Student Handbook
Masters in Cardiovascular Perfusion
2019-2020

Department of Health Professions
College of Health Professions
Medical University of South Carolina
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INTRODUCTION

The Cardiovascular Perfusion Program at MUSC (formerly known as Extracorporeal Circulation Technology) was founded in 1979 by James P. Dearing.

Each year at the end of the third semester, the James P. Dearing Memorial Scholarship is awarded to a perfusion student in memory of a truly outstanding pioneer and achiever in the health care field. Jim Dearing entered the health care profession at a time when open-heart surgery was in its infancy. Through both talent and hard work, he became one of the founding fathers of the perfusion profession. At the time of his entry into perfusion, there were few academic credentials available. Before coming to MUSC, he established the first academic-based perfusion program in the country at Ohio State University.

Jim Dearing worked to establish credentials so that perfusionists would be recognized as health care professionals. For his lifetime of work, he was awarded the John H. Gibbon, M.D. award in 1987. After years of outstanding service to the Medical University of South Carolina, he was awarded the rank of full professor. His lasting "tree of influence" can be seen today in the numerous students and alumni of the MUSC Cardiovascular Perfusion Program.

ACCREDITATION

The MUSC Cardiovascular Perfusion Program is accredited by the Commission of Allied Health Education (CAAHEP) upon the recommendation of the Accreditation Committee for Perfusion Education (ACPE).

CARDIOVASCULAR PERFUSION PROGRAM

The MUSC Cardiovascular Perfusion (CVP) Program is a well-balanced academic and clinically based perfusion education program dedicated to compassionate, safe, and evidenced-based patient care. The student is exposed to a rigorous education curriculum, which demands excellence in academics, clinical skills, research and professionalism. This program is designed to produce the evidence-based practitioners and leaders in the perfusion profession.

Upon completion of the program, the student will be awarded a Masters of Science (MS) Degree in Cardiovascular Perfusion.

DEPARTMENT OF HEALTH PROFESSIONS

The Division of Cardiovascular Perfusion, Anesthesia for Nurses, Physician Assistant, PT, and OT, comprise the Department of Health Professions in the College of Health Professions. Rick Segal, PT PhD is the Department Chair, and Minoo Kavarana, M.D., is the Medical Advisor for the Cardiovascular Perfusion Program.
CARDIOVASCULAR PERFUSION MISSION STATEMENT

The mission of the Medical University of South Carolina’s Division of Cardiovascular Perfusion is to prepare competent and compassionate clinical perfusionists who are dedicated to quality patient care, employing best practice methods, intraprofessional collaboration, and outcomes research.

CARDIOVASCULAR PERFUSION PROGRAM GOALS

At the completion of the program, all graduates will be able to

1. Demonstrate knowledge of the patient’s history, pathophysiology, laboratory values and pharmacology as evidenced by formation of a patient care plan with minimal supervision.
2. Select the proper equipment and supplies, assemble and prime the perfusion circuit using sterile technique, and prepare for surgery under minimal supervision.
3. Initiate CPB, manage CPB including hemodynamics, blood gases, electrolytes, anticoagulation, temperature, and terminate CPB according to protocol with minimal supervision.
4. Demonstrate knowledge and safe operation of adjunctive devices for blood management, ultrafiltration, cardiac assist, and Extra Corporeal Life support (ECLS), with minimal supervision.
5. Maintain professional conduct and communication with patients and staff.

GENERAL INFORMATION

Cardiovascular Perfusion Profession and Opportunities

Cardiovascular Perfusion is a very specialized allied health profession. The perfusionist is a highly trained member of the open-heart surgery team who is predominantly responsible for the operation of the heart-lung machine. In the operating suite, the cardiac catheterization laboratory, intensive care units and the emergency department, the perfusionist employs a number of highly technical devices that monitor, support and/or replace the functions of the patient’s cardiovascular and/or pulmonary systems. The perfusionist must command extensive knowledge in human anatomy, physiology, pharmacology, pathology and surgical technique.

Hospitals in moderate to large cities typically have active open-heart surgery programs that require perfusion support. Heart disease continues to be a leading cause of mortality and morbidity in this country. Routine cardiac surgery, heart transplant, and specialty techniques and procedures should ensure that the demand for well-trained perfusionists will continue.

