Department of Pathology and Laboratory Medicine

Mentoring Policy Based Upon the "Framework for Departmental Mentoring and Career Development Plans for Faculty at the Medical University of South Carolina" developed by the MUSC Mentor Leadership Council (August 2010; members listed in Appendix 4, page 25). Also refer to the College of Medicine Faculty Affairs: Mentoring & Resources Webpage

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Most Recent Update: 5/12/2016

Department of Pathology and Laboratory Medicine -

Mentoring

Background

The Policy is approved by the Chair of the Department and by the Department of Pathology and Laboratory Medicine Promotion and Tenure Committee. Organization and mentoring educational support is available from the Chief, Global Initiative for Pathology Patient Safety and Continuing Education Excellence or "GIPPSE" (Cynthia A. Schandl, MD, PhD). Such support includes meeting coordination and centralized data identifying current mentor-mentee relationships as requested by each group or pair. No mentor-mentee group is required to provide information to GIPPSE.

Mentoring relationships placed into effect early in one's career may prevent any feeling of alienation or isolation among faculty whether male or female and whether majority or traditionally underrepresented. Any member may benefit from a one-on-one interaction with individuals who have advanced experience in the culture of the academic medical center and have had success in its navigation. Such interactions may foster long term institutional fervor and loyalty and thereby increase the success of the institutional endeavors.

Goals

To assist faculty mentees in the establishment and growth of their career in academic medicine through the shared experience of other more senior faculty members.

To further the peer-to-peer teaching expertise of the faculty who act as mentors.

To provide an environment of caring guidance tailored to the needs, goals and aptitudes of each faculty member.

Policy

Promotion and Tenure Processes within the Department

The Department of Pathology and Laboratory Medicine follows the guidelines of the Medical University of South Carolina College of Medicine (COM) for faculty promotion and tenure. The Chair will make every effort to identify those colleagues approaching potential career advancement during Annual Faculty Evaluation meetings. Faculty who anticipate promotion or tenure may identify themselves to the Chair of the Department for recommendation to the Departmental Faculty Promotion and Tenure Committee; faculty may also identify themselves to the Chair of the Committee for review and consideration at an upcoming meeting.

Click link to see the: College of Medicine Appointment, Promotion and Tenure Guidelines

The Department of Pathology Promotions and Tenure Committee meets twice a year: once in or around January and then again in September. This follows the COM cycle of promotion and tenure. The committee reviews the faculty list and generally discusses anyone that has been at their current rank for 3 years or longer. Periodically, the Committee may review all members at a specific rank or ranks. At the conclusion of the meeting, a letter is sent to the Department Chair with Committee recommendations.

Committee Members (5/2016):

- Dr. Nick Batalis
- Dr. John Lazarchick
- Dr. John Metcalf
- · Dr. Rick Nolte
- Dr. Erin Presnell
- Dr. Mary Richardson
- · Dr. Bradley Schulte
- · Dr. Dennis Watson
- Dr. Michael T. Smith, Committee Chair

Documentation of Career Development

To achieve promotion and tenure, the professional growth of the faculty member must be documented. The curriculum vitae in the format required by the College of Medicine and research, teaching and clinical accomplishment portfolios must be developed and updated regularly.

Please refer to the College of Medicine Promotion Packet:

http://academicdepartments.musc.edu/com/faculty/apt/musc/

The individual's Faculty Track Designation will dictate which areas of a member's portfolio will require more emphasis. Please refer to the above website for a listing of Faculty Tracks (under "Internal MUSC Forms").

The typical components of each of these portfolios may include but are not limited to the following:

Research 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 is a mentee)
- 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 (principal investigator)
- 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 ("mentees"), achievements of mentees including grants received and important publications of mentees, current mentee professional status
- 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

Teaching Portfolio

A teaching portfolio includes documents and materials that show the scope, quality, and creativity of faculty members' teaching efforts, progress, and achievements (<u>Seldin, P 1997</u>). 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. Evidence of excellence in anatomic and clinical pathologic training of students, residents, and fellows
- 7. Documentation of teaching activities including formal lectures, grand rounds, and continuing medical education
- 8. Engagement in the scholarship of teaching and learning (SoTL)
- 9. Evidence of teaching accomplishments
 - 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
 - I. 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
- 10. Mentoring achievements in teaching: individuals mentored, achievements of mentees in teaching arena, and current mentee status

