MUSC - Department of Public Health Sciences Faculty Mentoring Plan

Table of contents

1.	Introduction1
2.	Goals1
3.	Description of the tenure process1
4.	Resources available for faculty development3
5.	Mentor assignment for faulty development
6.	Mentoring plans and roles
7.	Appendix A Resources for Supporting Faculty Development9
8.	Appendix B Sample mentoring agreement18
9.	Appendix C Examples of Individual Development Plan (IDP)20
10.	Appendix D Mentor-mentee relationship matrix23

•

MUSC - Department of Public Health Sciences Faculty Mentoring Plan

1. Introduction

The Department of Public Health Sciences (DPHS) developed a mentoring plan outlining important elements considered essential for successful mentoring and career development. DPHS strongly encourages junior and mid-level faculty to choose a mentor early in their appointment at MUSC and adhere to the mentoring framework outlined in this document to enhance professional growth and career development. The overall mentoring process is coordinated by the mentoring champion of DPHS in accordance with the vision and plan of the department chair. In DPHS, the mentoring champion is the Vice Chair for Faculty Development and Innovation. Accordingly, all assistant professors and associate professors (tenured or non-tenured) should select one or more senior faculty member (associate or full professor) from the department or any other appropriate area within or outside of the University that is aligned with the professional development plan of the mentee. The details included in this document outline the approach and information of DPHS in addressing the mentoring process. This includes developing a formal mentoring committee, formalizing a mentoring partnership agreement and a comprehensive Individual Development Plan (IDP). This document along with the faculty handbook can also be found on the DPHS Department site: http://academicdepartments.musc.edu/provost/faculty/handbook.pdf

2. Goal of Mentoring Plan

The goal of this mentoring plan is to lay out the framework that fosters the professional development of all faculty members of DPHS to achieve their individual full potential as members of the College of Medicine and to be rewarded for that achievement. MUSC, as an institution of higher learning and research, provides a conducive environment where everyone is learning, maturing, and developing skills. It is, therefore, vital that each member of the faculty see tangible evidence of that professional growth. This can be shown in the easily measured domains of writing papers for publication, writing and receiving grants, or preparing and presenting lectures for students and fellows, or in the less easily measured aspects, such as mentoring junior faculty. Appropriate documentation of progress needs to be stated to demonstrate that tangible progress is occurring. This mentoring plan is designed to assist in this process.

The role of the mentor is multifaceted. While guiding the mentee to achieve the measurable goals for professional growth such as research funding, publications, teaching and collaborations is fundamental, the guidance should also aim to improve organizational abilities, develop positive interpersonal relationships and relationships within the university in general, and assist in developing a network of support. Furthermore, the mentor is guiding the mentee in a sustainable attaining work-life balance.

3. Description of Promotion and Tenure Process within the Department

Each College at MUSC has different tracks and ranks and a process through promotion in which faculty progress is documented. The various ranks in DPHS and the College of Medicine along

with the description of how the Promotion and Tenure Committee of the Department operates can be found in the links below with guidelines for achieving them.

- MUSC faculty affairs website http://academicdepartments.musc.edu/com/faculty/facaffairs_deans.htm
- Department of Public Health Sciences <u>http://academicdepartments.musc.edu/phs/docs/Promotion%20Guideline</u> <u>s%20Revised_JUNE20_2013_AL.pdf</u>
- 3.1. <u>The process of promotion/tenure and operations of the departmental promotion and tenure committee (PTC) for current and new hires.</u>
 - a. Faculty approaches or is approached by their department head to apply for promotion/tenure using guidelines from the Faculty Affairs Website.
 - b. Faculty submits a written request and his/her C.V. to the department chair
 - c. The department chair sends the request to the departmental promotion and tenure committee (PTC) chair.
 - d. The PTC chair assigns a member of PTC to present a summary of the promotion and tenure dossier of the faculty applicant to all faculty members at or above the rank of the applicant.
 - e. The PTC discusses the application and determines if the candidate is ready for promotion/tenure. Faculty may provide open comments and questions and will cast their votes in support or against the promotion in a secret ballot.
 - f. The PTC chair sends a detailed letter to the department chair with the evaluations.
 - g. If approved at the PTC, Department chair approves application and sends it to the next level (i.e., College of Medicine PTC).
- 3.2. Documentation of career development

