

**Cell & Molecular Pharmacology and Experimental Therapeutics**

**Departmental Mentoring and Career Development Plan for Faculty**

## **Department Goals on Mentoring**

The goal is for all faculty members of the department of Cell & Molecular Pharmacology and Experimental Therapeutics is to achieve their full potential as members of the College of Medicine and the Medical University of South Carolina and to be rewarded for that achievement. Since the University is a place where everyone is learning, it is vital that each member of the faculty see tangible evidence of that professional growth, whether it be in the easily measured domains of writing papers for publication, writing and receiving grants, or preparing and presenting lectures for students and trainees of our colleges. Less easily measured aspects of success include teaching students, residents and fellows, or mentoring young investigators and junior faculty. It is incumbent on faculty members, their mentors, Department Chairs, and the university leadership to see that tangible progress is being made and documented. This mentoring plan is designed to assist in this process.

## **Description of Promotion and Tenure Process Within Department**

As with other Basic Science departments, Cell & Molecular Pharmacology and Experimental Therapeutics has two regular faculty tracks with the potential for achievement of tenure:

*Academic Investigator*

*Academic Investigator/Educator*

The department has academic tracks for faculty who will not have the potential for achievement of tenure:

*Research Faculty*

*Adjunct Faculty*

*Visiting Faculty*

The department also supports an “At Will” status for senior faculty members who have formally retired but can support themselves primarily through external grant support. Dual appointments and special appointments (emeritus) are also available.

## **Applying for promotion and tenure**

Full details on faculty appointment, promotion and the granting of tenure in the College of Medicine can be found at: <http://www.musc.edu/com1/faculty/index.htm>

Specific guidelines outlining the requirements for faculty rank (instructor, assistant professor, associate professor and professor) can also be found in the table in appendix 1. Faculty members are made aware that promotion and tenure are considered separately by the University.

Before submitting an application for promotion or tenure to the College of Medicine, the application must first be reviewed by the Appointments, Promotions and Tenure (APT)

committee for Basic Sciences (Microbiology and Immunology, Biochemistry and Molecular Biology, and Cell and Molecular Pharmacology and Experimental Therapeutics), which will then pass on its recommendations to the department Chair.

For the College of Medicine, there are two promotion cycles per year with application deadlines on May 1<sup>st</sup> and December 1<sup>st</sup>, and one tenure cycle per year with an application deadline on May 1<sup>st</sup>.

The application deadlines for Basic Sciences APT committee review are February 15<sup>th</sup> and Sept. 15<sup>th</sup> (for May and December College of Medicine deadlines, respectively). In addition, it is recommended to submit a letter of intent so that the committee can ensure all necessary documents are being prepared/procured.

## **Documentation of Career Development**

To achieve promotion and tenure, the professional growth of the faculty member must be documented. For this purpose, an up-to-date CV in the format required by the College of Medicine must be kept (link for CV format can be found at <http://www.musc.edu/com1/faculty/index.htm>). In addition, portfolios of research and teaching accomplishments should be kept updated (can be incorporated into expanded College of Medicine format CV). To advance through the academic ranks, the quality of the faculty member's individual scholarship is of critical importance, but depending on track, more emphasis will need to be placed on a specific portfolio e.g., for academic investigators, the research portfolio is most important, whereas for a faculty member in an academic educator track, the teaching portfolio is of primary importance. Individual c.v.'s should be kept updated for annual faculty evaluation by the Chairman.

Components of Research and Educator portfolios that should be included in expanded College of Medicine CV are listed below.

### **Academic Researcher Portfolio**

1. Completion of educational requirements necessary for career in academic research
2. First authored original publications (with impact factor information if possible)
3. Senior authored original publications (indicate whether the first author was someone you mentored)
4. Co-authored peer reviewed original publications
5. Other publications, e.g., review papers, book chapters, textbooks
6. Career training grant awards
7. Independent grant awards as PI
8. Grant awards as Co-investigator
9. Presentations of research at national / international meetings
10. Peer recognition for research activities including invitations to present at national / international meetings and other universities
11. Roles in organizing scientific meetings.
12. 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
13. Institutional or external research awards
  14. Intellectual property considerations and patents.
    14. Connections with Biotechnology and other “for profit” entities with a meaningful connection with MUSC.
  15. Teaching and Mentoring achievements: Courses taught, individuals mentored, achievements of mentees including grants received and important publications of mentees under your guidance, and where mentees are today
  16. Membership and involvement in professional and scientific organizations
  17. Contributions to research-oriented committees at department, college, university, community, state, regional, national and international levels
  18. Leadership roles in research in appropriate department, college, or university

