

MUSC Department of Dermatology and Dermatologic Surgery Faculty Mentoring Program (September, 2011)

1. Goal and Introduction

The ultimate goal of the Department's Faculty Mentoring Program is to help provide a road map for its young faculty to achieve successful careers in academic medicine.

2. Description of Promotion and Tenure Process Within the Department

The academic pathways available in our Department and College include the Academic Clinician track, the Academic Educator track, and the Academic Researcher track. The Department adheres to the guidelines for achieving promotion and tenure listed on the MUSC website at <http://academicdepartments.musc.edu/com/faculty/apt.htm>. Currently most faculty members are on the Academic Clinician track, but career pathways along the Academic Educator and Academic Researcher track are available. A discussion of progress towards academic advancement will be a part of each faculty member's yearly evaluation.

A Career Planning Portfolio (Appendix 1; further discussed further in Section 3 below) will be maintained for each faculty member. The Career Planning Portfolio includes the following:

- The faculty member's position description (Appendix 1a)
- An up-to-date curriculum vitae
- Previous year's career development plan (Appendix 1b)
- Previous year's performance evaluation (Appendix 1c)
- A report from the faculty member's mentor

The performance of faculty members will be reviewed annually by the Chairman. An initial review will be undertaken by the Department's Faculty Progress Committee, which consists of three senior faculty members. Based on the assessment of the documents in the Career Planning Portfolio and other elements of career development enumerated below, they will evaluate the candidate's performance and, if relevant, comment on the faculty member's qualifications for advancement in academic rank.

3. Documentation of Career Development

In order to achieve promotion and tenure, the professional growth of the faculty member must be documented. In addition to an up-to-date curriculum vitae in the format required by the College of Medicine (see

<http://academicdepartments.musc.edu/com1/faculty/index/htm>), portfolios of your research, teaching, and clinical accomplishments are important to develop and keep updated as you progress through the academic ranks. To advance through the academic ranks the quality of the faculty member's individual scholarship is of critical importance, but depending on the 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. The typical components of each of these portfolios include but are not limited to the following:

Academic Researcher Portfolio

1. Completion of educational requirements necessary for career in academic research
2. First authored original publications (with impact factor information if possible)
3. Senior authored original publications (indicate whether the first author was someone you mentored)
4. Co-authored original publications
5. Other publications, e.g., review papers, book chapters, textbooks
6. Career training grant awards
7. Independent grant awards as PI
8. Grant awards as Co-investigator
9. 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. Institutional or external research awards
13. Mentoring achievements: individuals mentored, achievements of mentees including grants received and important publications of mentees under your guidance, and where mentees are today
14. Membership and involvement in professional and scientific organizations
15. 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

A teaching portfolio includes 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.

The typical components of a teaching portfolio include the following:

1. Completion of educational requirements necessary for career in academic teaching
2. Philosophy of teaching and learning
3. Teaching goals for student accomplishment
4. Teaching methods and evaluation strategies
5. Participation in course and/or curriculum development
6. Engagement in the scholarship of teaching and learning (SoTL)
7. Evidence of teaching accomplishments
 - a. Description of types of different teaching activities 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)
 - c. Samples of teaching innovation (simulation, educational technology)
 - d. Samples of manuscripts related to teaching and or educational activities
 - e. Student, resident and fellow evaluations of teaching
 - f. Peer evaluations of teaching
 - g. Audience evaluations of 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. First authored publications (papers, chapters, reviews, textbooks) related to teaching
 - j. Senior authored publications (papers, chapters, reviews, textbooks) related to teaching
 - k. Co- authored publications (papers, chapters, reviews, textbooks) related to teaching
 - l. Grant awards related to teaching
 - m. Presentations on teaching at national / international meetings
 - n. Leadership roles in teaching in appropriate department, college, or university
 - o. Honors and awards for teaching
8. Mentoring achievements in teaching: individuals mentored, achievements of mentees in teaching arena, and where mentees are today