Medical University of South Carolina

The Medical University of South Carolina (MUSC) is an academic health care center comprised of a 700-bed referral and teaching center with six colleges (Dental Medicine, Graduate Studies, Health Professions, Medicine, Nursing, and Pharmacy). MUSC’s perfusion education program is in the Department of Health Professions of the College of Health Professions (CHP) (established 1965) at the Medical University of South Carolina.
MUSC is a state-owned entity and is South Carolina's primary specialized academic health care facility performing both adult and pediatric heart surgery. The MUSC Children's Hospital performs approximately 300 pediatric and infant cardiac procedures and is nationally ranked. MUSC has an active liver transplant, heart transplant, lung transplant, ventricular assist and ECMO program in which the CVP faculty and students actively participate.

Faculty and Staff

DIVISION DIRECTOR:
David Fitzgerald, DHA, MPH, CCP

CLINICAL COORDINATOR:
Laura Dell’Aiera, MHA, CCP

CLINICAL AFFILIATES
Advent Health for Children, Orlando, FL
Augusta University Hospital, GA
Barnes Jewish, St. Louis
Beth Israel Deaconess Medical Center, Boston, MA
Boston Children’s Hospital, Boston, MA
Brigham Women’s Hospital, Boston
Cardinal Glennon Children’s Hospital, St Louis
Carolina Medical Center, Charlotte
Children’s Hospital of Atlanta
Children’s Hospital of Philadelphia
Colorado Children’s Hospital, Denver, CO
Duke University Hospital, NC
Emory Hospital, Atlanta
Greenville Memorial, SC
INOVA Health System, Falls Church, VA
Louisville University Medical Center
Navicent Health Medical Center, Macon, Georgia
Massachusetts General Hospital, Boston
Medstar Washington Hospital Center, DC
Mercy Health, Cincinnati, OH
Mission Health, Asheville, NC
Nationwide Children's Hospital, Columbus, Ohio
NY Presbyterian- Columbia, New York City, NY
NY Presbyterian- Cornell, New York City, NY
Oschner Clinic, New Orleans, LA
Phoenix Children’s Hospital, AZ
Piedmont Hospital, Atlanta, GA
Promedica Hospital, Toledo, OH
Riverside Hospital, Columbus, OH
Roper St. Francis, Charleston, SC
Scripps Health – La Jolla, CA
Seattle Children's Hospital  
Shands Hospital, University of Florida  
St. Elizabeth Health, Kentucky  
Swedish Hospital, Seattle, WA  
Trident Hospital, North Charleston, SC  
University of Alabama-Birmingham  
University of Massachusetts, Worcester, MA  
University of Michigan, Ann Arbor, MI  
University of Pennsylvania Hospital, Philadelphia, PA  
Univ of Rochester, Strong Memorial  
Wellington Regional Hospital, New Zealand  
Yale New Haven Hospital, CT

Phone Number for Division of Cardiovascular Perfusion:

Division Director: David Fitzgerald (843) 792-9262  
Clinical Coordinator: Laura Dell'Aiera (843) 792-8404

Financial Assistance

Financial aid information and applications are available from the Office of Student Financial Aid Services in the Harper Student Center.

The American Society of Extracorporeal Technology (AmSECT), the largest perfusionist professional organization, offers scholarships to students in accredited perfusion education programs. An MUSC scholarship honoring Professor James P. Dearing was established by contributions made by his family, fellow faculty, former students and manufacturers in 1988. The award is given to an outstanding Cardiovascular Perfusion rising senior student who demonstrates academic achievement, intellectual potential and professionalism as evaluated by the faculty.

Daily Schedule Assignments and Cell Phones

The daily clinical schedule will be sent by email between 4 and 6PM. Every effort will be made to have assignments sent during this time, however sometimes this is impossible due to clinical schedule and meetings. Further changes in the O.R. schedule or assignments will be sent by email. All CVP students on-call are required to be available at all times from 6:00 a.m. Monday until 4:00 p.m. Friday. In addition, “on-call” students must keep their pagers on during assigned on-call hours.