### Academic Educator Portfolio

A teaching portfolio includes documents and materials that show the scope, quality, and creativity of your teaching efforts, progress, and achievements. Note that in the Department of CELL & MOLECULAR PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS, it is expected that faculty in the Educator track will also maintain a research interest, at least at the level of co-investigator in research projects. In addition, to any research achievements, components of a teaching portfolio should 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 teaching accomplishments
  - a. Description of types of different teaching activities such as formal courses, small group seminars, one-on one tutorials, supervision of student research projects, chairing thesis or doctoral committees, and coaching manuscript preparation for students, residents, and fellows
  - b. Course materials (syllabi, readings, handouts, assignments, examinations)
  - c. Samples of teaching innovation (simulation, educational technology)
  - d. Samples of manuscripts related to teaching and or educational activities
  - e. Student, resident and fellow evaluations of teaching
  - f. Peer evaluations of teaching
  - g. Audience evaluations of presentations at state or national meetings
  - h. Membership in departmental, college, university, society, community, state, regional, national and international committees or organizations related to teaching
  - i. First authored publications (papers, chapters, reviews, textbooks) related to teaching
  - j. Senior authored publications (papers, chapters, reviews, textbooks) related to teaching
  - k. Co- authored publications (papers, chapters, reviews, textbooks) related to teaching
  - l. Grant awards related to teaching

- m. Presentations on teaching at national / international meetings
- n. Leadership roles in teaching in appropriate department, college, or university
- o. Honors and awards for teaching

7. Mentoring achievements in teaching: individuals mentored, achievements of mentees in teaching arena, and where mentees are today

## **Resources Available for Faculty Development**

### **College of Medicine Resources**

Can be found at:

[http://academicdepartments.musc.edu/com1/faculty/resources\\_faculty.htm](http://academicdepartments.musc.edu/com1/faculty/resources_faculty.htm)

The faculty handbook can be found at:

[http://academicdepartments.musc.edu/faculty\\_senate/handbook/handbook.pdf](http://academicdepartments.musc.edu/faculty_senate/handbook/handbook.pdf)

### **Departmental Resources**

The department has a mentoring plan for junior and mid-career pre-tenure faculty (details below). The department also assists with pre-submission grant review; the mentoring committee together with the mentee will identify a suitable and willing faculty member for grant review (either within or outside department and possibly outside institution). As an incentive, reviewers will receive a \$200 stipend in return for an NIH-style critique. Submission of proposal for pre-review should be 1 month before grant deadline.

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

### **Other faculty groups that serve organizational, support and advocacy roles.**

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

**The Women Scholars Initiative (WSI)** is a joint initiative of the Office of Academic Affairs and the Office of the President with a long-term goal of promoting careers of women faculty. This organization provides a monthly workshop series (recent topics include promotion and tenure, work/life balance, contract negotiation, financial planning,

and establishing good mentoring relationships). Other events sponsored by the WSI include the annual Eminent Scholar Seminar and Award, which brings an eminent scientist to MUSC to talk about his/her work and visit with MUSC faculty members. Past Eminent Scholars include members of the National Academy of Sciences and the Howard Hughes Medical Institute. WSI sponsors the John R. Raymond Fellowship, an annual award made to a junior faculty member to be used towards building a collaboration with a renowned expert (male or female) in her field. WSI also sponsors a number of peer mentoring events and roundtables. WSI events are open to all MUSC faculty. Learn more at <http://academicDepartments.musc.edu/womenscholars/index.htm>

## **Departmental Mentoring Plan**

Initially, either pre- or post-appointment, the Chair and faculty member will decide:

- Track and rank
- Percent effort for teaching
- Protected time for research and teaching effort
- Support for administrative and research efforts

The Chair and the faculty member will meet to decide on the development of a suitable mentoring committee. This group will consist of a lead mentor and two other faculty mentors. At regular intervals determined by the faculty member, this team will assist with the professional development of the faculty member.

The mentoring committee and faculty member will together develop an individual mentoring plan. The mentoring plan will provide guidance in several different areas including: advice in area of focus (e.g., research, teaching); professional development (e.g., suggesting role for mentee on a grant review panel or scientific writing committee, introducing the mentee to experts in the field, etc.); monitoring the progress of the mentee; helping to ensure academic promotion of the mentee; academic career guidance; and psychosocial support.