The professional growth of the faculty member must be properly documented to achieve promotion and tenure. At a minimum, documentation should include an up-to-date curriculum vitae in a format accepted by DPHS (including the FAIR CV: <u>https://fair.musc.edu/default.aspx</u>). Portfolios of research, teaching, and service accomplishments are important to develop and keep updated as the faculty member progresses through the academic ranks.

To advance through the academic ranks, the quality of the faculty member's individual scholarship is of critical importance. Depending on the track, more emphasis will need to be placed on a specific portfolio. In the tenure track (TT), expectations include excellence in didactic teaching and student mentoring/advising, as well as increased involvement in service activities at MUSC and beyond (e.g., institutional, departmental and divisional committees, national committee service, journal editing). In the research track (RT), the emphasis is on research output primarily, and this track does not require involvement in teaching or service activities. The typical components of each of these portfolios include but are not limited as specified at DPHS Guideline for Promotion for Research and Tenure Track Faculty at the aforementioned URL.

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. The department of DPHS provides the following:

- a. Departmental Start-up Funds funding to promote research has been established and exists in a departmental research development fund account. These funds are allowed based on the recommendations of the mentor and Vice Chair for Research Development on behalf of the mentees.
- b. Faculty Development Fund DPHS provides up to \$1,250 each year for each faculty member. This funding is provided to edify faculty development by defraying the cost of travel to scientific meetings, purchase of books, journals, other tools, etc.
- c. Computers and software that are specifically tailored to the needs of the faculty in DPHS.
- d. In addition to the department's resources, a detailed list of institutional and state and national resources for supporting clinical and translational research, population health research, and education are provided in <u>Appendix 1.</u>
- e. Other support services:
 - 1. The <u>Faculty Senate</u> is the representative body of the Medical University of South Carolina faculty (<u>http://academicDepartments.musc.edu/faculty_senate</u>) that represents the views, needs, and interests of faculty in the educational, research, and service programs of the university.
 - 2. The <u>Women Scholars Initiative</u> (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.

5. A mentor or mentoring committee for new faculty

Hiring new faculty members is essential to ensure success of the graduate program and to maintain a versatile methodological research that will promote the status of the department in the community and among peer institutions. New faculty members will select and nominate mentors that will be reviewed and approved by the Department Chair in consultation with the mentoring champion and divisional leaders. The purpose of the mentor is to have a strong presence in academic life of the mentees to guide them through the development of career goals and plans as well as to help them improve organizational abilities, develop positive inter-personal relationships and mutually beneficial relationship with the university in general, assist in developing a network of support and to guide them in reconciling work and family demands. The process of assigning mentors is briefly summarized below.

- a. Once the decision to hire a new faculty has been made, the mentor champion in consultation with the chair will identify a willing senior faculty member, who was part of the initial interview process, to be the interim mentor until such time that offers the new faculty member the ability to identify mentor(s) compatible with the mentee's professional goals and research interest.
- b. The DPHS will ensure that the final offer letter from the department chair to the new hire includes the name of the interim mentor.

- c. After the new hire joins the faculty, the mentor champion will monitor the mentormentee relationship to ensure the mentoring is effective. If this is not found to be the case, the mentor champion and the chair will consult with the mentor and the faculty member to assign a new mentor.
- d. If the initial relationship is not sufficient, the department chair will produce a list of senior faculty within the department who have agreed to serve as mentors along with a brief summary of the academic interests of those particular faculty members. Junior faculty will meet with their respective division head or Vice Chairman for Academic Affairs to select a mentor who will be approved by the departmental chairman.
- e. Within three months of a mentee's faculty appointment, the mentor(s) should meet with the mentee for a discussion of the department mentoring/faculty development program.
- f. Regular meetings between the mentees and the mentor(s) should occur every three months.
- g. All faculty are encouraged to participate in a weekly departmental research seminars-organized by the Vice-Chair for Research to foster cross-pollination between departmental researchers and to create mentorship relationships between senior faculty and junior investigators.
- 5.1. The functions of a mentor

