. They develop special expertise about particular disorders usually in relation to their research activities.

Clinician Educator

This track recognizes the clinician who carries a heavy clinical load and is actively involved both in undergraduate and graduate medical education. These faculty members also may participate in research but this is not required for advancement. The clinician educator has major commitments to patient care and teaching.

These faculty members are clinical scholars involved in the scholarship of integration, application, and teaching. Scholarship of integration involves interpreting published research, integrating new clinical knowledge with previous concepts and selecting outmoded clinical concepts for discard. Scholarship of application tests new knowledge in clinical practice. Combining new knowledge with experience in clinical practices, they teach medical students, residents, and peers. They may have major interest in developing more effective teaching methods. Settings for education include the classroom, ambulatory clinics and offices, continuing medical education programs, diagnostic suites, operating rooms, and the hospital bedside.

Clinician educators must be involved in the discovery, organization, interpretation and transmission of new knowledge related to patient care, health care delivery, health care economics, professional ethics, medical legal issues or new educational methodology. They must participate in publications of some variety, but may or may not be an author on peer-reviewed papers in their field. However, their publications should influence the practice of clinical medicine at the regional and/or national levels. Clinician educators are not required to be principal investigators on research grants from national funding sources but are encouraged to participate in research as co-investigator, or a principal investigator on grants from local and regional funding sources.

Clinician educators are recognized clinical experts with advanced and in-depth knowledge of the pathophysiology and management of disorders within their general or specialty field. They may be sought as consultants in difficult cases and receive patients referred from a wide area. Faculty in this track must maintain licensure and certification to practice their specialty. They are expected to be recognized by election to local, regional, national and international scientific organizations in their specialty. They must maintain clinical privileges at one of the affiliated teaching hospitals.

When the ranks for regular faculty are used as academic titles, no modifiers distinguish tracks. For example, a faculty member in the Department of Surgery with the academic rank of Associate

Professor would be an “Associate Professor of Surgery” regardless of the academic track through which this academic title was granted.

In addition to regular faculty, the College of Medicine has four separate academic tracks for modified faculty. These tracks do not have the potential for achievement of tenure. Promotion is awarded in all four tracks. These tracks are:

Research Faculty
Clinical Faculty
Adjunct Faculty
Visiting Faculty

When the ranks for modified faculty are used as academic titles, the appropriate modifier is used to distinguish the track. For example, “Clinical Associate Professor of Surgery” or “Adjunct Assistant Professor of Surgery”.

Criteria for Promotion

The Department of Surgery Promotion, Tenure, and Mentoring Committee utilizes the university criteria for promotion in determining a faculty member's readiness for promotion. These criteria, as well as a complete description of the university's promotion and tenure process and requirements are available at <http://academicdepartments.musc.edu/com1/faculty/index.htm>

A grid representing the criteria for promotion in the various academic tracks is contained in [Appendix 3](#)

Materials required for submission as part of a faculty member's promotion packet are available at:

Regular Faculty

Promotion Packet

PDF Format <http://academicdepartments.musc.edu/com1/faculty/Rgprom.pdf>

MS Word Format <http://academicdepartments.musc.edu/com1/faculty/Rgprom.doc>

Tenure Packet

PDF Format <http://academicdepartments.musc.edu/com1/faculty/Rgtenure.pdf>

MS Word Format <http://academicdepartments.musc.edu/com1/faculty/Rgtenure.doc>

Modified Faculty

Promotion Packet

PDF Format <http://academicdepartments.musc.edu/com1/faculty/Modprom.pdf>

MS Word Format <http://academicdepartments.musc.edu/com1/faculty/Modprom.doc>

Documentation of Career Development

In order to achieve promotion and tenure, professional growth must be documented. All faculty members should maintain an up-to-date curriculum vitae in the FAIR format required by the College of Medicine. This is an electronic format maintained by the university and can be accessed by individual faculty members using their net ID and password. At the following link:

https://fair.musc.edu/SAVE/Publications_home.aspx?module=SAVE&module=PUBL&subchildmodule=&yr=%&userkey=29aabfe1-20f5-4351-8977-8a5e035d4336

In addition, portfolios of a faculty member's research, teaching, and clinical accomplishments are important to develop and keep updated as they progress through the academic ranks. To advance through the academic ranks the quality of a faculty member's individual scholarship is of critical importance, but depending on the faculty member's academic track, more emphasis will need to be placed on a specific portfolio e.g., for academic investigators, the research portfolio is most important, whereas for a faculty member in an academic educator track, the teaching portfolio is of primary importance.

Academic Researcher Portfolio

Faculty members in the academic educator track should maintain a research portfolio including documents and materials that show the scope, quality, and creativity of the faculty members' research efforts, progress, and achievements.

Faculty members in an academic researcher track should maintain a portfolio including:

1. Documentation of completion of educational requirements necessary for career in academic research
2. List of first authored original publications (with impact factor information if possible)
3. List of Senior authored original publications (indicate whether the first author was someone you mentored)
4. List of Co-authored original publications
5. List of other publications, e.g., review papers, book chapters, textbooks
6. List of career training grant awards
7. List of independent grant awards as PI
8. List of grant awards as Co-investigator
9. List of presentations of research at national / international meetings
10. Peer recognition for research activities including invitations to present at national/international meetings and other universities
11. National recognition as evidenced by election to specialty societies, editorial boards, service on national committees, NIH study sections, grant review panels of other funding agencies
12. List of institutional or external research awards
13. List of mentoring achievements: individuals mentored, achievements of mentees including grants received and important publications of mentees under your guidance, and where mentees are today
14. Memberships and involvement in professional and scientific organizations
15. List of contributions to research-oriented committees at department, college, university, community, state, regional, national and international levels
16. Leadership roles in research in appropriate department, college, or university

Academic Educator Portfolio

Faculty members in the academic educator track should maintain a teaching portfolio including documents and materials that show the scope, quality, and creativity of faculty members' teaching efforts, progress, and achievements. Reflection is an integral part of the portfolio and shows how faculty members have integrated new learning with their teaching philosophy and performance.

Faculty members in an academic educator track should maintain a portfolio including:

1. Documentation of completion of educational requirements necessary for career in academic teaching
2. A statement of the faculty members philosophy of teaching and learning
3. A list of teaching goals for student accomplishment
4. Teaching methods and evaluation strategies used by the faculty member
5. Descriptions of the faculty members participation in course and/or curriculum development
6. Descriptions of the faculty members engagement in the scholarship of teaching and learning (SoTL)
7. Evidence of teaching accomplishments
 - a. Description of types of different teaching activities performed by the faculty member such as formal courses, small group seminars, one-on one tutorials, supervision of student research projects, chairing thesis or doctoral committees, and coaching manuscript preparation for students, residents, and fellows
 - b. Course materials (syllabi, readings, handouts, assignments, examinations) developed by the faculty member
 - c. Samples of faculty member's teaching innovation (simulation, educational technology)
 - d. Samples of manuscripts related to teaching and or educational activities in which the faculty member is listed as an author
 - e. Student, resident and fellow evaluations of faculty member's teaching
 - f. Peer evaluations of faculty member's teaching
 - g. Audience evaluations of faculty member's presentations at state or national meetings
 - h. Membership in departmental, college, university, society, community, state, regional, national and international committees or organizations related to teaching
 - i. A list of first authored publications (papers, chapters, reviews, textbooks) related to teaching
 - j. A list of senior authored publications (papers, chapters, reviews, textbooks) related to teaching
 - k. A list of co- authored publications (papers, chapters, reviews, textbooks) related to teaching
 - l. A list of grant awards related to teaching
 - m. Presentations on teaching at national / international meetings
 - n. Leadership roles in teaching within the Department of Surgery, the College of Medicine, and the University
 - o. A list of honors and awards for teaching
8. Mentoring achievements in teaching:
 - a. individuals mentored
 - b. achievements of mentees in teaching arena
 - c. where mentees are today

Academic Clinician Portfolio

Faculty members in the academic clinician track should maintain a portfolio documenting their clinical achievements.