Cell Phones are NOT to be used for personal business during classroom or clinical settings unless for emergencies pertaining to the OR schedule.

E-Mail

Students of MUSC will be assigned an e-mail account. Instructors, the Dean’s Office and Administrative Departments will send students important information via e-mail. Students should check their MUSC e-mail frequently during the course of the day.

CPR Certification and HIPAA
Certified completion of Cardiopulmonary Resuscitation training (via the American Heart Association) for both adult and pediatric must be presented to the Clinical Education Team or designee within one week of beginning the Fall semester each year. Students are required to maintain current certification until graduation. Verification of HIPAA training must be provided within the one week of beginning program each year. Online training must be completed through the MUSC provided website located at: MYQUEST.musc.edu. Students are required to maintain their clinical folder in the MUSC Box folder so that all the necessary files are available for clinical rotations.

**Professional Conduct**

Each student enrolled in the College of Health Professions is expected to follow the code of professional conduct found in the MUSC Bulletin and adhere to the AmSECT Code of Ethics.

Under the code of professional conduct, a student enrolled in the College of Health Professions is expected to:

- Appear and conduct themselves in a professional manner.
- Identify and adhere to the channels of authority.
- Maintain academic and professional honesty.
- Exhibit respect and mutual support of fellow students, faculty, and staff regardless of race, religion, sex, nationality or economic status.
- Identify truthfully and accurately their credentials and professional status.
- Refrain from performing any professional services which requires competence that they do not possess or which is prohibited by law.
- Accept responsibility for relating incompetence and unethical conduct to the proper authorities.
- Maintain strict confidentiality with all patient-specific information. This includes refraining from discussing information with any unauthorized individual, including the patient.
- Demonstrate respect and consideration for the patient, regardless of race, religion, sex, nationality or economic status.
- Be guided at all times by concern for the welfare of patients entrusted to his/her care.

**Standard of Conduct for Treatment of Trainees**

MUSC strives to impart the values of professional and collegial attitudes and behaviors in interactions among members of the University community. MUSC prohibits attitudes and behaviors toward students, residents and fellows that are unfavorable to the development of mutual respect. The Standards of Conduct policy provides examples of misconduct and outlines procedures trainees can use to address mistreatment. Please visit the following website for more details:
AmSECT Code of Ethics (http://www.amsect.org/page/code-of-ethics)

The purpose of a code of ethics is to acknowledge a profession's acceptance of the responsibility and trust conferred upon it by society and to recognize the internal obligations inherent in that trust. The following paragraphs delineate the standards governing the conduct of members in their professional interactions with patients, colleagues, other health professionals and the general public. Realizing that no code can encompass all ethical responsibilities of the members, this enumeration of obligations in the code of ethics is not comprehensive and does not constitute a denial of the existence of other obligations, equally imperative, and not specifically mentioned herein. This code of ethics shall be binding on the members of this society.

Canon 1. Members must uphold the dignity and honor of the profession, accept its disciplines and expose without hesitation illegal, unethical and incompetent conduct.

Canon 2. Members shall respect the patients' rights and dignity and shall uphold the doctrine of confidentiality regarding privileged patient information.

Canon 3. Members shall provide only those services for which they are qualified. Members shall not misrepresent in any manner, either directly or indirectly, their skills, training, professional credentials, identity or services.

Canon 4. Members shall strive to improve their medical knowledge and skills on a continuing basis.

Canon 5. Members shall maintain and promote high standards for perfusion practice, which may include education, research and scientific presentations and/or publication.

Canon 6. A member shall at all times hold the well-being of the patient to be paramount and shall not act in such a way as to bring the members' interests into conflict with the patient's interests. A member shall deliver health care services without regard to race, color, creed, national origin, sex, age, religion, sexual preference or physical and/or mental condition.

Attendance

A student is responsible for studies missed during an absence and will be required to make up all missed clinical experiences. Academic penalties for unexcused absences will be determined by each course director and defined in the course syllabi.