Clinical Portfolio

- 1. Completion of educational requirements necessary for career as an academic pathologist, including certification by the American Board of Pathology
- 2. Evidence of a heavy clinical load
- 3. Evidence of excellence in high quality patient care
- Development of innovative clinical pathology practices i.e., participation or establishment of new clinical services, e.g., telepathology, informatics, application of new markers/molecular assays/other pathology techniques
- 5. Evidence of organization of clinical services to provide an optimal setting for medical education and a data base for research
- 6. First authored publications (papers, chapters, reviews, textbooks)
- 7. Senior authored publications (papers, chapters, reviews, textbooks)
- 8. Co-authored publications (papers, chapters, reviews, textbooks)
- 9. Presentations at national or international meetings
- 10. Peer recognition for clinical activities including invitations to present at national / international meetings and other universities
- 11. Co-investigator on research grant awards
- 12. Mentoring achievements: clinicians trained, achievements of trainees, and current trainee status
- 13. Membership and involvement in professional and scientific organizations
- 14. Contributions to clinically oriented committees at department, college, university, community, state, regional, national and international levels
- 15. Leadership roles in appropriate Department, College, or University Clinical Committees

Faculty Development Resources

- A. Negotiable Intradepartmental Resources
 - a. Protected time for research
 - b. Protected time for teaching
 - c. Departmental funds for pilot studies
 - d. Appropriate administrative support
 - e. Appropriate laboratory technical support
 - f. Appropriate pathologist assistant support
 - g. Shared laboratory resources
 - h. Travel to scientific meetings where presenting original materials
 - i. Travel to scientific meetings where presenting didactic materials
- B. Professional expense account
 - a. Books
 - b. Journals
 - c. Hardware/software
 - d. Continuing medical education (CME)
- C. In-house CME credit and SAM (self-assessment module) credit opportunities
- D. Colleague advocacy committees
 - a. Faculty Development Committee

- b. Promotions and Tenure Committee
- E. Interdepartmental/Institutional See Appendix 1, 1.1 1.2
- F. National/International See Appendix 1, 2
- G. On-Campus Faculty Advocacy Groups See Appendix 1, 1.3

Procedures/Guidelines

A. Faculty Recruitment

Upon serious consideration of hiring of a new faculty member, an interim mentor will be offered to the candidate. A mentor who is a senior faculty member not in direct or indirect competition for Departmental resources will be identified. If accepted by the candidate, the mentor may assist the candidate in negotiations with discussion of the following:

- a. Track and rank
- b. Clinical activities %effort
- c. After hours call effort
- d. Teaching %effort
- e. Protected time
 - i. Research
 - ii. Teaching
- f. Support
 - i. Administrative
 - ii. Research
 - iii. Clinical
- g. Development of mentoring team

New faculty offer letters should address these points of negotiation. New faculty must attend a Faculty Orientation Session as described under "Faculty Senate" above.

B. New Faculty

Within three months of hire, the new member will meet with or otherwise communicate with their interim mentor (if applicable) to determine whether the arrangement is beneficial, suitable, and sufficient. If not, the mentee will inform the Chair who will provide mentor options. The mentee may then meet with his/her division director to discuss and select a mentor.

C. Existing Faculty

All faculty may request or be offered a mentor; particularly those at rank of Associate Professor and lower. The mentee may at any time request mentor options from the Chair and may at any time request a meeting with his/her division director for assistance in selection of a mentor. The mentor may assist the mentee in production of a career development plan and may assist the mentee in identification of a lead mentor or mentoring team. After development of the plan, the mentor, mentee and Chair will meet to identify resources that may be necessary for success of the mentee.

Mentoring Plans and Agreements

Mentoring plans will be developed by the group consisting of the Chair, mentor or interim mentor, and mentee. Upon request, plans may be reviewed by the Chief, Global Initiative for Pathology Patient Safety and Continuing Education Excellence.

Mentoring plans will include an Individual Development Plan (see Appendix 4) that includes all areas pertinent to the mentee such as clinical service, research, teaching, administration, and community services.