Faculty members in an academic clinician track should maintain a portfolio including:

1. Documentation of completion of educational requirements necessary for career as an academic clinician, including certification by appropriate specialty board(s)
2. Evidence of a heavy clinical load
 - a. Examples:
 - i. RVUs per year
 - ii. Operations per year
3. Evidence of excellence in high quality patient care
 - a. Examples:
 - i. Patient satisfaction scores
 - ii. NSQIP outcomes
4. Descriptions of innovative clinic practices developed
 - a. Examples:
 - i. New clinical services that the faculty member established
 - ii. New clinical services that the faculty member participated in
 - iii. New surgical techniques
5. Evidence of organization of clinical services to provide an optimal setting for medical education and a data base for research
6. Evidence of excellence in clinical training of students, residents, and fellows
7. Documentation of teaching activities including formal lectures, grand rounds, and continuing medical education
8. Superior evaluations of teaching by students, residents, fellows, peers, course directors and department chairs
9. First authored publications (papers, chapters, reviews, textbooks)
10. Senior authored publications (papers, chapters, reviews, textbooks)
11. Co-authored publications (papers, chapters, reviews, textbooks)
12. Presentations at national or international meetings
13. Peer recognition for clinical activities including invitations to present at national/international meetings and other universities
14. Co-investigator on research grant awards
15. Mentoring achievements:
 - a. clinicians trained
 - b. achievements of trainees
 - c. where trainees are today
16. Membership and involvement in professional and scientific organizations
17. Contributions to clinically oriented committees at department, college, university, community, state, regional, national and international levels
18. Leadership roles in clinical activities in appropriate department, college, or university

Clinician Educator Portfolio

1. Documentation of completion of educational requirements necessary for a career as a clinician educator, including certification by appropriate specialty board(s)

2. Evidence of a heavy clinical load
 - a. Examples:
 - i. RVUs per year
 - ii. Operations per year
3. Evidence of excellence in high quality patient care
 - a. Examples:
 - i. Patient satisfaction scores
 - ii. NSQIP outcomes
4. Descriptions of innovative clinic practices developed
 - a. Examples:
 - i. New clinical services that the faculty member established
 - ii. New clinical services that the faculty member participated in
 - iii. New surgical techniques
5. Descriptions of the faculty members participation in course and/or curriculum development
6. Documentation of teaching activities including formal lectures, grand rounds, small group seminars, one-on one tutorials, supervision of student, resident, and fellow research projects, coaching manuscript preparation for students, residents, and fellows, and continuing medical education
7. Evidence of recognition for teaching accomplishments
 - a. Course materials (syllabi, readings, handouts, assignments, examinations) developed by the faculty member
 - b. Student, resident and fellow evaluations of faculty member's teaching
 - c. Peer evaluations of faculty member's teaching
 - d. Audience evaluations of faculty member's presentations at state or national meetings
 - e. Membership in departmental, college, university, society, community, state, regional, national and international committees or organizations related to teaching
 - f. Leadership roles in teaching within the Department of Surgery, the College of Medicine, and the University
 - g. Other evidence of excellence in clinical training of students, residents, and fellows
 - h. A list of honors and awards for teaching
8. Evidence of role in resident, student, and/or faculty mentoring:
 - a. individuals mentored
 - b. achievements of mentees
 - c. where mentees are today
9. First authored publications (papers, chapters, reviews, textbooks)
10. Senior authored publications (papers, chapters, reviews, textbooks)
11. Co-authored publications (papers, chapters, reviews, textbooks)
12. Presentations at national or international meetings
13. Peer recognition for clinical activities including invitations to present at national/international meetings and other universities
14. Co-investigator on research grant awards
15. Membership and involvement in professional and scientific organizations
16. Contributions to clinically oriented committees at department, college, university, community, state, regional, national and international levels
17. Leadership roles in clinical activities in appropriate department, college, or university

Resources Available for Faculty Development

Issues such as protected time for research or teaching, personnel support (for administrative assistants, research nurses, nurse practitioners, physician assistants, lab technicians, etc.), and allocation of departmental or divisional funds to support pilot studies are negotiated during the hiring process for new faculty members. For established faculty members requiring additional support, these issues should be addressed to divisional leadership.

Resources are available within the Department of Surgery that can assist with faculty development. The most important of these is the department's mentoring program which is overseen by the Department's Promotion, Tenure, and Mentoring Committee. Dr. Bruce Elliott oversees the mentoring program in his capacity as chairperson of the department's Promotion, Tenure, and Mentoring Committee. Dr. Doug Norcross serves as the mentoring champion on that committee. A description of the department's mentoring program is attached as [appendix 4](#). The mentoring program is evaluated through annual surveys of both the mentees and their assigned mentors. These survey instruments are attached as [appendix 5](#).

Other programs within the department are as follows:

Leadership development program: The DOS has established in collaboration with the Department of Psychiatry, a DOS Leadership Skill Enhancement program. This program will have participation by all of the members of the DOS Leadership Council. It is designed to optimize the professional leadership strengths targeting identified areas of focus for each individual. The program length varies but may be up to 10 or more sessions over six to eight months. After an initial self assessment process, all leaders within the department meet individually with Susan Knight or Josh Smith in the Department of Psychiatry to target an individual's professional strengths as a leader and uses those strengths to enhance the identified areas noted above to optimize their leadership skills. Departmental resources are available to send leaders to training sessions or courses that will assist the faculty member in fulfilling these recommendations.

Masters in Science in Clinical Research: Department and/or Divisional resources may be made available to selected faculty members for completion of MUSC's Master of Science in Clinical Research program. Faculty members interested in this program should discuss this with their mentor as well as with their divisional and department leadership.

Senior Mentor Program: Dr Fred Crawford serves as a "senior mentor" and is available to faculty members to provide advice and counsel. He, on an annual basis, meets in person with all Assistant Professor faculty members and also with the assigned mentors in order to provide guidance and advice with respect to their professional development and/or mentoring skills. In addition, he is available to provide advice to faculty members at the Associate Professor level who have completed the mentoring program described in [Appendix 4](#).

Clinical Translational Scholars Program: The Department of Surgery has implemented a process to be overseen by the department's research council through which individual faculty members with an interest in developing a clinical research effort will be teamed up with experienced researchers in the department and mentored through the process of developing and following through with a research project. The intent of this proposal is to assist new researchers in establishing a research focus that will ultimately lead to external grant funding. The department will provide the resources

necessary to support the initial research effort for faculty members chosen to participate in this program. (See [Appendix 6](#))

Research administrative support: Cheryl Brown serves a role in pre submission research grant support assisting researchers with preparation of grant applications. Her role is to assure that grants are formatted properly and prepared in a manner that gives the grant application the best possible chance of funding.

Katie Castello and Kate Grass are the Department of Surgery's grant managers and assists faculty members in tracking receipt and distribution of grant funds.

Research Council: The Department of Surgery's Research Council is responsible for assisting researchers in meeting their research aims. It is composed of divisionally based research program leaders (named by each Division Chief) in addition to the Vice Chair for Research, and a member from Departmental Research Administration. This Committee acts in an advisory capacity to the Chairman and Leadership Council and meets bimonthly (unless need dictates otherwise). The Research Council has been tasked with addressing research related issues that have department wide impact. This includes programmatic recruitment, resident research development, oversight of the Clinical Translational Scholars program described above, identification of research space needs and makes recommendations to the department chairman for distribution of department research space. It also assists the department by working with the university committee overseeing allocation of research space to identify and allocate available space within the university to accommodate new researchers should departmental space be unavailable.

Travel expenses: Travel expenses for faculty members or residents presenting their research at approved and recognized major regional and national meetings are paid by the Department of Surgery within the allowances and restrictions mandated by the University, MUSC Physicians, and the laws of the State of South Carolina. It should be noted that the DOS also provides support for the mentors involved with the individual's research and presentation when appropriate.

Additional resources are provided by MUSC, as well as state and national organizations that can assist faculty members in their career development. Some of these are listed in [Appendix 7](#).

It is also important for all faculty members to be aware of two important faculty groups on campus that serve important organizational, support and advocacy roles for faculty:

The Faculty Senate is the representative body of the Medical University of South Carolina faculty (http://academicDepartments.musc.edu/faculty_senate). The Senate's recommendations reflect and advocate the faculty's collective interests to further the university's mission. The mission of the MUSC Faculty Senate is to represent the views, needs, and interests of faculty in the educational, research, and service programs of the university. One of the important roles of the Faculty Senate is arranging the New Faculty Orientation Program. This is a biannual event that includes a general welcome from key leaders at MUSC and breakout sessions detailing clinical, research, and teaching resources specific to MUSC. The Faculty Senate also provides Town Hall Meetings and Workshops several times a year to update the faculty on University Initiatives, Tenure and Promotion, and other relevant topics.