A mentor functions as a coach, counselor, teacher, supporter, encourager, protector, challenger, sponsor, and guide mentoring activities with and for one's mentee include: helping to learn risk-taking behavior, communication skills, and institutional and professional political skills; providing advice, encouragement and criticism; facilitating career advancement; and fostering involvement in research and scholarly productivity.

Behaviors that can lead to constraining or even destructive mentoring relationships are discouraged. These include (1) avoidance—not being available or accessible; (2) forcing or coercing mentees into new roles with no support; (3) blocking communication with the mentee by continuously refusing requests, withholding important information; (4) taking over projects or taking improper credit for work performed by the mentee; (5) imposing overbearing supervision; and (6) overt criticism, focusing only on inadequacies without providing positive reinforcement. Mentors and mentees must not use the relationship to manipulate or exploit the other.

Mentoring involves many stages and phases, and development of the relationship is a gradual, interactive process. Embracing the mentoring program outlined herein goes beyond the usual informal and unstructured nature of traditional mentoring and sanctions and helps manage formal mentoring for the purpose of socializing new members, fostering productive relationships and increasing access to mentoring resources.

5.2. Desirable attributes of a good mentor and mentee relationships

The mentor and mentee should become cognizant and periodically review the characteristics of effective mentoring relationships which are:

- a. *Mutuality* The relationship should be beneficial to both people, although the common perception is that the relationship is focused on the person being mentored.
- b. *Familiarity* There must be a comfort level with each other's styles and values.
- c. *Compatibility* Simply stated, liking each other and enjoying each other's company in the context of respect (more than in the sense of socializing).
- d. *Flexibility* The relationship may change, and both people should expect and accept that. A mentoring relationship may evolve to collegiality, it may become a friendship, or it may also simply end when the time comes.
- e. *Purposeful* There must be a well-stated purpose and goals of the mentee, preferably in writing such as the Individual Development Plan (IDP) (Please see 6.3. below).
- f. *Power* A mentoring relationship should be one of shared power, a win-win situation, where each partner gains and neither loses. Both partners should be focused on a plan of action supporting the mentee's development.
- 5.3. What is expected from a good mentor?

Prerequisites for a good mentor include being a competent academic who must have not only achieved their own academic success, but also must exemplify this towards their junior colleagues. That is, mentors must feel sufficiently secure that they are not only comfortable taking a backseat to those being mentored in matters of authorship and recognition, but they should actively pursue a secondary role. The mentor should not compete for recognition with the individual they are mentoring. Mentors should strive for free and open exchange of ideas, priorities, aspirations and criticisms; must like mentoring and be willing to devote the time and energy required to explore and solve both the routine and the extraordinary scientific and personal challenges that arise; must periodically seek feedback so they can evaluate their own performance, decide whether they remain the best person to continue to mentor their junior colleagues, and identify ways to improve their mentoring skills. Some of the most important traits of a good mentor are:

- *Respectful*—views the mentee as a valuable but inexperienced colleague.
- *Committed*—takes the time to provide guidance on a wide range of professional topics.
- *Demanding*—sets and models high standards.
- *Adaptable*—realizes that mentees have different strengths and needs, and the mentees needs may change over time.
- *Encouraging*—helps the mentee through the low spots encountered in any academic career.
- *Proactive*—does not wait for the mentee to contact him/her but provides opportunities for contact.

- *Nurturing* —finds ways to ensure that mentees are ready to compete in their respective professional fields.
- 5.4. What is expected from a good mentee?