Academic Clinician Portfolio

1. Completion of educational requirements necessary for career as an academic clinician, including certification by appropriate specialty board
2. Evidence of a heavy clinical load
3. Evidence of excellence in high quality patient care
4. Development of innovative clinic practices i.e., new clinical services that the faculty member established or participated in e.g., telemedicine, new surgical

technique

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
16. Mentoring achievements: clinicians trained, achievements of trainees, and where trainees are today
17. Membership and involvement in professional and scientific organizations
18. Contributions to clinically oriented committees at department, college, university, community, state, regional, national and international levels
19. Leadership roles in clinical activities in appropriate department, college, or university

At MUSC, as at most universities, there are unique cases where faculty members' roles are not primarily in research, teaching, or clinical activities, but rather may serve in extramural program development, as reference librarians, instructional technologists and designers, curriculum designers, and providers of academic support for students, as examples. In such cases the fundamental anchor for promotion and tenure is scholarship. Opportunities for scholarship exist in many areas including discovery, application, integration, and teaching such as the development of local and global initiatives, the development of online programs of study, research related to the use of educational technology, and the design and implementation of faculty development opportunities. These scholarship activities may be conducted individually or in collaboration with others. Evidence of scholarship typically includes publications in peer reviewed journals, a strong national visibility related to area(s) of expertise, and evidence of funding.

4. Resources Available for Faculty Development

Resources are required for optimal faculty development and may be found in the department, at the institutional level, and at the state or national level.

Departmental Resources

The Department's stated goals are excellence in patient care, education, and research. It is recognized that each faculty member is a unique individual whose interests may not be equally balanced among these three areas. Protected time will be provided to allow

faculty members to engage in academic pursuits, and departmental funds are available for supporting pilot projects, purchasing educational materials, and underwriting travel to scientific meetings. Requests for these (including justification for same) should be made initially in writing with follow up discussion with the faculty member's mentor and the Chair. We encourage faculty to include residents (and students) in their research projects as part of the Department's educational mission.

Institutional, State and National Resources

In addition to the Department's resources, a detailed list of institutional and state and national resources for supporting clinical and translational research, basic science research, and education are provided in Appendix 2.

On Campus Support

It is also important for all faculty 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 a 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>.

5. Hiring of New Faculty and Initial Mentoring

As noted, the ultimate goal of the Department's Faculty Mentoring Program is to help provide a road map for its young faculty to achieve successful careers in academic medicine. Mentoring begins during the recruitment process, during which the Department's appointment, promotion, and tenure policies will be discussed with all prospective faculty members. These policies are consistent with those of the University, and can be referenced at <http://academicdepartments.musc.edu/com1/faculty/gdlines.pdf>. They will be reviewed with the Chairman at the time of appointment, as will specific guidelines for documenting career development.

6. Existing Faculty

All existing full time, academic faculty at ranks lower than full professor will be included in the mentoring program described in this document.

7. Mentoring Plans and Agreements

A mentorship partnership agreement will be agreed upon between mentor and mentee (examples are provided in Appendix 3). Gene Burges, MD, PhD, will be the mentoring champion within the Department. Dr. Burges has a background in both clinical dermatology and basic immunology and will serve as the career mentor for faculty on clinical or research tracks. She will provide career guidance, help the young faculty member work through any critical professional (or personal) crises, and assist in the understanding of the University's appointment, promotion, and tenure process. She will assist the mentee in the preparation of the Career Planning Portfolio, which will provide documentation of activities and accomplishments to support future consideration for advancement in academic rank (Appendix 1). The new faculty member and Dr. Burges will meet at least quarterly, and she will provide a written report yearly on the mentee's academic progress. This report will be part of the mentee's Career Planning Portfolio, which will be reviewed by the Chairman. Meetings with the Chairman will be scheduled every six months to one year, with interim meetings added as necessary. The designation of a specific mentor will not preclude the young faculty member from seeking the advice of other colleagues within or outside the Department.

8. Resources for Mentors Within the Department

Mentoring should be part of each faculty member's Departmental and academic responsibilities. Mentoring is professionally stimulating and personally satisfying, and is a way of giving back to the profession. There is a continuum in mentoring from teaching and advising students and trainees to assisting faculty colleagues with research and career development, often across college or departmental lines. These mentoring relationships are critical and are part of the fabric of an academic institution.