The Women Scholars Initiative (WSI) is a joint initiative of the Office of Academic Affairs and the Office of the President with a long-term goal of promoting careers of women faculty. This organization provides a monthly workshop series (recent topics include promotion and tenure, work/life balance, contract negotiation, financial planning, and establishing good mentoring relationships). Other events sponsored by the WSI include the annual Eminent Scholar Seminar and Award, which brings an eminent scientist to MUSC to talk about his/her work and visit with MUSC faculty members. Past Eminent Scholars include members of the National Academy of Sciences and the Howard Hughes Medical Institute. WSI sponsors the John R. Raymond Fellowship, an annual award made to a junior faculty member to be used towards building collaboration with a renowned expert (male or female) in her field. WSI also sponsors a number of peer mentoring events and roundtables. WSI events are open to all MUSC faculty. Learn more at <http://academicDepartments.musc.edu/womenscholars/index.htm>

Measurement of Academic Productivity

The Department of Surgery has developed a practice plan structure that incorporates a points system to reward individual faculty members for their academic productivity. The intent of this plan is to encourage faculty members to engage in academic pursuits by rewarding them financially for these efforts through their divisional practice plans. Each Division/Section has its own individualized plan for distributing the funds.

A copy of the uniform points system is included as [appendix 8](#). The publication impact factor scale used in this points system is attached as [appendix 9](#).

Appendix 1

An up-to-date curriculum vitae utilizing the College of Medicine standard format. Include only published or in-press citations. Conform exactly to the College of Medicine format; departures from this format may result in delayed or postponed consideration of the appointment/promotion. Preferably the CV should be printed and submitted from FAIR in PDF format.

COLLEGE OF MEDICINE CURRICULUM VITAE FORMAT

Name: _____ **Birth Date:** _____ (Optional)

Home Address: _____ **Phone:** _____

Office Address: _____ **Phone:** _____ **Fax:** _____

Citizenship and/or Visa Information:

Education (Beginning with Baccalaureate Degree):

Institution/Location	Years	Degree/Date	Field of Study
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Internship: _____ (Place) _____ (Dates)

Residencies or Post Doctoral: _____ (Place) _____ (Dates)

Specialty/Board Certification: _____ **Date:** _____

Licensure: _____ **Date:** _____

Military Service:

Faculty Appointments (Begin with initial appointment):

Years	Rank	Institution	Department
-------	------	-------------	------------

Administrative Appointments:

Years	Position	Institution	Department
-------	----------	-------------	------------

Hospital Appointments/Privileges:

Years	Active/Inactive	Institution
-------	-----------------	-------------

Other Experience:

Years	Position	Institution	Department
-------	----------	-------------	------------

Membership in professional/scientific societies (include offices held):

National Societies

Local Societies

Editorial Positions:

Extramural Grants/award amount (current and past):

As Principal Investigator (% time) As Co-Investigator (% time)

Intramural Grants/amount of award:

Awards, Honors, Membership in Honorary Societies:

Academic Committee Activities (past 5 years):

University College

Department Division

Major Teaching Interests and Responsibilities (Current):

Undergraduate Medical Education Graduate

Medical Education Graduate Studies Education

Continuing Medical Education

CURRICULUM VITAE FORMAT (Continued)

Mentoring Activities

Major Clinical Interests and Responsibilities:

Major Research Activities and Responsibilities:

Lectures and Presentations during the last 3 years – Identify the name and location of the meeting/conference.

List presentations under the following headings:

Invited lectures and presentations

Submitted presentations (e.g., abstract or paper presentations)

Extramural Professional Activities:

Faculty Development:

Community Service:

NOTE: Please use the following symbols to identify names of Medical students* Graduate students# Residents+ who appear as co-authors on publications.

Publications: Number and list in chronological order publications under the following headings in the order shown.

Peer Reviewed Journal Articles: Published or accepted for publication in final form

Non- Peer Reviewed: Published non-peer reviewed journal articles

Scholarly Books and Monographs:

Chapters in Scholarly Books and Monographs

Peer Reviewed Electronic Publications:

Non-Peer Reviewed Electronic Publications:

Other Publications: (e.g., newspapers and magazines)

Products or Patents:

Revised 11/2010

Appendix 2
FACULTY INTRAMURAL TEACHING EFFORT REPORT

Name: _____

1. Involvement in formal medical school courses during the past 3-5 years:

 Name of course (repeat for each course taught)
 Frequency of course
 Number of contact hours
 Number of students
 Types of students
 medical
 graduate
 residents
 etc.

2. Involvement in formal courses offered by other colleges in the University in last 3-5 years.

 Name of course
 Frequency of course
 Number of contact hours
 Number of students
 Types of students

3. Involvement in department sponsored teaching activities in last 3-5 years:

 Conferences
 Seminars
 Grand Rounds
 Continuing Medical Education Activities

4. One-on-one or small group teaching in last 3-5 years:

 Rounds
 Clinical Services

5. Course materials (syllabi, readings, handouts, examinations) developed by the candidate. Indicate how these materials were used in the course. *Please limit the material submitted to a maximum of 20 pages.

6. Supervision of research projects involving students, residents, fellows in last 3-5 years.

7. Editorial assistance with papers written by students, residents, fellows, others in last 3-5 years.

8. Membership in departmental, college or university committees related to education in last 3-5 years.

9. Service as an advisor for students, residents or fellows. Provide names of advisees over past 3 years.

10. List any honors/awards which you have received relative to teaching (i.e., Faculty Excellence Award, Golden Apple Award, etc.).

FACULTY INTRAMURAL TEACHING EFFORT REPORT (Continued)

Name: _____

11. Participation in thesis committees.
12. List articles, chapters, books or other promotional materials related to education, developed by the candidate; please do not send these materials.
13. Describe courses or self-instructional activities taken by the candidate to improve teaching skills.
14. Describe public service activities which are oriented to education (example-making presentations to high school students on AIDS prevention).
15. Attach teaching evaluations from medical students, residents, fellows, postdocs, graduate students, etc. during last three years. *Provide 1-2 evaluations per year. Please limit the material submitted to a maximum of 20 pages.

TEACHING EVALUATIONS

Appendix 3

COM FACULTY RANKS CRITERIA				
<i>Under exceptional circumstances, promotions may be recommended when the candidate does not meet all of the basic criteria. These will be unusual cases.</i>				
R=Required S=Suggested				
Professor	Academic Investigator	Academic Inv/Ed	Academic Clinician	Clinician Educator
Continues to meet all the criteria for Associate Professor with major accomplishments in research, teaching, and/or clinical service	R	R	R	R
Distinguished career exemplifying scholarship. Excellence & productivity in research, outstanding success as a teacher, and/or outstanding service contributions are required. Involved in teaching activities, including formal lectures, grand rounds, and/or continuing medical education. (Leadership in interprofessional teaching and interdisciplinary research encouraged)*	R*	R*	R*	R*
Principal investigator on significant research grants	R	S	S	
Co-investigator on research grants.		R	R	
Direct involvement in research.	R	R	R	R
Key individual in training of students, post-graduates and mentorship of junior faculty	R	R	R	R
Serves as Course Director for one or more major courses		R		
Continues to carry a heavy clinical or teaching load		R		R
Continued publication of reviews, chapters, textbooks, peer reviewed papers, and/or innovative teaching materials (new curricula, educational programs, syllabi, video materials, computer programs, etc.) that influence the science and practice of medicine at the regional & national levels	R	R	R	R
Continued publication of important and original clinical and/or laboratory investigations with significant authorship.	R		R	
Publications with significant authorship since promotion to Associate Professor (line 1), and in total (line 2)	≥10 ≥30		≥10 ≥30	
Publications with authorship since promotion to Associate Professor (line 1), and in total (line 2)		≥5 ≥10		≥5 ≥10
National recognition, as evidenced by election to generalist or specialty societies, service on national committees, study sections, editorial boards, visiting professorships, and/or invitations to speak in CME courses.	R	R	R	R
Leadership roles in appropriate department, hospital and college		R	R	R