The faculty member will initially provide an updated and extended CV (see above under “Documentation of Career Development”) and a career development plan (see below) to the mentoring committee. After an initial meeting of the committee (without faculty member), the mentee and the mentoring team will meet on average twice per year to discuss the mentees goals and review the progress. The mentoring team will also assess the mentee’s career development in terms of what is missing in the faculty member’s portfolio for promotion, and make specific recommendations about how to achieve promotion.

Before each meeting, the mentee will provide an updated/extended CV and updated Career Development Plan. The career development plan is to consist of:

### **1. Planned time allocation:**

\_\_\_\_\_ % Teaching/training/providing mentoring

\_\_\_\_\_% Research  
\_\_\_\_\_% Patient Care  
\_\_\_\_\_% Administration  
\_\_\_\_\_% Other Creative Professional Activity

**2. Actual time allocation:**

\_\_\_\_\_% Teaching/training/providing mentoring  
\_\_\_\_\_% Research  
\_\_\_\_\_% Patient Care  
\_\_\_\_\_% Administration  
\_\_\_\_\_% Other Creative Professional Activity

**3. Professional Goals**

Short Term Goals (coming year)

Long term (3-5 years)

**4. Previously stated goals and progress toward those goals**

---

**Developing, Training and Rewarding Mentors Within the Department**

While the skills required for effective mentoring come naturally to some faculty, even those mentors could benefit from mentoring training programs (Refs. 1 and 2 below). MUSC is currently looking into developing such a program.

Although the department requires that all faculty members provide mentorship in some capacity, it is recognized that, in general, faculty mentoring is sometimes done by a few passionate and successful mentors. Junior faculty members tend to gravitate to successful mentors. This presents a challenge for the successful mentor in terms of providing sufficient time to mentor several mentees. One way to do this for mid-career or senior scientists is to apply for mentoring awards from NIH (K05, K07, or K24 grants) that can provide up to 50% salary support for 5 years (renewable for another 5 years in some NIH institutes). Some members of the Mentor Leadership Council and other faculty members at MUSC are current or past recipients of these awards and can help other faculty apply for these awards. Contact the Office of Research Development if you are interested in applying for a K05, K07, or K24 award, and their staff will connect you with a current or past recipient of one of these awards.

Departments should also consider ways of supporting and rewarding successful, in-demand faculty mentors who are typically already over-committed with their own research, clinical, educational, or administrative responsibilities. Without this support, the Mentor Leadership Council is concerned that those mentors will limit the amount of mentoring they will take on as they are forced to support their effort through other reimbursable activities. Since these mentoring activities are key to the success of junior faculty achieving career goals (e.g. obtaining NIH funding), which in turn brings the department and the institution prestige and additional resources, it is key that departmental and institutional leadership

develop strategies to reward successful faculty mentors<sup>18</sup>.

Mentors are also encouraged to attend the B & BS club (organized by Perry Halushka), at which research projects are presented and critiqued. The feedback and criticism should be helpful to both mentors (in terms of improving their mentoring skills), as well as mentees.

1. 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.

2. 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.

**APT and Post Tenure Review Guidelines available here**

<http://www.musc.edu/com1/faculty/index.htm>

## 1. Institutional Resources

### 1.1 Research Support

There are a number of institutional resources that support clinical, translational, and basic science research. These are listed on the MUSC Research and Discovery website (<http://research.musc.edu/index.html>). Some of these resources are described below:

- **The South Carolina Translational Research (SCTR) Institute.** The recently NIH funded MUSC Clinical Translational Science Award (CTSA) that is called the South Carolina Translational Research (SCTR) Institute (<http://sctr.musc.edu/>) provides research support to investigators across campus. Within SCTR is the **SUCCESS Center** which provides research navigation support such as collaborator and mentor matching and links to institutional cores and programs. Additionally, the SUCCESS center (<https://sctr.musc.edu/index.php/programs/success-center>) provides consultation for regulatory submissions and study subject recruitment, lists studies on clinical trials registry, and helps with grant budget development. At SCTR there is a toolkit that can help the most inexperienced investigator navigate the process required to get clinical trials underway and much more. MAP-R is a web portal that identifies approvals needed for all types of grant submissions. Visit [https://sctrweb2.musc.edu/research\\_toolkit](https://sctrweb2.musc.edu/research_toolkit) to find a wealth of information and pertinent advice about research at MUSC.