Interested faculty are encouraged to apply for mentoring awards from the NIH (K05, K07, or K24 grants) that can provide up to 50% salary support for 5 years (renewable for another 5 years in some NIH institutes). Some members of the Mentor Leadership

Council and other faculty members at MUSC are current or past recipients of these awards and can help other faculty apply for these awards. Contact the Office of Research Development if you are interested in applying for a K05, K07, or K24 award, and their staff will connect you with a current or past recipient of one of these awards.

The Department will support and reward successful, in-demand faculty mentors who are typically already over-committed with their own research, clinical, educational, or administrative responsibilities. Such support may include:

- providing salary support for those mentors with a particularly heavy mentoring load
- providing a financial bonus for successful mentoring
- providing annual awards for successful faculty mentors
- ensuring that successful mentoring is a criterion to be used for promotion.

9. Metrics of Successful Mentoring

Metrics should be developed to determine the success of each mentee – mentor relationship and the Department’s mentoring plan. The mentee and mentor should complete a confidential evaluation report at least annually that is reviewed by the Chair. Examples of such surveys are provided in Appendix 4.

Other metrics that may be used to determine the effectiveness of the mentee – mentor relationship will depend on whether mentoring is related primarily to research, education, or clinical activities.

Research-related metrics for determining the effectiveness of mentoring

- number of grants submitted by mentee under the mentor’s guidance
- number of these grants funded
- number of original publications under the mentor’s guidance
- importance of original publications under the mentor’s guidance (e.g., impact factor, editorial written on paper)
- career development progress of mentee while guided by the mentor, e.g., presentation of research at national / international meetings, invited presentations at meetings or other universities, election to study sections or specialty societies, promotion of mentee
- research awards of mentee under the mentor’s guidance

Teaching related metrics for determining the effectiveness of mentoring

- teaching accomplishments of mentee under mentor’s guidance, e.g., formal courses taught, course materials developed, innovative teaching methods developed
- number of education publications under the mentor’s guidance
- importance of education publications under the mentor’s guidance (e.g., impact factor, editorial written on paper)

- number of education grants submitted by mentee under the mentor's guidance
- number of these grants funded
- career development progress of mentee while guided by the mentor, e.g., presentations at national / international meetings, invited presentations at meetings or other universities, membership in education committees in or outside of the institution, promotion of mentee
- honors and awards for teaching to the mentee under the mentor's guidance

Clinical related metrics for determining the effectiveness of mentoring

- number of presentations at institutional, national, or international meetings by trainees (students, residents, and fellows) or junior clinical faculty under the mentor's guidance
- number of publications by trainees (students, residents, and fellows) or junior clinical faculty under the mentor's guidance
- innovative clinical care developed by junior faculty under mentor's guidance
- career development progress of trainees and junior clinical faculty while guided by the mentor, e.g., graduation from clinical training program of trainees and subsequent positions, invitations to junior clinical faculty to present at meetings or other universities, junior faculty participating as members in clinical committees in or outside of the institution, promotion of junior clinical faculty
- honors and awards for teaching to the junior faculty member under the mentor's guidance

Metrics to determine the overall effectiveness of the departmental mentoring plan should include:

- surveys of faculty on their satisfaction with the plan and their job overall
- attrition of faculty within the department, especially junior and mid-level faculty
- promotion of faculty within the department
- number of successful mid-career awards for trained mentors NIH (K05, K07, or K24 grants)
- number of career development awards of mentees (e.g., K23, K08, KL2)
- total funding from all mentored activities
- total number of publications overseen by mentors
- an external review of the mentoring program by a senior member of the College leadership designated by the Dean every 3-5 years.

10. Role of the Chair, Promotion Committees, and Dean

The Department Chair is ultimately responsible for ensuring that all faculty in the department are mentored successfully. This includes overseeing the development of a specific mentoring plan for the department and monitoring the effectiveness of the plan. The Chair will meet with each mentee at least annually to review the progress of the

mentee and the effectiveness of the mentee – lead mentor relationship, and to ensure that areas of concentration facilitate the mentee’s successful career development and departmental strategic plan. The Chair may also suggest and facilitate a change of mentor(s) if the relationship is not deemed beneficial for either participant.