Associate Professor	Academic Investigator	Academic Inv/Ed	Academic Clinician	Clinician Educator
Continues to meet all the criteria for Assistant Professor with a record of achievement in research, teaching, and/or clinical service. (Participation in interprofessional teaching and inter-disciplinary research encouraged)*	R*	R*	R*	R*
Record of excellence in high quality patient care, teaching and/or research	R	R	R	R
Established independent investigator with major impact in planning/development of research project. Involved in teaching activities, including formal lectures, grand rounds, and/or continuing medical education.	R		R	
Principal investigator on significant research grants	R		S	
Co-investigator on research grants.		R	R	
Local, regional or national grant support for independent research or development of teaching methods, or health care delivery methods, or clinical care systems		S		S
Peer recognition for research activities including invitations to present work at other universities, workshops and scientific conferences.	R		R	
Direct involvement in research.	R	R	R	R
Organization of clinical services to provide a setting for medical education and a data base for clinical research.				R
Active in training of students and/or post-graduates.	R	R	R	R
Serves as Course Director for one or more major professional courses		S		
Important contributor to course development or course direction.		R		S
Superior evaluations of teaching by students, residents, peers, course directors, dept. chairs.	S	R	S	R
Nominated for or recipient of teaching awards.		S		S
Presentations at national/international meetings.	R	R	R	R
Continued publication of reviews, chapters, textbooks, peer reviewed papers, and/or innovative teaching materials (new curricula, educational programs, syllabi, video materials, computer programs, etc.) that influence the science and practice of medicine at the regional & national levels	R	R	R	R
Continued publication of important and original clinical and/or laboratory investigations with significant authorship.	R	R	R	
Total publications with significant authorship since last promotion	≥10		≥10	
Total publications with authorship since last promotion		≥5		≥5
Development of new teaching materials, such as curricula, educational programs, textbooks, syllabi, computer programs and video tapes		R		R
Established reputation inside and outside local institution as an authority in a clinical specialty or for leadership in primary care			S	R
Contributions to committees at department, college, university, community, state, regional, national and international levels	R Univ Level	R Univ Level	R State Level	R State Level
Leadership role in department and hospital as a section or division head, or program director			S	S
Active involvement in local and national professional organizations	R	R	R	R
Election to scientific organizations in discipline.	S	S	S	S

Assistant Professor	Academic Investigator	Academic Inv/Ed	Academic Clinician	Clinician Educator
Clear commitment to an academic career in research, teaching and/or clinical care.	R	R	R	R
Commitment to and potential for performing independent laboratory and/or clinical research.	R	R	R	
Receipt, active pursuit or development of the skills necessary to apply for local, regional and national grants.	R	R	R	
Developing skills for directing or contributing to publications related to research, teaching and/or clinical care. (Participation in interprofessional teaching and inter-disciplinary research encouraged)*	R*	R*	R*	R*
Active in training of students and/or post-graduates.	R	R	R	R
Strong interest in teaching.		S		
Contributions as first author on refereed publications.	R	R	S	
Contributions as author on refereed publications.			R	S
Capable of managing most clinical problems in the appropriate discipline, but may seek assistance from senior faculty when dealing with complex problems.			R	R
Carry a heavy clinical load				R
Establishing recognition through candidacy or membership in appropriate professional and scientific organizations.	R	R	R	R

Instructor	Academic Inv	Academic Inv/Ed	Academic Cl	Clinician Ed
Completion of educational requirements necessary to enter a career in academic research, teaching and/or clinical care.	R	R	R	R
Aptitude for an academic career based upon recommendations of mentors.	R	R	R	R
Career goal to function independently in an academic environment as an investigator, teacher, and/or clinician.	R	R	R	R
Developing experience with preparation of research protocols and grant applications.	R	R	R	
Demonstrated interest in teaching.	R	R	R	R
Early experience with preparation of publications and presentations related to research.	R	R	R	
Fulfilled educational requirements for certification by appropriate specialty board.			R	R
Demonstrated interest in high quality clinical care.				R

Appendix 4
Department of Surgery Faculty Mentoring

GOAL: Develop an effective means to provide junior faculty assistance with professional and personal development and to provide a safe mechanism for that individual to express concerns and obtain guidance.

PURPOSE OF THE MENTORING PROGRAM

1. Development of internal (and in some cases external) mentors who will be available to assist and guide junior faculty in their career development.
2. Assuring timely and regular review of junior faculty progress toward promotion.
3. Assure a forum for exchange of ideas between junior and senior faculty members.
4. Process for formal review of grants and other important work efforts in mentoring.
5. Encourage and recognize faculty efforts in mentoring.

ATTRIBUTES OF A GOOD MENTOR

- Committed to his or her mentee and the mentoring process
- Has realistic expectations of the mentee-mentor relationship
- Is available and approachable
- Listens well and demonstrates patience
- Maintains confidentiality
- Keeps promises and follows through
- Is non-judgmental and accepting of personal differences
- Demonstrates sensitivity to the mentee's needs
- Has the mentee's best interests in mind
- Enjoys watching his or her mentee's development
- Exhibits high professional and moral character
- Treats others with respect

PITFALLS OF MENTORING

- Having inappropriate expectations (either mentee or mentor)
- Accepting responsibility or credit for work that is not one's own (includes authorship or grants)
- Lacking availability or schedule flexibility
- Inappropriateness or insensitivity in interpersonal interactions, especially gender, culture, or age related
- Inability to recognize limitations and not providing alternative resources
- Doing work for the mentee

- Discomfort sharing own failures or missteps
- Breaching confidentiality
- Not anticipating challenges or obstacles in the mentoring process.

IMPLEMENTATION

The initial stages of mentoring should include:

- Introduction to the promotion process. The mentor should make sure that the mentee is in the correct track and understands the components for promotion to Associate Professor. The mentor should help guide this process and track progress. The mentor should help the mentee format his or her CV. It is suggested that quarterly meetings would be appropriate with a formal review of career progress at least annually.
- The mentor should acquaint the mentee with appropriate committee opportunities that fit the mentee's interests and/or opportunities for growth. It is suggested that consideration be given to representation on a Departmental, College of Medicine, and Hospital committee.
- Yearly goals and objectives should be outlined and tracked. In the first year(s), consideration should be given to the priority of any necessary Board certification.
- The mentee should be encouraged to begin an early record of publication. Guidelines should be given regarding subject matters, resources, and venues.
- The mentor should assist the mentee in developing relationships with referring physicians and assisting the mentee in speaking opportunities.

For research faculty, the mentor would preferably have some knowledge of the mentee's field of interest. The faculty mentor should:

- Introduce the mentee to faculty with similar interest and who could potentially serve as additional mentors and collaborators.
- Assist the mentee in developing research goals and objectives. The mentor should track progress on a quarterly basis.
- Assist the mentee in identifying potential funding opportunities.
- Serve as a grant reviewer.

Ongoing implementation will include:

- On a quarterly to semi-annual basis, mentors will review with their mentee the progress of the mentee in achieving annual goals set forth by the mentee's division head and/or the department chair.
- A formal review process with the chairman and/or division head on achievement of academic goals and objectives, as well as development of new goals will be held, at minimum, on a yearly basis.
- The mentee's success will be part of the Chair's yearly review of the mentor's performance.

MEASUREMENT CRITERIA

The faculty mentor will review the following with their mentees

Education

1. Resident and medical student education scores.
2. Resident and medical student interactions (small group sessions, development of teaching modules, advisory roles, participation in projects such as case reports, meeting presentations, etc.)
3. Teaching awards
4. Development of teaching material by the mentee
5. The mentees role in leading a specific course or program

Practice

1. RVUs per year
2. Operations per year
3. Patient satisfaction scores
4. Available outcome metrics (NSQIP, CMS parameters, etc.)