- **Funding Opportunities** are available through the KL2 and Pilot Project Program of SCTR and the University Research Committee. <https://sctr.musc.edu/index.php/education/k12>  
<https://sctr.musc.edu/index.php/programs/pilot-projects>  
<http://research.musc.edu/urc/home.htm>

- **SCTR Vouchers** can be requested for up to \$1,000 for research services and supplies per approved protocol every six months. Investigators are limited to two active vouchers in any one six month period as long as they are for two different protocols. For more information please visit <https://sctr.musc.edu/index.php/voucher>.

If you think that applying for a SCTR Voucher could be beneficial to your research study, please visit <http://sctr.musc.edu> and fill out a Service Request Form. The SUCCESS Center staff reviews all voucher requests and a decision of award is made within two business days of application.

- **The Office of Research Development (ORD)** (<http://research.musc.edu/ord/index.html>), which is funded through the Vice President for Academic Affairs & Provost's Office, focuses on program and proposal development, identifies funding opportunities, develops proposal concepts, networks faculty members with complementary interests, provides grant-writing consultation and workshops, offers pre-submission critiques, compiles institutional data, and prepares competitive proposals for research resources and research training. New faculty and trainees are encouraged to visit the office in 101 Basic Science Bldg to meet the ORD staff and learn about networking

opportunities. The following are among the services offered by the Office of Research Development:

Research Project Grant (RPG) Retreats are held approximately 3 times / yr. These interactive half-day sessions give individual investigators the opportunity to gain constructive criticism on a specific research concept or proposal. Researchers at any phase of career development are encouraged to present or attend.

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

Community of Science (COS) is an external web-based system, offered as an institutional subscription service, that provides a range of services including searchable databases for funding opportunities and expertise, as well as a personalized workbench from which to access and manage COS services.

Institutional “Boilerplate” is a compilation of information about MUSC, its components and programs, primarily used to assist MUSC faculty, staff, and trainees in preparing institutional resources and environment sections for research grant and contract proposals.

Grantsmanship Workshops are held twice per year. Led by an external consultant, the workshop content focuses on the NIH organization, peer review system, grantsmanship tips, and the ABCs of an R01 or other NIH grant application. Individual and team consultations are also offered. The workshops and consultation opportunities are an institutional research support service, provided at no charge to investigators or programs.

MyPeerReview is an internal, on-line searchable database of information about MUSC faculty service on review panels and study sections for the NIH and other federal and non-federal sponsors, as well as journals for which MUSC faculty members have served or currently serve as an ad hoc reviewer, member, editorial board, etc.

- **Grant Writing Help** is provided by: The Office of Scientific Editing and Publications (OSEP) which provides support to augment manuscript and grant writing skills for MUSC faculty, trainees, and staff <http://research.musc.edu/APR/OSEP.html>, and also through the SUCCESS center <https://sctr.musc.edu/index.php/programs/success-center>.

- **Grant Administrative Support.** The Office of Research and Sponsored Programs (ORSP) and Office of Grants and Contracts Accounting (OGCA) provide the fundamental support need to obtain and manage sponsor-supported research funding. In addition to individual support, their websites provide important information regarding basic information needed for submission, and management of grants and contracts.
  - Office of Research and Sponsored Programs (<http://research.musc.edu/orsp/index.html>)

- Office of Grants and Contracts Accounting (<http://academicDepartments.musc.edu/vpfa/finance/gca/index.htm>)

### Some Specific Resources for Clinical and Translational Research:

- **Clinical & Translational Research Center (CTRC).** The primary purpose of the CTRC is to support clinical and translational research projects within the institution and SCTR affiliate members as well as pilot studies that may lead to future NIH or other sources of peer-reviewed clinical/translational research grant support. The specialized staff members of the CTRC consist of research nurses, laboratory personnel, nutritionists, IT specialists, and professional/administrative personnel. A core laboratory, fully equipped outpatient clinic, dental suite, and imaging suite comprise the highly-technical physical facilities that are on hand to support your research. <https://sctr.musc.edu/index.php/programs/clinical-a-translational-research-center>

- **Biostatistics Consultation** through the SCTR Biostatistics & Epidemiology Program. Services offered are:

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

These services are offered for several different settings:

Assistance Preparing Grants (Federal, Foundation, Other)