Prompt and regular class, laboratory and clinical attendance are expected from each student in the program. If for any reason a student is unable to attend a scheduled academic assignment, it is his/her responsibility to inform the appropriate instructor, supervisor or program director 1 hour before the absence occurs whenever possible. If prior notification is impossible, an explanation for the absence should be presented to the instructor within 24 hours.
During the final two clinical semesters and with the instructor’s permission, students in the primary perfusionist role may be excused from class until bypass is completed. After termination of CPB the student is expected to attend remaining class time. When class is over; students assigned to a clinical case are expected to return to their clinical assignment.

An absence is defined as non-attendance of any scheduled class, laboratory or clinical assignment. An absence is classified as excused when the student provides documentation from student health service or they experience a death in their immediate family (2 days funeral leave). All other absences are considered unexcused.

Dress Code

While in the hospital, the Thoracic Surgery office, professional presentations or meetings, students will be expected to dress in professional attire. This will include lab coats with Cardiovascular Perfusion patch and ID badges. (ID badges are also required in the O.R. and all clinical arenas.)

If you need to leave the O.R. for a clinical situation (i.e. emergency in the cath lab), you must wear an OR jacket gown or your lab coat over the O.R. scrubs and remove shoe covers, hats, and masks.

Professional Development Evaluation

In regard to ethics and professional behavior, the students are evaluated each semester as "above satisfactory," “satisfactory” or “unsatisfactory" in "professional development". Professional development includes issues such as honesty, ethical behavior, orientation to the patient, and participating appropriately as a team member. Failure to achieve a satisfactory score on the professional development evaluation will result in the student earning an unsatisfactory professional development rating on their grade report. An unsatisfactory rating in professional development will result in academic probation. Two semesters of unsatisfactory professional development will result in dismissal.

CURRICULUM

Curriculum Description

The University Bulletin specifically lists the curricula and the course descriptions: https://education.musc.edu/students/enrollment/bulletin/colleges-and-degrees/health-professions/ms-in-cardiovascular-perfusion/curriculum

The Cardiovascular Perfusion curriculum is structured for twenty-one months, 5 semesters (15 weeks each) following the general principles of cognitive domain of learning and developing psychomotor skills. Students are introduced to the clinical arena, professional behavior and ethics during the first two semesters, along with course work in physiology, pharmacology and pathology. As the course work proceeds students increase their hands-on activities through simulation and wet labs, moving to the animal research labs for initial perfusion training and emergency drill simulation. The course work transitions into clinical practice and implementation of research projects during the final two semesters.
<table>
<thead>
<tr>
<th>Year</th>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<td>CVP-700</td>
<td>Clinical and Laboratory Monitoring</td>
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<td>CVP-702</td>
<td>Perfusion Technology I</td>
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<td>CVP-704</td>
<td>Research Methodology</td>
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<td>Perioperative Blood Management</td>
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<td>CVP-718</td>
<td>Pathophysiology</td>
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<td></td>
<td>IP-711</td>
<td>IP Foundations and TeamStepps</td>
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<td>CVP-703</td>
<td>Perfusion Technology II/Simulation Lab</td>
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<td>CVP-708</td>
<td>Pathophysiology for Perfusion with Focus on Aging</td>
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<td>CVP-610</td>
<td>Pharmacology for Perfusion</td>
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<td>CVP-710</td>
<td>Fundamentals of Clinical Acid Base Chemistry</td>
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<td>CVP-770</td>
<td>Masters Research Project II</td>
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<td>CVP-716</td>
<td>Seminar I</td>
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<td>CVP-714</td>
<td>Cardiac Assist Devices</td>
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<td>CVP-720</td>
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<td>CVP-762</td>
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<td>Clinical Experience II B</td>
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<td>CVP-728</td>
<td>Leadership and Health Services Delivery</td>
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<td>CVP-764</td>
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Competencies and Terminal Objectives

Each course, especially the clinical courses, carries objectives and competencies that must be demonstrated by the student. Each course employs testing and evaluation methods consistent to the course objectives.

Grading Policy and Academic Standing
The CVP program utilizes the CHP grading policy as noted in the CHP Student Policies and Procedures Manual found on the following link: https://education.musc.edu/colleges/health-professions/current-students

Didactic Evaluation
Classroom evaluation and methods are in the purview of the individual course instructors. No student may graduate while on academic probation.