Academic: Clinician Educator

1. Publications
2. Presentations
3. Meetings attended
4. Elected to national professional organizations
5. Offices held
6. Clinical research projects or collaborations

Academic: Research

1. Publications
2. Preliminary data on research
3. Grants funded

4. Grants submitted
5. Meetings attended
6. Review panels

Evaluation of Effectiveness of the Mentoring Program

1. We believe that the most important measure of program effectiveness is whether the mentor and mentee feel that the relationship is worthwhile. There must be a reciprocal relationship wherein the mentor feels sense of pride and extension of self and the mentee recognizes that his or her academic progress has been enhanced by the advice and guidance of the mentor. This is measured by an annual mentor and mentee survey to be completed each July. (*Appendix 4*)

REFERENCES

1. Levy BD, Katz JF, Wolf MA, et al. An initiative in mentoring to promote resident's and faculty members careers. *Acad Med* 2004; 79:845-850.
2. Cohen NH. *The mentor's guide to mentoring*. Amherst (MA): HRD Press; 1999.
3. Cohen NH. *Manager's pocket guide to effective mentoring*. Amherst (MA): HRD Press; 1999.
4. Cohen NH. *Principles of adult mentoring inventory (PAMI)*. Amherst (MA): HRD Press; 1998.
5. Tracy EE, Reshma J, Starr R, Tarbell NJ. Outcomes of a pilot faculty-mentoring program. *Am J Obstet Gynecol* 2004; 191:1846-50.
6. Cochran A, Paukert JL, Scales EM, Neumayer LA. How medical students define surgical mentors. *Am J Surg* 2004; 187:698-701.
7. Bickel J, Brown JA. Generation X: Implications for faculty recruitment and development in academic health centers. *Acad Med* 2005; 80:205-210.
8. Souba WW. The essence of mentoring in academic surgery. *J Surg Oncol* 2000; 75:76-79.

Appendix 5

Evaluation of Mentor/Mentee Relationship

TO BE COMPLETED BY MENTEE

Mentee: _____

Mentor: _____

ITEM	Excellent		Fair	Poor	
1. The mentor is available on a regular basis and approachable.	1	2	3	4	5
2. The mentor helps define goals	1	2	3	4	5
3. The mentor has respect for the mentee	1	2	3	4	5
4. The mentee has respect for the mentor	1	2	3	4	5
5. The mentor is an appropriate role model for the mentee	1	2	3	4	5
6. The mentor has a good understanding of the challenges presented to the mentee.	1	2	3	4	5
7. The mentor has been helpful in guiding the mentee through the challenges presented.	1	2	3	4	5
8. The mentor provides both support and constructive criticism of the mentee.	1	2	3	4	5
9. The mentee maintains a portfolio of publications, lectures, clinical development, faculty/university service for periodic review with mentor(s) and annual review with chair	1	2	3	4	5

TO BE COMPLETED BY MENTOR

Mentee: _____

Mentor: _____

ITEM	Excellent		Fair	Poor	
1. The mentee is available on a regular basis and approachable.	1	2	3	4	5
2. The mentee has developed a reasonable set of goals	1	2	3	4	5
3. The mentor has respect for the mentee	1	2	3	4	5
4. The mentee has respect for the mentor	1	2	3	4	5
5. The mentee exhibits understanding of the requirements, policies, and procedures for promotion and tenure.	1	2	3	4	5
6. The mentee has a good understanding of the challenges presented to the mentee.	1	2	3	4	5
7. The mentee has developed an established relationship(s) with a mentor(s) in the areas of teaching, research, clinical service, and faculty development	1	2	3	4	5
8. The mentee takes criticism/suggestions from the mentor and reacts appropriately.	1	2	3	4	5

Appendix 6

MUSC Department of Surgery
Research Committee
Clinical Research Improvement Initiative (CRII)

INTRODUCTION:

Clinical research expertise and productivity are desirable if not necessary in academic surgical departments. Varying degrees of expertise and productivity in clinical research typically exist in surgical departments and may be viewed as a range from the conduct of individual retrospective chart reviews to participation in multicenter studies to competitively funded investigations by established investigators. This is a preliminary proposal intended to increase clinical research productivity by faculty in the early stages of their surgical careers and establish a foundation for an expanded clinical research enterprise in the Department of Surgery.

GOALS:

Long Term: To promote high quality clinical research projects in the Department of Surgery at MUSC that contribute to the development of programmatic areas of research excellence in the Department as well extramural funding in selected areas.

Short Term: To provide support for selected surgical faculty who seek to design and implement a methodologically sound, high quality, clinical research project.

It is anticipated that the program will promote quality research projects as evidenced by a progression along the following continuum:

1. Chart review/Case report
2. Hypothesis driven, single center, adequately powered project with high internal and external validity
3. Hypothesis driven, multi-center adequately powered project with high internal and external validity
4. Mentored investigations within structured environments such as a K award or an MSCR degree
5. Extramural funding from NIH and other sources
6. Independent investigator status

TARGET PARTICIPANTS: Non-tenured surgical faculty at the Instructor, Assistant Professor and Associate Professor level with a well-developed clinical research question and a commitment to engage in the CRII. Divisional support is considered vital.

DESCRIPTION: The CRII proposal seeks to explore options for the promotion of high quality clinical research in the Department of Surgery at MUSC with the goal of developing and expanding programmatic areas of research excellence in the Department and increasing the number of independently funded researchers. We are proposing that the Research Committee invite each Division Chief to submit the name of 1 faculty member (Instructor, Assistant Professor, Associate Professor without Tenure) who is not a well-established researcher and who is willing to submit a well developed idea for a clinical research project. The Committee will choose two candidate proposals and would

ensure that the 2 faculty members had the resources needed to design and implement a fundamentally sound clinical project. This would serve as a preliminary experience that would be limited in scope but representative of what is needed to support the faculty in performing clinical research of significant quality.

Faculty would be invited to submit a brief proposal in a format consisting of the following elements:

- Title
- Research question/hypothesis
- Specific aims of the proposed research
- Existing literature on the subject/background
- Significance and programmatic relevance, especially as relevant to Divisional goals and objectives
- Proposed research design and methods
- Available divisional or other resources
- Budget needs
- Proof of up to date CITI certification

The following resources would be available to the selected proposals through the

- Departmental Research Committee:
- Research Mentor
- Support for biostatistics and study design
- Support for IRB submission
- Support for database development and/or mining as needed
- Support for manuscript preparation
- Departmental funding of \$25,000/year for each of the 2 faculty members

At the discretion of the Research Committee, these resources will be available to all faculty members who submit proposals.

SUBMISSION OF CANDIDATE CRII PROPOSALS:

1. Division Chief will submit the name of a faculty member (Instructor, Assistant Professor, Associate Professor without Tenure) with:
 - a. Letter of support outlining available Divisional support including time (suggested format is 8 hours per week for research), available resources (eg. statistical support, existing funding) and mentorship arrangement.
 - b. Letter of Support from a Research Mentor. Existing Department of Surgery Mentors should be considered for this role but any mentor that the candidate has ready access to would be acceptable.
2. The Faculty candidate, with assistance from their Division Chief and Research Mentor will develop and submit a research proposal using the CRII guidelines:
 - a. Proposal title
 - b. Candidate's career research goals
 - c. Divisional goals/mission and how the proposal is consistent with these Divisional goals/mission
 - d. Research question and specific aims

- e. Background
 - f. Proposed Methodology
 - g. Budget outline
3. Proposals should be no longer than 5 single spaced pages.
 4. Candidates should have current CITI certification and IRB approval (as appropriate) is required as a condition of funding.
 5. All faculty who submit proposals will be asked to present a brief (10 minute) presentation to the Research Committee.
 6. The Research Committee will meet to review submissions and select 2 proposals for support in the inaugural cycle.
 7. Members of Research Committee will meet with faculty selected for the first cycle of funding to discuss proposals and develop a follow-up plan including a timeline for additional funding such SCTR, VA awards, K series awards, R-21, R-01 etc.
 8. Faculty whose proposals are selected for funding will be expected to provide the Research Committee with a brief oral or written update at 6 month intervals.
 9. They will also be expected to present a Surgical Grand Rounds on their subject.
 10. All faculty who submit proposals will have the benefit of productive advice, constructive criticism and guidance by Research Committee members so that their proposal may become a feasible clinical project.
 11. Faculty are encouraged to resubmit their proposals if not selected for funding in the initial cycle.
 12. Funds provided by the Department of Surgery (up to \$25,000/year per proposal) may be used for any research related expense listed in the budget except the faculty member's salary. Faculty salary support is the responsibility of the individual Division and should be negotiated prior to submission of proposals.
 13. Proposal packets for the CRII should be submitted to the Chair of the Research Committee.