Mentor responsibilities

The mentor or mentoring team (including a lead mentor) should actively monitor and promote the career of the mentee in ways such as but not limited to:

- 1. Provide review and committee service opportunities
- 2. Include the mentee on appropriate grants and papers to help assure academic promotion
- 3. Provide a psychosocial support structure for the mentee
- 4. Act as mentee advocate during negotiation processes
- 5. Assist in development of Curriculum vitae
- 6. Formal regular meetings (every 3 to 6 months)
- 7. Provide honest constructive advice regarding progress

Mentee responsibilities

In turn, the mentee will assume primary responsibility for the relationship in ways such as but not limited to:

- 1. Seek out mentor/mentor team and initiate relationship(s)
- 2. Commitment to learn from mistakes and welcome new learning experiences
- 3. Commitment to seek balance amongst personal and work duties
- 4. Respect mentor's time
- 5. Seek out a wide experiential variety of mentor relationships
- 6. Keep Curriculum vitae up-to-date
- Actively work on Individual Development Plan and discuss with mentor at least yearly (see Appendix 4)

A formal agreement with identified terms of commitment between the mentee and lead mentor will be reached that describes the intended interaction; the agreement is formally reviewed yearly by the Chair during faculty annual evaluations and may be adjusted at any time by recommendation of the mentor, mentee, or Chair. Appropriate confidentiality in all mentor-mentee agreements is paramount.

See Appendix 2 for Mentee/Mentor Agreements

Developing, Training and Rewarding Mentors

Mentoring is considered a faculty member's departmental and academic responsibility. The South Carolina Translational Research Institute (<u>SCTR</u>) plans to offer an annual mentor training program based on a program in place at the University of California, San Francisco (UCSF); faculty will be expected to attend no less than once every five years.

Should particularly successful mentors be identified, the Department of Pathology and Laboratory Medicine may offer an annual award of recognition, which, at the discretion of the Chair, may be accompanied by a financial award. Successful mentoring activities (see "Metrics of Successful Mentoring" below) will be taken into consideration by the Promotions and Tenure Committee during reviews for promotion.

Metrics of Successful Mentoring

- 1. Mentor and mentee annual confidential evaluations reviewed by the Chair
- 2. Evidence of successful research mentorship
 - a. Grants submitted
 - b. Grants funded
 - c. Number and importance of original publications under mentor guidance
 - d. National/international presentations and invitations
 - e. Mentee promotion
 - f. Research awards under mentor guidance
- 3. Evidence of successful teaching mentorship
 - a. Formal course development
 - b. Number and importance of education publications
 - c. Education grants submitted
 - d. Education grants funded
 - e. National/international presentations and invitations
 - f. Mentee promotion
 - g. Teaching awards and honors under mentor guidance
- 4. Evidence of successful clinical mentorship
 - a. Number of presentations and publications by trainees
 - b. Innovations by mentee regarding clinical services provided
 - c. Clinical teaching awards and honors
 - d. Clinical career development progress by mentee
 - i. Promotion
 - ii. Clinical committee participation
- 5. Evidence of overall successful mentorship
 - a. Job satisfaction survey
 - b. Intradepartmental attrition
 - c. Faculty promotion
 - d. Mid-career awards for mentors (i.e. NIH K05, K07, K24)
 - e. Career development awards for mentees (i.e. NIH K23, K08, KL2)
 - f. Total funding for mentored activities
 - g. Total number of mentored publications
 - h. External review of program by College Leadership (every 3 to 5 years)

Role of Leadership

- A. Chair
 - a. Ensure that all faculty are successfully mentored
 - b. Participate in the initial review of the Career Development Plan
 - c. Discuss the mentee-mentor relationship during Annual Faculty Reviews
 - d. Align the Career Development Plans with the Departmental strategic plan
 - e. Recommend and facilitate change of mentor as necessary
- B. Promotions and Tenure Committee
 - a. Annual review of the Mentoring Policy
 - b. Faculty portfolio review
 - c. Determine, list and disclose (to Chair and/or Faculty Member) items absent from portfolio and methods to achieve items needed for promotion
- C. Deans
 - a. Hold Department Chair accountable to ensure that faculty are well mentored and appropriately promoted
 - b. Organize periodic review of Departmental Mentoring Policy

Responsible work unit

Faculty Development

cas:8/11; 5/15; 5/16

Based upon "Framework for Departmental Mentoring and Career Development Plans for Faculty at the Medical University of South Carolina" developed by the MUSC Mentor Leadership Council (August 2010).