Being a mentee is not a passive role, but involves responsibilities including actively seeking and accepting guidance, sharing values, needs, and aspirations and being willing to listen and learn. Traits of a good mentee include:

- *Considerate*—recognizes that mentors are busy professionals who are donating valuable time.
- *Responsible*—respects the mentor's time and carefully thinks out questions to maximize the use of the mentor's time.
- *Respectful*—realizes that some communication with the mentor might be professionally sensitive and should be kept confidential.
- *Adaptable*—understands that the mentor's schedule may prevent him/her from being available at the time or in the mode that they desire.
- *Proactive*—suggests ways in which he/she can benefit from the relationship.

6. Mentoring Plan and Roles

6.1. The role of the mentor in this relationship is as follows:

- a. To act as an advocate for the new hire in the negotiation process of items including but are not limited to:
 - Deciding on the right track and rank
 - Percent of effort for teaching, and in what academic semester the mentee should begin teaching.
 - Adequate protected time for research and teaching
 - Adequate support for administrative, clinical, and research efforts
 - Development of a mentoring team
- b. To assist junior faculty in developing a system (formal curriculum vitae) to document teaching accomplishments, scholarly work, service to the department, university, and community, and other activities which would be important at the time of faculty evaluation and promotion/tenure consideration. At the beginning of relationship, the mentor and mentee will complete the Mentoring Partnership Agreement together which outlines how the two will proceed.
- c. To meet with his/her assigned junior faculty members every three months to review progress for promotion and set additional goals. While the mentor and mentee work to define the parameters of the relationship in the Mentoring Partnership Agreement, meetings should be held no less than every three months to ensure appropriate mentoring and feedback is provided to the mentee.
- d. To document the progress of each mentee and keep the departmental Academic Affairs Committee aware of such progress. The mentor shall have the junior faculty member's academic well-being in mind and offer constructive, honest

advice as to his/her progress. The mentor should serve as a sounding board for the junior faculty member's research ideas and share experiences on how to handle difficult situations which might arise.

- e. To inform junior faculty about the promotion and tenure process and update them with any changes in the policy. The current process is as follows:
 - 1) An eligible faculty member submits the promotion packet along with a cover letter to DPHS Promotion and Tenure Committee (PTC) chair.
 - 2) If approved, the completed packet is forwarded to the department chair for final approval.
 - 3) If approved, the packet is prepared and submitted to the PTC
- 6.2. The role of the mentee in the relationship is as follows:
 - a. To work with mentor to develop a system (formal curriculum vitae) to document teaching accomplishments, scholarly work, service to the department, university, and community, and other activities which would be important at the time of faculty evaluation and promotion/tenure consideration. At the beginning of relationship, the mentor and mentee will complete the Mentoring Partnership Agreement together which outlines how the two will proceed. Examples of mentoring agreement is included as Appendix 2.
 - b. To meet with his/her assigned mentor every three months to review progress for promotion and set additional goals. While the mentor and mentee work to define the parameters of the relationship in the Mentoring Partnership Agreement, meetings should be held no less than every three months to ensure appropriate mentoring and feedback is provided to the mentee.
 - c. To document the progress using the Individual Development Plan (IDP).
- 6.3. Individual Development Plan (IDP)

The IDP provides the planning process that identifies both the professional development needs and career objectives. The IDP can also serve as a tool that helps facilitate communication between the mentees and the mentor. The responsibility of developing an IDP for each mentee is primarily by the mentee guided by the lead mentor if there is more than mentor. An example of an IDP is found in <u>Appendix 3</u>.

6.4. Mentoring evaluation metrics

To determine the success of each mentee-mentor relationship and the department mentoring plan, metrics has been developed for measuring these criteria. The mentee and mentor in each relationship should be required to complete a confidential evaluation report at least annually that should be reviewed by the Department Chair. Examples of these surveys are provided in <u>Appendix 3</u>.