Assistance Preparing CTRC Protocols

Assistance with Current CTRC Funded Project

Unfunded Research Project (e.g. Abstract/Manuscript Preparation)

Links to these services are <http://sctr.musc.edu/index.php/programs/biostats> and [http://sctrweb2.musc.edu/research\\_toolkit/preaward/grantproposal/statistic](http://sctrweb2.musc.edu/research_toolkit/preaward/grantproposal/statistic)

- **Master of Science in Clinical Research Program (MSCR)** degree is offered by MUSC. This program teaches core competencies in clinical research methods, fosters development of a sustainable research focus, and provides the participant with the skills to compete for extramural support. <https://sctr.musc.edu/index.php/education/mscr-masters-of-science-in-clinical-research>

- **Society of Clinical Research and Translational Early Scientists (SOCRATES)** provides a forum for junior faculty to present their research projects in front of peers, senior researchers and statisticians, foster collaboration across multiple subspecialties at MUSC,

and trouble shoot about ways to improve mentoring across campus  
<https://sctr.musc.edu/index.php/programs/teach/133>

### **Some Specific Resources for Basic Science Research:**

- **Research Support** (<http://research.musc.edu/researchresources.html>)
  - Shared Core Facilities. A number of core facilities are available to support basic research (see information of each of these facilities in Research Shared Facilities on this website). In addition, an annual EXPOsition of these facilities that enables meetings with core personnel occurs in the fall each year.
  - College of Graduate Studies (CGS) Office of Postdoctoral Affairs. In addition to providing useful information regarding practical aspects of hiring and mentoring postdoctoral scientists, the office also offers services to enable recruitment of postdoctoral scientists.
  
- **Responsible Conduct of Research (RCR).**
  - CGS RCR Retreat resources. All MUSC postdocs participate in a mandatory 2-day retreat focused on career development, conflict resolution, and compliance issues related to the responsible research practices. All lectures and handouts are available on the CGS website. (<http://www.musc.edu/grad/postdoc/rcr.html>)
  - The HHS Office of Research Integrity website has a wealth of educational resources on RCR practices with case scenarios, videos and tutorials for all stages of research professionals (<http://ori.dhhs.gov>)
  
- **Personnel/Trainees Relationships**
  - College of Graduate Studies (<http://www.musc.edu/grad/>)
    - Graduate Faculty Resources – application for appointment to graduate faculty and conflict of interest forms.
    - Mentoring Compact – AAMC recommendations for mentoring graduate students and postdocs (<http://www.aamc.org/research/postdoccompact>).
    - Graduate Council Minutes – record of monthly meetings and policy discussions.
    - Graduate Faculty Research – web-based database of faculty research interests to aid students looking for potential mentors.
    - Training Grants – listing of MUSC training grants and career development programs for graduate students and postdocs.
    - Student Handbook – specifics of graduate programs, resources, dissertation requirement, and CGS policies.
    - Summer Research Programs for Undergraduates and Health Professional Students. These programs provide students the opportunity of a 10-week long internship with MUSC faculty. (<http://www.musc.edu/grad/summer/index.html>)
  - Howard Hughes Medical Institute
    - “Lab Management: Making the Right Moves” is an essential resource for postdocs and faculty, available free on-line. (<http://www.hhmi.org/resources/labmanagement/moves.html>)

- “Entering Mentoring” provides guidance in mentoring individuals with diverse learning and personality styles. (<http://www.hhmi.org/catalog/main?action=product&itemId=272>)
  - Human Resources Career Development Courses and Seminars. MUSC HR provides a variety of professional development workshops and seminars to facilitate more effective lab management and hiring practices. (<http://academicDepartments.musc.edu/vpfa/hrm/training/trainingpage>)
  - International Scientific Presenters Toastmasters. This club provides a supportive environment for learning how to give effective scientific presentations, and benefit from constructive feedback of peers and faculty sponsors. (<http://scientific.freetoasthost.us>)
  - CGS725 Teaching Techniques. This course is offered every Fall and Spring semester and is open to all students and postdocs. Contact the College of Graduate Studies office for registration information ([weised@musc.edu](mailto:weised@musc.edu))
- **Networking Opportunities**
    - “B & BS“ ([halushpv@musc.edu](mailto:halushpv@musc.edu)). The B & BS club provides an informal forum for faculty, postdoctoral and graduate students to present their research ideas, grant proposals or research problems to a mixed audience that can provide useful feedback and often potential collaborations or exchange of reagents
    - MUSC Core Facilities “Octoberfest” Reception. This is an annual event for core facility directors to highlight the services available.
    - Research INKlings (<http://research.musc.edu/inklings.html>). INKlings is a monthly on-line news letter of recent events of interest to MUSC researchers.
    - SACNAS promotes a diverse research academy by providing workshops and networking opportunities that encourage Chicano/Hispanic and Native American students and postdocs to pursue and persist in STEM fields. This is also an excellent recruitment resource. (<http://www.sacnas.org/>)
    - ABRCMS is an annual conference that brings underrepresented minority students and postdocs together to present their research in an environment that encourages their development into future STEM faculty. This is also an excellent recruitment venue. (<http://www.abrcms.org/index.html>)
    - [www.MinorityPostdoc.org](http://www.MinorityPostdoc.org) hosts a variety of career development resources for postdocs, including job listings and articles, with an emphasis on minority scholars.