Appendix 7

Institutional, State and National Resources for Supporting Faculty Development at MUSC

1. Institutional Resources

- a. **Research Support** There are a number of institutional resources that support clinical, translational, and basic science research. These are listed on the MUSC Research and Discovery website

<http://academicdepartments.musc.edu/research/index.html>. Some of these resources are described below:

- i. **The South Carolina Translational Research (SCTR) Institute.** The recently NIH funded MUSC Clinical Translational Science Award (CTSA) that is called the South Carolina Translational Research (SCTR) Institute (<http://sctr.musc.edu/>) provides research support to investigators across campus. Within SCTR is the **SUCCESS Center** which provides research navigation support such as collaborator and mentor matching and links to institutional cores and programs. Additionally, the SUCCESS center (<https://sctr.musc.edu/index.php/programs/success-center>) provides consultation for regulatory submissions and study subject recruitment, lists studies on clinical trials registry, and helps with grant budget development. At SCTR there is a toolkit that can help the most inexperienced investigator navigate the process required to get clinical trials underway and much more. MAP-R is a web portal that identifies approvals needed for all types of grant submissions Visit https://sctrweb2.musc.edu/research_toolkit to find a wealth of information and pertinent advice about research at MUSC.
- ii. **Funding Opportunities** are available through the KL2 and Pilot Project Program of SCTR and the University Research Committee. <https://sctr.musc.edu/index.php/education/k12>
<https://sctr.musc.edu/index.php/programs/pilot-projects>
<http://research.musc.edu/urc/home.htm>
- iii. **SCTR Vouchers** can be requested for up to \$1,000 for research services and supplies per approved protocol every six months. Investigators are limited to two active vouchers in any one six month period as long as they are for two different protocols. For more information please visit <https://sctr.musc.edu/index.php/voucher>. If you think that applying for a SCTR Voucher could be beneficial to your research study, please visit <http://sctr.musc.edu> and fill out a Service Request Form. The SUCCESS Center staff reviews all voucher requests and a decision of award is made within two business days of application.
- iv. **The Office of Research Development (ORD)** (<http://research.musc.edu/ord/index.html>), which is funded through

the Vice President for Academic Affairs & Provost's Office, focuses on program and proposal development, identifies funding opportunities, develops proposal concepts, networks faculty members with complementary interests, provides grant-writing consultation and workshops, offers pre-submission critiques, compiles institutional data, and prepares competitive proposals for research resources and research training. New faculty and trainees are encouraged to visit the office in 101 Basic Science Bldg to meet the ORD staff and learn about networking opportunities. The following are among the services offered by the Office of Research Development:

1. ORD Alerts mailing list is a service for MUSC faculty and trainees to receive research news and funding opportunities by email (<http://www.carc.musc.edu/ordalerts/>)
2. Pivot is an external web-based system, offered as an institutional subscription service, that provides a range of services including searchable databases for funding opportunities and expertise, as well as a personalized workbench from which to access and manage COS services.
<http://pivot.cos.com>
3. Resources and Scientific Environment is a compilation of information about MUSC, its components and programs, primarily used to assist MUSC faculty, staff, and trainees in preparing institutional resources and environment sections for research grant and contract proposals.
http://academicdepartments.musc.edu/research/ord/proposaldevelopment/resources_scientific_environment/index.html
4. Grantsmanship Workshops are held twice per year. Led by an external consultant, the workshop content focuses on the NIH organization, peer review system, grantsmanship tips, and the ABCs of an R01 or other NIH grant application. Individual and team consultations are also offered. The workshops and consultation opportunities are an institutional research support service, provided at no charge to investigators or programs.
http://academicdepartments.musc.edu/research/ord/retreats_workshops/grantsmanship.html
5. Research Project Grants Retreats are held several times each year. These interactive half-day sessions give individual investigators the opportunity to gain constructive criticism on a specific research concept or proposal. Researchers at any phase of career development are encouraged to present or attend.
http://academicdepartments.musc.edu/research/ord/retreats_workshops/rpg.html

6. MyPeerReview is an internal, on-line searchable database of information about MUSC faculty service on review panels and study sections for the NIH and other federal and non-federal sponsors, as well as journals for which MUSC faculty members have served or currently serve as an ad hoc reviewer, member, editorial board, etc.
<http://academicdepartments.musc.edu/research/ord/mypeerrview.html>
- v. **Bridge Funding Program:** The purpose of this program is to support investigators with established clinical or basic research programs during periods when a competitive renewal was not funded. Applications will be accepted three times per year. Program details and the application format can be found at <http://academicdepartments.musc.edu/com/research/bridgefunding.htm>
- vi. **Grant Writing Help** is provided by:
 1. The Office of Scientific Editing and Publications (OSEP) which provides support to augment manuscript and grant writing skills for MUSC faculty, trainees, and staff
<http://academicdepartments.musc.edu/nursingold/departments/researchoffice/documents/osep.pdf>
through the SUCCESS center
<https://sctr.musc.edu/index.php/programs/success-center>.
- vii. **Grant Administrative Support.** The Office of Research and Sponsored Programs (ORSP) and Office of Grants and Contracts Accounting (OGCA) provide the fundamental support need to obtain and manage sponsor-supported research funding. In addition to individual support, their websites provide important information regarding basic information needed for submission, and management of grants and contracts.
 1. Office of Research and Sponsored Programs
(<http://research.musc.edu/orsp/index.html>)
 2. Office of Grants and Contracts Accounting
(<http://academicDepartments.musc.edu/vpfa/finance/gca/index.htm>)
- viii. **Some Specific Resources for Clinical and Translational Research:**
 1. **SCTR Research Nexus.** The 9,200 sq. ft. facility on the 2nd floor of MUSC's Clinical Sciences Building includes 8 examination rooms, 3 procedure rooms, a dental suite, pulmonary function testing suite and a specialized imaging/body evaluation suite. The facilities provide space and support for a myriad of studies. These include but aren't limited to: investigator-initiated, federally-funded, foundation-funded, industry-initiated/industry-sponsored, and pilot studies. The overarching goal is to facilitate

patient-oriented research in a cost-effective manner and help strengthen the discipline of clinical and translational science.

http://academicdepartments.musc.edu/sctr/nexus/services/research_facilities.html

2. **Biostatistics Consultation** through the SCTR Biostatistics & Epidemiology Program. Services offered are:
 - a. Biostatistical Education: Consultation and assistance in understanding one or more biostatistical concepts
 - b. Methodology/Study Design: Guidance with selecting an appropriate study design or developing a statistical analysis plan
 - c. Power Analysis / Sample Size Calculation: Assistance with determining the statistical power or sample size required for a proposed study
 - d. Data Analysis: Assistance with analyzing data collected for a research study
 - e. Other: (e.g. help with presentations, manuscripts, etc.)

These services are offered for several different settings:
Assistance Preparing Grants (Federal, Foundation, Other)
Assistance Preparing CTSC Protocols
Assistance with Current CTSC Funded Project
Unfunded Research Project (e.g. Abstract/Manuscript Preparation)

Links to these services are

<http://sctr.musc.edu/index.php/programs/biostats>

http://sctrweb2.musc.edu/research_toolkit/preaward/grantproposal/statistic

- ix. **Master of Science in Clinical Research Program (MSCR)** degree is offered by MUSC. This program teaches core competencies in clinical research methods, fosters development of a sustainable research focus, and provides the participant with the skills to compete for extramural support.
<http://academicdepartments.musc.edu/mscr/index.htm>
- x. **The SCTR Training, Education and Career Home (TEACH)** program was developed to increase the clinical and translational research workforce through innovative educational and mentoring opportunities. SCTR-TEACH capitalizes on the educational resources of MUSC in basic science, clinical research, and community-based outreach and participatory research, and unites them as an exceptional team with comprehensive expertise and a shared goal of excellence in clinical and translational research training and career development. SCTR-TEACH provides the

infrastructure for training and development across the spectrum of translational research for clinical fellows, junior faculty, mentors, pre- and postdoctoral students, research coordinators and administrators. <https://sctr.musc.edu/index.php/programs/teach/133>

xi. **Some Specific Resources for Basic Science Research:**

1. **Research Support**

<http://research.musc.edu/researchresources.html>

- a. **Shared Core Facilities.** A number of core facilities are available to support basic research. A description of available core facilities is available at the following link.

https://sctrweb2.musc.edu/cores_facilities

- b. **College of Graduate Studies (CGS) Office of Postdoctoral Affairs.** In addition to providing useful information regarding practical aspects of hiring and mentoring postdoctoral scientists, the office also offers services to enable recruitment of postdoctoral scientists.