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

6.4.1. Research-related metrics for determining the effectiveness of mentoring

- a. Number of grants submitted by mentee under the mentor's guidance
- b. Number of these grants funded
- c. Number of original publications under the mentor's guidance
- d. Importance of original publications under the mentor's guidance (e.g., impact factor, editorial written on paper)
- e. 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
- f. Research awards of mentee under the mentor's guidance
- 6.4.2. Teaching-related metrics for determining the effectiveness of mentoring
 - a. Teaching accomplishments of mentee under the guidance of the mentor, e.g., formal courses taught, course materials developed, innovative teaching methods developed
 - b. Number of education publications under the guidance of the mentor
 - c. Importance of education publications under the guidance of the mentor (e.g., impact factor, editorial written on paper)
 - d. Number of education grants submitted by mentee under the guidance of the mentor
 - e. Number of these grants funded
 - f. 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
 - g. Honors and awards for teaching to the mentee under the mentor's guidance

Appendix A.

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 website (<u>http://research.musc.edu/index.html</u>). 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 (<u>http://sctr.musc.edu/</u>) 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

(http://academicdepartments.musc.edu/sctr/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 http://academicdepartments.musc.edu/sctr/tools_links/toolkit_design.html to find a wealth of information and pertinent advice about research at MUSC.

- **Career Development Funding Opportunities** are available through various institutional KL2 and K12 grant awards from NIH:
 - the SCTR KL2 and COM K12 Programs <u>http://academicdepartments.musc.edu/sctr/education_training/K12</u>
 - K12 Career Development Program in Drug Abuse and Addiction. <u>http://academicdepartments.musc.edu/psychiatry/addiction-</u><u>sciences/education/nidak12/index.html</u>
 - The Building Interdisciplinary Research Careers in Women's Health (BIRCWH) K12 Program. <u>https://www.musc.edu/psychiatry/addiction-sciences/education/bircwh/</u>
 - The Paul Calabresi Clinical & Translational Oncology Training Program <u>http://academicdepartments.musc.edu/psychiatry/addiction-</u> <u>sciences/education/K12-paul-calabresi.html</u>
- SCTR Pilot Project Program. SCTR supports pilot grant applications across the translational spectrum from basic science to population health including patient-centered and community-engaged applications as well as applications from Early

Career Investigators to shorten the time to research independence. <u>http://academicdepartments.musc.edu/sctr/programs/pilot_projects</u>

 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
 vicit http://academicdepartments.musc.edu/setr/funding.opportunities/youchers

visit http://academicdepartments.musc.edu/sctr/funding_opportunities/vouchers .

If you think that applying for a SCTR Voucher could be beneficial to your research study, please visit <u>http://academicdepartments.musc.edu/sctr/index.htm</u> and fill out a SPARC 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:

<u>Research Project Grant (RPG) Retreats</u> 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.

<u>ORD Alerts</u> 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/).

<u>Community of Science (COS)</u> 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.

<u>Institutional "Boilerplate"</u> 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.

<u>Grantsmanship Workshops</u> 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.

<u>MyPeerReview</u> 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 <u>https://www.musc.edu/esl/writingcenter/</u>, and ii. through the SUCCESS center http://academicdepartments.musc.edu/sctr/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 (<u>http://research.musc.edu/orsp/index.html</u>)
 - Office of Grants and Contracts Accounting (<u>http://academicDepartments.musc.edu/vpfa/finance/gca/index.htm</u>)

• Some Specific Resources for Clinical and Translational Research:

Research Nexus Centre. The primary purpose of the Research Nexus 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 Nexus 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. <u>http://academicdepartments.musc.edu/sctr/nexus/services/research_facilities</u>..<u>html</u>

- **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

http://academicdepartments.musc.edu/sctr/programs/biostatistics.html are http://academicdepartments.musc.edu/sctr/tools links/toolkit design.html

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_domestic/

- 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. http://academicdepartments.musc.edu/sctr/education_training/socrates
- Some Specific Resources for Basic Science Research:
 - 1. Research Support (http://academicdepartments.musc.edu/research/connect/forresearchers/research-support-services.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.