Additional Reading and Appendices 1, 2, 3, and 5 excerpted from the "Framework" below with yearly updates to correct changing information:

Further Reading

Bickel J, Brown JA. Generation X: Implications for faculty recruitment and development in academic health centers. Acad Med 2005; 80: 205-210.

Blixen CE, Papp KK, Hull AL, Rudick RA, Bramstedt KA. Developing a mentorship program for clinical researchers. J Contin Educ Health Prof. 2007Spring;27(2):86-93.

Cochran A, Paukert JL, Scales EM, Neumayer LA. How medicals students define surgical mentors. Am J Surg 2004; 187:698-701.

Detsky AS, Baerlocher MO. Academic mentoring--how to give it and how to get it. JAMA. 2007 May 16;297(19):2134-6.

Feldman MD, Huang L, Guglielmo BJ, Jordan R, Kahn J, Creasman JM, Wiener-Kronish JP, Lee KA, Tehrani A, Yaffe K, Brown JS. Training the next generation of research mentors: the University of California, San Francisco, Clinical & Translational Science Institute Mentor Development Program. ClinTransl Sci. 2009 Jun;2(3):216-21.

Johnson MO, Subal, LL, Brown JS, Lee KA, Feldman MD. An innovative program to train health sciences researchers to be effective clinical and translational research mentors. Acad Med 2010; 85:484-489.

Keyser DJ, Lakoski JM, Lara-Cinisomo S, Schultz DJ, Williams VL, Zellers DF, Pincus HA. Advancing institutional efforts to support research mentorship: a conceptual framework and self-assessment tool. Acad Med. 2008 Mar;83(3):217-25.

Levy BD, Katz JF, Wolf MA, et al. An initiative in mentoring to promote resident's and faculty members careers. Acad Med 2004; 79:845-850.

Morahan PS, Kasperbauer D, McDade SA, Aschenbrener CA, Triolo PK, Monteleone PL, Counte M, Meyer MJ. Training future leaders of academic medicine: internal programs at three academic health centers. Acad Med. 1998 Nov;73(11):1159-68.

Moskowitz J, Thompson JN. Enhancing the clinical research pipeline: training approaches for a new century. Acad Med. 2001 Apr;76(4):307-15.

Palepu A, Friedman RH, Barnett RC, Carr PL, Ash AS, Szalacha L, Moskowitz MA. Junior faculty members' mentoring relationships and their professional development in U.S. medical schools. Acad Med. 1998 Mar;73(3):318-23.

Pololi L, Knight S. Mentoring faculty in academic medicine. A new paradigm? J Gen Intern Med. 2005 Sep;20(9):866-70.

Pololi LH, Knight SM, Dennis K, Frankel RM. Helping medical school faculty realize their dreams: an innovative, collaborative mentoring program. Acad Med.2002 May;77(5):377-84.

Sambunjak D, Straus SE, Marusić A. Mentoring in academic medicine: a systematic review. JAMA. 2006 Sep 6;296(9):1103-15.

Seldin P. The teaching portfolio. A practical guide to improved performance and promotion / tenure decisions. 2nd edition. 1997. Anker Publishing Company.

Souba WW. The essence of mentoring in academic surgery. J Surg Oncol 2000; 75-76-79.

Tracy EE, Reshma J, Starr R, Trabell NJ. Outcomes of a pilot faculty-mentoring program. Am J Obstet Gynecol 2004; 191:1846-50.

Wingard DL, Garman KA, Reznik V. Facilitating faculty success: outcomes and cost benefit of the UCSD National Center of Leadership in Academic Medicine. Acad Med. 2004 Oct;79(10 Suppl):S9-11.

Appendix 1. Institutional, State and National Resources for Supporting Faculty Development at MUSC

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

The Office of Research Development (ORD), 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.

http://academicdepartments.musc.edu/research/ord/

Bridge, research support and voucher information is available as well:

http://academicdepartments.musc.edu/research/ord/fundingops/internal_opps.html

If you think that applying for a SCTR Voucher could be beneficial to your research study, please visit http://academicdepartments.musc.edu/sctr/funding_opportunities/vouchers and fill out a SPARC Service Request Form.