The Department’s Faculty Progress Committee should also review the mentee’s career development annually, identify areas of weakness in the faculty member’s Career Planning Portfolio, and make specific recommendations about how to achieve promotion to the Chair (or faculty member directly).

**Appendix 1. CAREER PLANNING PORTFLIO
1a. Faculty Position Description**

Name:
Department:
Division:
Start Date:
Rank:
Promotional Track:
Office Location:

TEACHING ASSIGNMENTS:

CLINICAL ASSIGNMENTS:

RESEARCH/SCHOLARLY ACTIVITY:

ADMINISTRATIVE RESPONSIBILITIES:

MISCELLANEOUS:

Appendix 1b. Career Development Plan

Instructions to Mentees:

Please complete this form every 6 months and give a copy to your career mentor before your mentoring session. Attach an updated CV in the recommended format

Instructions to Mentors:

Please review the mentee's CV and this CDP prior to meeting your mentee.

Date:

Mentor Name:

Mentee Name:

Time allocation as estimated by Mentee:

_____ % Teaching/training/providing mentoring

_____ % Research

_____ % Patient Care

_____ % Administration

_____ % Other Creative Professional Activity

How (if at all) would you like to change this time distribution and how could you justify that change?

Academic Appointment

Do you understand the expectations for your career advancement and promotion within the University?

___ Yes

___ No

If no, provide questions you have about career advancement and promotion at the University:

Current Professional Responsibilities

List your major professional responsibilities and if you anticipate significant changes in the coming year

Future Professional Goals

Short Term Goals

List your professional goals for the coming year. Indicate how you will assess if the goal was accomplished (expected outcome)

1. Goal:

Expected outcome:

2. Goal:

Expected outcome:

3. Goal:

Expected Outcome:

Long Term Goals

List your professional goals for the next 3 to 5 years. Indicate how you will assess if the goal was accomplished.

1. Goal:

Expected outcome:

2. Goal:

Expected outcome:

3. Goal:

Expected Outcome:

Are you satisfied with your personal-professional balance? If not—what are your plans for modifying how you spend your time?

Appendix 1c. Faculty Performance Evaluation

Faculty Member _____ For Period of _____ Department _____

| <u>GOALS OF FACULTY MEMBER</u> | <u>ADDITIONAL GOALS SET FORTH BY CHAIR</u> |
|--|--|
| I. Teaching Activity | I. |
| II. Research/Scholarly Activity | II. |
| III. Patient Care | III. |
| IV. Institutional Activity | IV. |
| V. Professional Growth | V. |
| VI. Other | VI. |

Appendix 2. Institutional, State and National Resources for Supporting Faculty Development at MUSC

1. Institutional Resources

1.1 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://research.musc.edu/index.html>). Some of these resources are described below:

- **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.
- **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>
- **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.

- **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:

Research Project Grant (RPG) Retreats are held approximately 3 times / yr. 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.

ORD Alerts mailing list is a service for MUSC faculty and trainees to receive research news and funding opportunities by email (<http://research.musc.edu/ordalerts.html>.)

Community of Science (COS) 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.

Institutional "Boilerplate" 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.

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.

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.

- **Grant Writing Help** is provided by: i. 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://research.musc.edu/APR/OSEP.html>, and ii. through the SUCCESS center <https://sctr.musc.edu/index.php/programs/success-center>.
- **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.
 - Office of Research and Sponsored Programs (<http://research.musc.edu/orsp/index.html>)
 - Office of Grants and Contracts Accounting (<http://academicDepartments.musc.edu/vpfa/finance/gca/index.htm>)

Some Specific Resources for Clinical and Translational Research:

- **Clinical & Translational Research Center (CTRC).** The primary purpose of the CTRC is to support clinical and translational research projects within the institution and SCTR affiliate members as well as pilot studies that may lead to future NIH or other sources of peer-reviewed clinical/translational research grant support. The specialized staff of the CTRC consist of research nurses, laboratory personnel, nutritionists, IT specialists, and professional/administrative personnel. A core laboratory, fully-equipped outpatient clinic, dental suite, and imaging suite comprise the highly-technical physical facilities that are on hand to support your research. <https://sctr.musc.edu/index.php/programs/clinical-a-translational-research-center>
- **Biostatistics Consultation** through the SCTR Biostatistics & Epidemiology Program. Services offered are:
 - Biostatistical Education: Consultation and assistance in understanding one or more biostatistical concepts
 - Methodology/Study Design: Guidance with selecting an appropriate study design or developing a statistical analysis plan
 - Power Analysis / Sample Size Calculation: Assistance with determining the statistical power or sample size required for a proposed study
 - Data Analysis: Assistance with analyzing data collected for a research study
 - Other: (e.g. help with presentations, manuscripts, etc.)

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

Links to these services are <http://sctr.musc.edu/index.php/programs/biostats> and http://sctrweb2.musc.edu/research_toolkit/preaward/grantproposal/statistic

- **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. <https://sctr.musc.edu/index.php/education/mscr-masters-of-science-in-clinical-research>
- **Society of Clinical Research and Translational Early Scientists (SOCRATES)** provides a forum for junior faculty to present their research projects in front of peers, senior researchers and statisticians, foster collaboration across multiple subspecialties at MUSC, and trouble shoot about ways to improve mentoring across campus <https://sctr.musc.edu/index.php/programs/teach/133>

Some Specific Resources for Basic Science Research:

- **Research Support** (<http://research.musc.edu/researchresources.html>)
 - Shared Core Facilities. A number of core facilities are available to support basic research (see information of each of these facilities in Research Shared Facilities on this website). In addition, an annual

EXPOsition of these facilities that enables meetings with core personnel occurs in the Fall each year.

- 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.
- **Responsible Conduct of Research (RCR).**
 - 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>)
 - 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>)
- **Personnel/Trainees Relationships**
 - College of Graduate Studies (<http://www.musc.edu/grad/>)
 - Graduate Faculty Resources – application for appointment to graduate faculty and conflict of interest forms.
 - Mentoring Compact – AAMC recommendations for mentoring graduate students and postdocs (<http://www.aamc.org/research/postdoccompact>).
 - Graduate Council Minutes – record of monthly meetings and policy discussions.
 - Graduate Faculty Research – web-based database of faculty research interests to aid students looking for potential mentors.
 - Training Grants – listing of MUSC training grants and career development programs for graduate students and postdocs.
 - Student Handbook – specifics of graduate programs, resources, dissertation requirement, and CGS policies.
 - 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>)
 - Howard Hughes Medical Institute
 - “Lab Management: Making the Right Moves” is an essential resource for postdocs and faculty, available free on-line. (<http://www.hhmi.org/resources/labmanagement/moves.html>)
 - “Entering Mentoring” provides guidance in mentoring individuals with diverse learning and personality styles. (<http://www.hhmi.org/catalog/main?action=product&itemId=272>)
 - 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>)
 - 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://scientific.freetoasthost.us>)

- 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)
- **Networking Opportunities**
 - “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
 - MUSC Core Facilities “Octoberfest” Reception. This is an annual event for core facility directors to highlight the services available.
 - Research INKlings (<http://research.musc.edu/inklings.html>). INKlings is a monthly on-line news letter of recent events of interest to MUSC researchers.
 - 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/>)
 - 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>)
 - www.MinorityPostdoc.org hosts a variety of career development resources for postdocs, including job listings and articles, with an emphasis on minority scholars.

1.2 Resources for Education

1.2.1. Types of Educational Technology

- a. Tegrity - 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>
- b. Adobe Connect - 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>
- c. WebCT - WebCT 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://webct.musc.edu>

1.2.2 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.

1.2.3. 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://www2.edserv.musc.edu/appletree/>

The following are the goals of the Society:

- Expand the faculty development opportunities related to teaching on campus.

- Initiate programs that recognize and enhance the value of teaching as a scholarly activity.
- Explore and support innovative methods and technologies for teaching and learning.
- Promote professional development of current and future educators.