## 1.2 Resources for Education

### 1.2.1. Types of Educational Technology

- a. Tegrity - is a lecture capture service that lets faculty automatically capture every class – on and off campus – for later review by every student, anytime, anywhere. <http://tegrity.musc.edu>
- b. Adobe Connect - Adobe Connect is a Web conferencing software that securely shares presentations and multimedia right from a desktop computer, supporting feedback from hundreds of participants — all using a web browser and the Adobe Flash® Player runtime. <http://connect.musc.edu>

c. WebCT - WebCT is MUSC's current Learning Management System. A Learning Management System is a software package that enables the management and delivery of learning content and resources to students. <http://webct.musc.edu>

**1.2.2 Education Technology Services (ETS)** Provides support in the areas of digital imaging, audiovisual 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 activities related to the scholarship of health professions teaching through campus and national partnerships. <http://www2.edserv.musc.edu/appletree/>

The following are the goals of the Society:

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

Activities of the Society include:

- Monthly Brown Bags – noontime sessions on topics related to the Scholarship of teaching
- Workshops focused on development of teaching skills including lecture and presentation skills, case based discussions, evaluating learners, and using technology such as WebCT (see below)
- Collegiality – informal meetings to discuss teaching and learning

**1.2.4. Copyright Toolkit** - Understanding and complying with the laws governing the use of copyrighted materials is daunting. The information on this site is directed at teaching faculty, students, scientific writers, researchers, and others at MUSC who use copyrighted works. It includes Copyright @ MUSC: Policies, Forms, & Resources, forms, and information about Coursepacks, Plagiarism and How to Cite Sources, releases, Images and text, and print and digital/online resources. Many of the links lead to the excellent copyright Websites of other universities. <http://copyright.library.musc.edu/page.php?id=1314>

**1.2.5. Creating Collaborative Care/Interprofessional Education** - Creating Collaborative Care (C3) is a Quality Enhancement Plan (QEP) for the Medical University of South Carolina that focuses on inter-professional education. <http://academicDepartments.musc.edu/c3/>

**1.2.6. Faculty teaching awards** (College and University) - In recognition of faculty accomplishments the individual colleges, as well as the university, present annual awards in teaching, research, and service. These awards are very competitive underscoring the excellence of the faculty with respect to their achievements. The awards are sponsored by various groups. The university annual awards include:

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

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

- 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>

## 2. State or National Resources

### 2.1. Funding Agencies

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

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

## 2.2. Associations

- **Association of American Medical Colleges (AAMC).** The AAMC represents all 133 accredited U.S. medical schools; approximately 400 major teaching hospitals and health systems, including 68 Department of Veterans Affairs medical centers; and nearly 90 academic and scientific societies. Through these institutions and organizations, the AAMC represents 125,000 faculty members, 75,000 medical students, and 106,000 resident physicians. Through its many programs and services, the AAMC strengthens the world's most advanced medical care by supporting the entire spectrum of education, research, and patient care activities conducted by member institutions. <http://www.aamc.org/>
- **Association of Women in Science (AWIS)** is a national advocacy organization championing the interests of women in science across all disciplines and employment sectors. By breaking down barriers and creating opportunities, AWIS strives to ensure that women in these fields can achieve their full potential. <http://www.awis.org/>
- **National Postdoctoral Association.** The NPA provides many resources useful for enriching the research environment, managing a research lab, and expectations of mentors and trainees. MUSC is an affiliate institution which provides membership to all faculty, postdocs, and students. <http://www.nationalpostdoc.org/>