Also see these SCTR resources:

SUCCESS Center

Request a SCTR Presentation

Research Nexus

REDCap

SPARC Request

SCTR Retreats

SCresearch.org

Research Toolkit

MUSC Cores & Facilities

Pilot Projects

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)

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. http://academicdepartments.musc.edu/sctr/

Biostatistics Consultation services offered include:

- 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)
- Link to the Biostatistics Shared Resource service: http://hcc.musc.edu/research/resources/biostatistics/index.htm
- Link to the Data Coordination Unit: http://dcu.musc.edu/

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

Resources for Basic Science Research:

Research Support

Shared Core Facilities. http://academicdepartments.musc.edu/com/research/CORESharedResources.htm
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.

Cores & Shared Resources

Antibody Facility

Flow Cytometry & Cell Sorting Unit (HCC)

Gene Function Core

Genomics Shared Resources

Histology & Immunohistochemistry Laboratory (Pathology)

Lipidomics Shared Resource

Mass Spectrometry Facility

MUSC Bioinformatics Core (MBC)

Structural Biology: Nuclear Magnetic Resonance Facility

Proteogenomics Facility

Structural Biology: X-Ray Crystallography Resource

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 provides a number of vital research policy guidelines regarding scientific conduct, data sharing and other topics: http://www.hhmi.org/about/policies.
- "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)
- CGS 725 Teaching Techniques. This <u>course</u> 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 (Keisha Vaughn at <u>brownkn@musc.edu</u>). Upon completion of CGS 725, the student or postdoc may enroll in CGS 745 <u>Teaching Internship</u>.

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 is a monthly on-line newsletter of recent events of interest to MUSC researchers and Research Impact showcases faculty involved in research and academic ventures. Both can be found at the <u>Research Communications</u> website of the Office of Research Development.

SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science) 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 (Annual Biomedical Research Conference for Minority Students) 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

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.
- d. Also see MUSC Library EdWeb: http://www.library.musc.edu/page.php?id=1061&SASB=5
- 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://academicdepartments.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. The Office of Interprofessional Initiatives at MUSC is responsible for "implementation of interprofessional, synergistic, team-based, clinical, educational and research initiatives at MUSC. The Office's Quality Enhancement Plan (QEP) encourages such interdisciplinary opportunities for the MUSC community and sponsors an Interprofessional Day.
 - 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/

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

1.3. Faculty Advocacy Groups

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

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)
- Funding Portal at MUSC: http://academicdepartments.musc.edu/research/ord/fundingops/

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 2. SAMPLE MENTORING PARTNERSHIP AGREEMENT #1

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

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 (at least every 3 – 6 months). Our specific schedule of contact and meetings, including additional meetings, is as follows:
2. Look for multiple opportunities and experiences to enhance the Mentee's learning.
We have identified, and will commit to, the following specific opportunities and venues for learning:
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:
Provide regular feedback to each other and evaluate progress. We will accomplish this by:

Mentee's Signature and Date

Adapted from: The Mentor's Guide by Lois J. Zachary. 2000 $^{\circ}$ by Jossey-Bass, San Francisco, CA.

Mentor's Signature and Date

Appendix 2. 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	n this relationship			_
	Nam	ne	Name	
2. We are committed to sus	stain this relationship for at	least one (1) year from	this date.	
Na	nme	Name		
3. We are committed to me	eet together: weekly	monthly	-	
4. We have established the	e following goals for this me	ntoring relationship:		
5. The skill areas to be enh	nanced or developed throug	h this partnership are:		
6. Each of us has outlined	expectations for the mentor	ing relationship		
7. We have discussed and	agree to a "No-Fault conclu	usion, if necessary		
Mentor	Date	Mentee	Date	<u> </u>

Appendix 3. Mentor/Mentee relationship evaluation.

Part 1. TO BE COMPLETED BY MENTEE.

Mentee:		
Mentor:	 	

ITEM	Excellent	Fair	Poor	
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 3. Mentor/Mentee relationship evaluation.

Part 2	TO BE	FILLED	OUT B	Y MENTOR

Mentee:			
Mentor: _			

ITEM	Excellent	Fair	Poor	
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

Appendix 4: Individual Development Plan

What goal is your top priority for the coming year?