Activities of the Society include:

- Monthly Brown Bags – noontime sessions on topics related to the Scholarship of teaching
- 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)
- Collegiality – informal meetings to discuss teaching and learning

1.2.4. 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>

1.2.5. 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/>

1.2.6. 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:

- Developing Scholar Awards
- Outstanding Clinician Awards
- Teaching Excellence Awards (Developing Teacher, Educator-Lecturer, Educator-Mentor)
- Distinguished Faculty Service Awards

1.2.7. Library resources - <http://www.library.musc.edu/>

- a. 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
- b. 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.
- c. Center for Academic and Research Computing – Works with faculty and staff across the campus to design, develop and support interactive instructional programs.

d. Journals The library currently provides access to approximately 17,498 e-journals and 34 current print-only subscriptions <http://muscls.musc.edu/>

- 1.2.8. 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/>
- 1.2.9. 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/>
- 1.2.10. Enrollment Services** - Enrollment Services oversees student admissions, records and financial aid. <http://www.musc.edu/em>
- 1.2.11. Faculty Senate - 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.
- 1.2.12. Women's Scholar Initiative - 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 a 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>

2. State or National Resources

2.1. Funding Agencies

By going to the MUSC Research and Discovery website (<http://research.musc.edu/researchresources.html>) and clicking on Funding Opportunities under the Office of Research Development, information on the following opportunities is available:

- Funding alerts
- Federal and state funding opportunities
- Sponsor opportunities (Corporate and Foundations)
- New Investigator Funding Opportunities
http://research.musc.edu/newinv_fund.html
- Postdoctoral Funding Opportunities
- Limited Submissions Competitions Opportunities

2.2. Associations

- **Association of American Medical Colleges (AAMC)**. The AAMC represents all 133 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/>
- **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/>
- **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 3. SAMPLE MENTORING PARTNERSHIP AGREEMENT #1

We have agreed on the following goals and objectives as the focus of this mentoring relationship:

- to develop a dynamic reciprocal relationship fostering professional growth
- to work towards the development of a career development plan
- to introduce Protégé to best practices in academic medicine

We have discussed the process by which we will work together, develop, and, in that same spirit of partnership, collaborate on the development of a work plan. In order to ensure that our relationship is a mutually rewarding and satisfying experience for both of us, we agree to:

1. Meet regularly. Our specific schedule of contact and meetings, including additional meetings, is as follows:

2. Look for multiple opportunities and experiences to enhance the Protégé’s learning.

We have identified, and will commit to, the following specific opportunities and venues for learning:

3. Maintain confidentiality of our relationship.

Confidentiality for us means that

4. Honor the ground rules we have developed for the relationship.

Our ground rules will be:

5. Provide regular feedback to each other and evaluate progress. We will accomplish this by:

Mentor’s Signature and Date

Protégé’s Signature and Date

Check box if you are lead mentor_ []

Source: Adapted from *The Mentor’s Guide* by Lois J. Zachary. 2000 © by Jossey-Bass, San Francisco, CA.

Appendix 3. SAMPLE MENTORING PARTNERSHIP AGREEMENT #2

Working in partnership, we are entering this mentoring relationship. It is our expectation that this partnership will foster professional growth and career development. In order to ensure that the mentoring relationship will be a mutually rewarding and satisfying experience, we agree to the following:

1. Maintain confidentiality in this relationship _____
Name Name

2. We are committed to sustain this relationship for at least one (1) year from this date.

Name Name

3. We are committed to meet together: weekly _____ monthly_____

4. We have established the following goals for this mentoring relationship:

5. The skill areas to be enhanced or developed through this partnership are:

6. Each of us has outlined expectations for the mentoring relationship. _____

7. We have discussed and agree to a “No-Fault conclusion”, if necessary. _____

Mentor Date Mentee Date

Check box if you are lead mentor_ []

Appendix 4. Mentor/Mentee relationship evaluation.

Part 1. 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 |

Appendix 4. Mentor/Mentee relationship evaluation.

Part 2. TO BE FILLED OUT BY MENTOR.

Mentee: _____

Mentor: _____ **Check box if you are lead 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 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 |