2. **Responsible Conduct of Research (RCR).**

- a. CGS RCR Retreat resources. All MUSC postdocs participate in a mandatory 2-day retreat focused on career development, conflict resolution, and compliance issues related to the responsible research practices. All lectures and handouts are available on the CGS website.

<http://www.musc.edu/grad/postdoc/rcr.html>

- b. The HHS Office of Research Integrity website has a wealth of educational resources on RCR practices with case scenarios, videos and tutorials for all stages of research professionals

<http://ori.dhhs.gov>

3. **Personnel/Trainees Relationships**

- a. College of Graduate Studies

<http://www.musc.edu/grad/>

- i. Graduate Faculty Resources – application for appointment to graduate faculty and conflict of interest forms.

https://academicdepartments.musc.edu/grad/faculty_resources/index.htm

- ii. Mentoring Compact/Graduate Students – AAMC recommendations for mentoring graduate students

<https://www.aamc.org/initiatives/research/gradcompact>

- iii. Mentoring Compact – AAMC recommendations for mentoring postdocs

<https://www.aamc.org/initiatives/research/postdocompact>

- iv. Graduate Council Minutes – record of monthly meetings and policy discussions.
 - v. Graduate Faculty Research – web-based database of faculty research interests to aid students looking for potential mentors.
 - vi. Training Grants – listing of MUSC training grants and career development programs for graduate students and postdocs.
 - vii. Student Handbook – specifics of graduate programs, resources, dissertation requirement, and CGS policies.
 - viii. Summer Research Programs for Undergraduates and Health Professional Students. These programs provide students the opportunity of a 10-week long internship with MUSC faculty. (<http://www.musc.edu/grad/summer/index.html>)
- b. Howard Hughes Medical Institute
- i. “Lab Management: Making the Right Moves” is an essential resource for postdocs and faculty, available free on-line. http://www.hhmi.org/sites/default/files/Educational%20Materials/Lab%20Management/Making%20the%20Right%20Moves/moves_2.pdf
 - ii. “Entering Mentoring” provides guidance in mentoring individuals with diverse learning and personality styles. http://www.hhmi.org/sites/default/files/Educational%20Materials/Lab%20Management/entering_mentoring.pdf
- c. Human Resources Career Development Courses and Seminars. MUSC HR provides a variety of professional development workshops and seminars to facilitate more effective lab management and hiring practices. <http://academicDepartments.musc.edu/vpfa/hrm/training/trainingpage>
- d. International Scientific Presenters Toastmasters. This club provides a supportive environment for learning how to give effective scientific presentations, and benefit from constructive feedback of peers and faculty sponsors.

<http://www.toastmasters.org/ToastmastersMagazine/ToastmasterArchive/2007/May/Science.aspx>

- e. CGS725 Teaching Techniques. This course is offered every Fall and Spring semester and is open to all students and postdocs. Contact the College of Graduate Studies office for registration information (weised@musc.edu)

4. Networking Opportunities

- a. “B & BS” (halushpv@musc.edu). The B & BS club provides an informal forum for faculty, postdoctoral and graduate students to present their research ideas, grant proposals or research problems to a mixed audience that can provide useful feedback and often potential collaborations or exchange of reagents
- b. MUSC Core Facilities “Octoberfest” Reception. This is an annual event for core facility directors to highlight the services available.
- c. Research INKlings: INKlings is a monthly on-line news letter of recent events of interest to MUSC researchers.
<http://academicdepartments.musc.edu/research/ord/researchnews/index.html>
- d. SACNAS promotes a diverse research academy by providing workshops and networking opportunities that encourage Chicano/Hispanic and Native American students and postdocs to pursue and persist in STEM fields. This is also an excellent recruitment resource.
<http://www.sacnas.org>
- e. ABRCMS is an annual conference that brings underrepresented minority students and postdocs together to present their research in an environment that encourages their development into future STEM faculty. This is also an excellent recruitment venue.
<http://www.abrcms.org/index.html>
- f. www.MinorityPostdoc.org hosts a variety of career development resources for postdocs, including job listings and articles, with an emphasis on minority scholars.

b. Resources for Education

i. Types of Educational Technology

1. Tegrity –

- a. Tegrity is a lecture capture service that lets faculty automatically capture every class – on and off

- campus – for later review by every student, anytime, anywhere. <http://tegrity.musc.edu>
2. Adobe Connect –
 - a. Adobe Connect is a Web conferencing software that securely shares presentations and multimedia right from a desktop computer, supporting feedback from hundreds of participants — all using a web browser and the Adobe Flash® Player runtime. <http://connect.musc.edu>
 3. Moodle
 - a. Moodle is MUSC’s current Learning Management System. A Learning Management System is a software package that enables the management and delivery of learning content and resources to students. <http://moodle.musc.edu>
 - ii. **Education Technology Services (ETS)** Provides support in the areas of digital imaging, audio visual support in centrally scheduled classrooms and distance education technologies, and video production. <http://academicdepartments.musc.edu/ets/>
 - iii. **Apple Tree Society** - The Apple Tree Society exists to foster dialogue and activity related to the scholarship of health professions teaching through campus and national partnerships. <http://academicdepartments.musc.edu/appletree>
 1. The following are the goals of the Society:
 - a. Expand the faculty development opportunities related to teaching on campus.
 - b. Initiate programs that recognize and enhance the value of teaching as a scholarly activity.
 - c. Explore and support innovative methods and technologies for teaching and learning.
 - d. Promote professional development of current and future educators.
 2. Activities of the Society include:
 - a. Monthly Brown Bags – noontime sessions on topics related to the scholarship of teaching.
 - b. Workshops focused on development of teaching skills including lecture and presentation skills, case based discussions, evaluating learners, and using technology such as WebCT (see below)
 - c. Collegiality – informal meetings to discuss teaching and learning
 - iv. **Copyright Toolkit** - Understanding and complying with the laws governing the use of copyrighted materials is daunting. The information on this site is directed at teaching faculty, students,

scientific writers, researchers, and others at MUSC who use copyrighted works. It includes Copyright @ MUSC: Policies, Forms, & Resources, forms, and information about Coursepacks, Plagiarism and How to Cite Sources, releases, Images and text, and print and digital/online resources. Many of the links lead to the excellent copyright Websites of other universities.

<http://copyright.library.musc.edu/page.php?id=1314>

- v. **Creating Collaborative Care/Interprofessional Education** - Creating Collaborative Care (C3) is a Quality Enhancement Plan (QEP) for the Medical University of South Carolina that focuses on inter-professional education.
<http://academicDepartments.musc.edu/c3/>
- vi. **Faculty teaching awards** (College and University) - In recognition of faculty accomplishments the individual colleges, as well as the university, present annual awards in teaching, research, and service. These awards are very competitive underscoring the excellence of the faculty with respect to their achievements. The awards are sponsored by various groups. The university annual awards include:
 - 1. Developing Scholar Awards
 - 2. Outstanding Clinician Awards
 - 3. Teaching Excellence Awards (Developing Teacher, Educator-Lecturer, Educator-Mentor)
 - 4. Distinguished Faculty Service Awards
- vii. **Library resources** - <http://www.library.musc.edu/>
 - 1. Computer labs – 4 computer labs are available for use by faculty for their classes. The labs host an average of 25 iMac computers that support the use of both Windows and Macintosh operating systems
 - 2. Learning Commons – An initiative of the MUSC library currently under development designed to provide spaces for study and socialization and access to the latest technologies for teaching and learning.
 - 3. Center for Academic and Research Computing – Works with faculty and staff across the campus to design, develop and support interactive instructional programs.
 - 4. Journals The library currently provides access to approximately 17,498 e-journals and 34 current print-only subscriptions <http://muscls.musc.edu/>
- viii. **Center for Academic Excellence** - The CAE is dedicated to improving learning and teaching on campus. Health care providers must learn and re-learn in order to adapt their practices to the latest advances in biomedical science. They also must collaborate with colleagues across professions to provide quality care and conduct groundbreaking research. That’s why the CAE provides collaborative learning groups; and the effectiveness of these groups

is why a majority of MUSC students choose to participate—in addition to their scheduled class time. Another vital part of the work of the CAE is teaching the material and the strategies necessary for success on national and state licensing board/certifying exams. Under the tutelage of CAE faculty and their fellow students, students approach these rigorous exams with confidence and exceed national performance averages.