Year:			Name:	
Today's D	ate:		Current Academic Rank:	
Career an	d Profess	sional Goals:		
	a.	Past year goals met:		
	b.	Past year goals not met and reason:		
	C.	Upcoming year:		
	d.	Next 3 – 5 years:		
Motivating	factors:			
Barriers a	nd Challe	enges:		
Time Alloc			This year	Next year
	Teaching	g, training, mentoring others (%)	This year	Next year
	Teaching Research	n, creative work (%)	This year	Next year
	Teaching Research Clinical w	n, creative work (%) vork/patient care (%)	This year	Next year
	Teaching Research Clinical w Administr	n, creative work (%) vork/patient care (%) ration/other duties (%)		
Skills deve	Teaching Research Clinical w Administr	n, creative work (%) vork/patient care (%) ration/other duties (%) — Describe what skills you need for success and ho		
Skills deve	Teaching Research Clinical w Administr	n, creative work (%) vork/patient care (%) ration/other duties (%) — Describe what skills you need for success and ho		
Skills deve	Teaching Research Clinical w Administr elopment Research	n, creative work (%) vork/patient care (%) ration/other duties (%) – Describe what skills you need for success and ho		
Skills deve	Teaching Research Clinical w Administr	n, creative work (%) vork/patient care (%) ration/other duties (%) – Describe what skills you need for success and ho		
Skills deve	Teaching Research Clinical w Administr elopment Research Teaching	n, creative work (%) vork/patient care (%) ration/other duties (%) - Describe what skills you need for success and ho n skills		
Skills deve	Teaching Research Clinical w Administr elopment Research Teaching	n, creative work (%) vork/patient care (%) ration/other duties (%) – Describe what skills you need for success and ho		
Skills deve	Teaching Research Clinical w Administr elopment Research Teaching	n, creative work (%) vork/patient care (%) ration/other duties (%) - Describe what skills you need for success and ho n skills g skills onal skills		
Skills deve	Teaching Research Clinical w Administr elopment Research Teaching	n, creative work (%) vork/patient care (%) ration/other duties (%) - Describe what skills you need for success and ho n skills		

Appendix 5: Members of the Mentor Leadership Council (2010)

Marc Chimowitz MBChB – Chair of Council, Director of SCTR Mentoring, Professor of Neurology, Associate Dean of Faculty Development, College of Medicine

Jeanette Andrews PhD, APRN- BC, FNP - Associate Dean for Research and Evaluation, College of Nursing; Associate Professor of Nursing

Craig Cano Beeson PhD - Associate Professor College of Pharmacy

Heather Shaw Bonilha PhD, CCC-SLP- Assistant Professor of Health Sciences Research, College of Health Professions

Keith Borg MD, PhD - Assistant Professor of Medicine

Kathleen Brady MD, PhD – Director of SCTR, Professor and Director, Clinical Neuroscience Division, Associate Dean of Clinical and Translational Research, College of Medicine

Lisa L. Cunningham, PhD- Assistant Professor of Pathology and Laboratory Medicine

Leonard Egede MD, MS - Professor of Medicine

Perry Halushka PhD, MD - Co-director of SCTR, Dean of the College of Graduate Studies, Professor of Medicine and Pharmacology

Kathie L. Hermayer MD - Professor of Medicine

Thomas Hulsey Sc.D. - Director of CSTR TEACH, Director of Division of Pediatric Epidemiology; Professor of Pediatrics

Keith Kirkwood DDS, PhD - Associate Dean for Research Dental Medicine; Professor of Dental Medicine

Edward Krug PhD - Assistant Dean for Postdoctoral Affairs, College of Graduate Studies, Associate Professor of Regenerative Medicine and Cell Biology

Bonnie Martin-Harris PhD - Director (Interim), Division of Communication Sciences, Professor of Otolaryngology

Mary Mauldin Ed. D. - Associate Professor and Director, Center for Academic and Research Computing; Head, Library Learning Commons

Jacqueline McGinty, PhD - Associate Dean, College of Graduate Studies; Professor of Neurosciences

Maralynne D. Mitcham PhD - Director, Division of Occupational Therapy; Professor of Health Professions

Carrie Randall, PhD - Distinguished University Professor of Psychiatry and Behavioral Sciences

Joann Sullivan PhD – Director of Office of Research Development, Assistant Dean for Extramural Program Development, College of Graduate Studies