2. Responsible Conduct of Research (RCR).

- CGS RCR Retreat resources. All MUSC postdocs participate in a mandatory 2day 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://academicdepartments.musc.edu/grad/post_doc_resources/curr_postdocs/r esp_conduct.htm
- The MUSC (http://academicdepartments.musc.edu/research/ori/)and HHS Offices of Research Integrity (http://ori.dhhs.gov) websites have a wealth of educational resources on RCR practices with case scenarios, videos and tutorials for all stages of research professionals

3. Personnel/Trainees Relationships

- o College of Graduate Studies (http://academicdepartments.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
 - (https://www.aamc.org/initiatives/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. <u>http://academicdepartments.musc.edu/grad/summer_research_program</u> $\underline{/}$

- 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)
- 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)
- MUSC Toastmasters Club. 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://musc.toastmastersclubs.org/)

 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

- "B & BS" (<u>halushpv@musc.edu</u>). 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)
- <u>www.MinorityPostdoc.org</u> 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

Academy of Medical Educators in the College of Medicine - The Academy of Medical Educators was established in June 2012 to provide a forum for higher levels of participation, training and recognition of faculty educators. The members are an interdisciplinary group of educators who are dedicated to promoting excellence, innovation and scholarship in teaching and education.

http://academicdepartments.musc.edu/com/faculty/Academy_of_Medical_Educat ors/

1) Types of Educational Technology

1) 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. <u>http://tegrity.musc.edu</u>

 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. <u>http://connect.musc.edu</u> 3) 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.

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.

MUSC Toastmasters Club: provides a mutually supportive and positive learning environment in which every member has the opportunity to develop communication and leadership skills which in turn foster self-confidence and personal growth. <u>http://musc.toastmastersclubs.org/</u>

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/

The following are the goals of the Society:

- Expand the faculty development opportunities related to teaching on **c**ampus.
- 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

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://musc.libguides.com/copyright

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/oii/education/programs/

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

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
- 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 ejournals and 34 current print-only subscriptions <u>http://muscls.musc.edu/</u>

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/

The Writing Center - The Writing Center faculty members teach students to communicate effectively with their professors, their fellow students, and their patients. <u>http://www.musc.edu/writingcenter/</u>

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

2. State or National Resources Funding Agencies

By going to the Office of Research Development website (http://academicdepartments.musc.edu/research/ord/fundingops/index.html) information on the following opportunities are available

- Funding alerts
- Federal and state funding opportunities
- Sponsor opportunities (Corporate and Foundations)
- New Investigator Funding Opportunities
- Postdoctoral Funding Opportunities
- Limited Submissions Competitions Opportunities

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. <u>http://www.aamc.org/</u>

- 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. <u>http://www.awis.org/</u>
- 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. <u>http://www.nationalpostdoc.org/</u>

Appendix B

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

4. 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.

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 rela	tionship		
	Name	Name	
2. We are committed to sustain this re	elationship for at least o	ne (1) year from this dat	e.
Name		Name	
3. We are committed to meet togethe	er: weekly mo	onthly	
4. We have established the following	goals for this mentoring	relationship:	
5. The skill areas to be enhanced or d			
	······		
6. Each of us has outlined expectation	ns for the mentoring rela	tionship	-
7. We have discussed and agree to a '	'No-Fault conclusion, if r	necessary	
Mentor Date	Ment	ee Date	
Check box if you are lead mentor_[]		

Appendix C

Example of Individual Development Plan (IDP)

Prepared by Mentee and Reviewed by Mentor

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 IDP 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 D

Mentor/Mentee relationship evaluation matrix

Part 1. TO BE COMPLETED BY MENTEE.

Mentee: ______

Mentor: _____

ITEM	Exc	ellent	Fair	Po	or
1. The mentor 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 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

Part 2. TO BE FILLED OUT BY MENTOR.

Mentee: _____

Mentor: _____ Check box if you are lead mentor_[]

ITEM	Exc	ellent	Fai	r	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 mentor is an appropriate role model for the mentee	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