<http://www.musc.edu/cae/>

- ix. **The Writing Center** - The Writing Center faculty members teach students to communicate effectively with their professors, their fellow students, and their patients.

<http://www.musc.edu/writingcenter/>

- x. **Enrollment Services** - Enrollment Services oversees student admissions, records and financial aid. <http://www.musc.edu/em>

2. State or National Resources

- a. The Office of Research Development maintains a “funding portal” to assist researchers in identifying funding opportunities.

<http://academicdepartments.musc.edu/research/ord/fundingops/index.html>

Information on the following opportunities is available:

- i. Funding alerts
- ii. Federal and state funding opportunities
- iii. Sponsor opportunities (Corporate and Foundations)
- iv. New Investigator Funding Opportunities
- v. Postdoctoral Funding Opportunities
- vi. Limited Submissions Competitions Opportunities

b. Associations

- i. **Association of American Medical Colleges (AAMC)**. The AAMC represents all 141 accredited U.S. medical schools; approximately 400 major teaching hospitals and health systems, including 68 Department of Veterans Affairs medical centers; and nearly 90 academic and scientific societies. Through these institutions and organizations, the AAMC represents 125,000 faculty members, 75,000 medical students, and 106,000 resident physicians. Through its many programs and services, the AAMC strengthens the world's most advanced medical care by supporting the entire spectrum of education, research, and patient care activities conducted by member institutions. <http://www.aamc.org/>
- ii. **Association of Women in Science (AWIS)** is a national advocacy organization championing the interests of women in science across all disciplines and employment sectors. By breaking down barriers and creating opportunities, AWIS strives to ensure that women in these fields can achieve their full potential. <http://www.awis.org/>
- iii. **National Postdoctoral Association**. The NPA provides many resources useful for enriching the research environment, managing a research lab, and expectations of mentors and trainees. MUSC is

an affiliate institution which provides membership to all faculty, postdocs, and students. <http://www.nationalpostdoc.org/>

Appendix 8:

MUSC DOS ACADEMIC POINT SCALE

MUSC Dept of Surgery Academic Productivity Scale	Points Assigned
Academic Rank	
Promotion	20
Professor	20
Associate Professor	10
Tenure	15
MUSC/MUHA/UMA/VAH Activities	
Section Head	15
Chair, Major Department committee	4
Member	1
Chair, ad hoc Department committee	3
Member	1
Chair, Major University committee	5
Member	1
National and Regional Activities	
Election to Major Surgical Organization (MSO)	15
Major office, National Surgical Organization	10
Committee Member	3
Major office, Regional Surgical Organization	3
Committee Member	1
Major office, State Surgical Organization	2
Committee Member	1
Visiting Professor (invited)	6
Publications	
Refereed Journal	
First/Senior Author: Cit Index Impact Factor (see Appendix 9)	5-70
Major Contributor: 0.5 x Cit Index (see Appendix 9)	2.5-35
Non-refereed Journal	
1st Author/ Senior mentor	5
Contributor/ Other Author	2
Textbook Editor	20
Textbook Chapter	8
Letter to the Editor	1
Presentations	
<i>National/International meeting</i>	
Session Moderator	5
Abstract Presentations:	
Presenter/senior mentor	6
Co-author, not presenter	3
<i>Regional meeting</i>	
Session Moderator	2
Abstract Presentations:	
Presenter/senior mentor	3

Co-author, not presenter	1
State meeting (includes GS post-graduate course)	
Presenter/senior mentor	2
Co-author, not presenter	1
Local invited speaker (incl. Dept. Surg Grand Rounds)	1
Peer Review Efforts	
Member, NIH Study Section	20
Ad Hoc Reviewer for National/Regional Funding	4
Editor, Major Journal	20
Journal Editorial Board	10
Ad hoc journal reviewer (per manuscript reviewed)	1
Preparation of Board Examination Questions	10
Board Examination Oral Examiner	10
Teaching and Mentoring	
Surgical Anatomy/Physical Dx/Intro Clinical Reasoning	2
ATLS course teaching participant	2
Chair, Mentorship Committee	15
Assigned Faculty Mentor	10
Meets mentorship expectations	5
Thesis Committee, Chair	5
Thesis Committee, Member	2
Assigned Tutoring/one-on-one instruction (with success on the test of the mentee)	15
Teaching Aids/Manuals	3
Revisions	1
Teaching Awards	
Golden Apple Award	20
nomination	5
Resident Teaching Award	6
Medical Student Teaching Award	6
Grants Submitted (points are per grant, dollars represent entire proposal for all years (direct and indirect))	
New Peer Reviewed Grant (NIH, etc) (must be PI, Project Leader, and Core Leader) (If dual PI or Project/Core Co-Leader will receive half credit)	
>\$2.0M	10
\$450k - \$1.99M	5
\$150k - \$449k	2
<\$150k	1
Revised Peer Reviewed Grant (NIH, etc) (must be PI, Project Leader, and Core Leader) (If dual PI or leader will receive half credit)	
>\$2.0M	5
\$450k - \$1.99M	2
\$150k - \$449k	1
<\$150k	1
Grants Awarded	
Peer Reviewed Grant (NIH, etc) (must be PI, Project Leader, and Core Leader) (If dual PI or leader	

will receive half credit. Dollars based on direct and indirect awarded)	
>\$1M/year	50
\$350k - \$999k/year	25
\$200k - \$349k/year	15
\$100k - \$199k/year	10
<\$100k	5
Non-Peer Reviewed Grant (NIH, etc) (\$'s based on revenue received)	
>\$1M/year	25
\$350k - \$999k/year	15
\$200k - \$349k/year	10
\$100k - \$199k/year	5
<\$100k	2
Other	

Appendix 9

PUBLICATION IMPACT FACTOR SCORING

Impact Factor Grouping	Count of Publications	% of Total Count	Cumulative Total	Cumulative % of Total	Academic Points Awarded	% of Total Count
0	55	0.9%	55	0.9%	2	0.88%
.003-.999	2,689	42.8%	2744	43.7%	5	70.77%
1-1.999	1,756	28.0%	4500	71.6%		
2-2.999	848	13.5%	5348	85.1%	10	23.15%
3-3.999	389	6.2%	5737	91.3%		
4-4.99	217	3.5%	5954	94.8%		
5-5.99	92	1.5%	6046	96.3%	20	3.61%
6-6.99	51	0.8%	6097	97.1%		
7-7.99	39	0.6%	6136	97.7%		
8-8.99	25	0.4%	6161	98.1%		
9-9.99	20	0.3%	6181	98.4%		
10-10.99	17	0.3%	6198	98.7%	30	0.83%
11-11.99	11	0.2%	6209	98.9%		
12-12.99	8	0.1%	6217	99.0%		
13-13.99	7	0.1%	6224	99.1%		
14-14.99	9	0.1%	6233	99.2%		
15-15.99	8	0.1%	6241	99.4%	40	0.33%
16-16.99	3	0.0%	6244	99.4%		
17-17.99	3	0.0%	6247	99.5%		
18-18.99	5	0.1%	6252	99.5%		
19-19.99	2	0.0%	6254	99.6%		
20-20.99	3	0.0%	6257	99.6%	50	0.16%
21-21.99	1	0.0%	6258	99.6%		
22-22.99	2	0.0%	6260	99.7%		
23-23.99	3	0.0%	6263	99.7%		
24-24.99	1	0.0%	6264	99.7%		
25-25.99	2	0.0%	6266	99.8%	60	0.19%
26-26.99	4	0.1%	6270	99.8%		
28-28.99	3	0.0%	6273	99.9%		
29-29.99	3	0.0%	6276	99.9%		
31-31.99	1	0.0%	6277	99.9%	70	0.08%
38-38.99	1	0.0%	6278	100.0%		
47-47.99	1	0.0%	6279	100.0%		
52-52.99	1	0.0%	6280	100.0%		
69-69.99	1	0.0%	6281	100.0%		