Students will be placed on academic probation based on the following criteria
  • A student with a cumulative GPA between 2.75 and 3.0 after the first semester will be placed on academic probation. They will be allowed one semester to raise the cumulative average to the required 3.0.
    o If, at the end of that semester of probation, the student has failed to achieve a 3.0 or greater cumulative grade point average, the student will be dismissed from the program.
  • Students will be dismissed from the program if any one of the following occur:
    • A cumulative GPA of less than 3.0 the second semester or later
    • A cumulative GPA less than 2.75 at anytime
    • Two course grades between 2.0 and 2.9 in a semester
    • Any course grade of less than 2.0

In addition, a failing grade in pass/fail courses will be treated as a quantitative point value of 0.0 for the determination of a student’s GPA.

Clinical Experience
The Accreditation Committee for Perfusion Education (AC-PE) requires all graduates to have completed at least seventy-five (75) CPB procedures prior to graduation. An additional ten (10) pediatric observations are also required.

On-Call Responsibilities
As part of the educational experience in the Cardiovascular Perfusion program students will be required to be “On-Call” during Clinical Experience. The hours and frequency will vary depending upon clinical assignments. Pagers will be assigned to the “On-call” students. It is the “On-call” student’s responsibility to be available and to be within 30 minutes of the OR after 4pm.

Affiliations and Clinical Rotations
The MUSC Cardiovascular Perfusion Program provides the clinical perfusion services at MUSC
and the Veterans Administration Medical Center (VAMC). MUSC Hospital is accredited by the Joint Commission on Accreditation of Healthcare Organizations. The Ralph Johnson Veterans Administration Medical Center (VAMC) is a 401-bed general medical and surgical hospital. The VAMC is a Dean's Committee hospital and maintains a close liaison with the staff at MUSC. The VAMC is regulated and monitored by the National Veterans Administration. All South Carolina health care facilities including Cardiovascular Perfusion Program affiliates, are monitored and regulated by the South Carolina Department of Health and Environmental Control (DHEC).

Students will be required to attend external clinical rotations. Travel, lodging, and boarding fees will be the responsibility of the student.

**Student Clinical Practice Policy**

While in clinical rotations performing patient-care activities, Cardiovascular Perfusion students will always be supervised by clinical instructors. Cardiovascular perfusion students shall never be employed to take the place or assume the responsibilities of clinical staff perfusionists at MUSC or its clinical affiliates.

Cardiovascular Perfusion students are restricted to the patient-care competencies described in the course specific syllabus. Specific perfusionist tasks, such as preparing, verifying or administering medications alone, or checking donor blood products, remain the primary responsibility of the Cardiovascular Perfusion clinical faculty in the patient care areas, even if the Cardiovascular Perfusion student is a registered nurse or licensed medical professional. Cardiovascular Perfusion students do not perform IABP (Intra-Aortic Blaoon Pumps), ATS (Autotransfusion Systems), or ECMO (Extracorporeal Membrane Oxygenation) without direct instructor supervision.

Should students find that they are assigned to or performing patient-care activities without faculty supervision, the student must immediately cease activity, consult faculty, and notify program officials.

Students who are appropriately licensed and experienced may seek employment in their non-perfusionist specialty at MUSC or external hospitals as long as their employment does not interfere with class meetings, clinical assignments, call or academic performance.

**Student Blood Borne Pathogen Exposures**

Students who sustain a blood borne pathogen exposure during clinical coursework are to call Student Health (843-792-3664) during normal operating hours (Monday - Friday, 8:00 AM – 4:30 PM) to report the exposure, as well as the MUSC Clinical Cooordinator. For exposures that occur at MUSC when Student Health Services is closed (after hours, weekends, or holidays), call the MUSC operator (843-792-2123) and have the Hospital Supervisor paged to your extension. If a Hospital Supervisor is not available, have the operator page Dr. Blumenthal to your extension.

Students who sustain an exposure during a rotation at a non-MUSC clinical site are to follow the protocol of that institution and can be seen at MUSC Student Health for any needed follow up (see Non-MUSC Off-Campus Clinical Sites below). Students who are in Charleston on an off-campus clinical rotation can call MUSC Student Health for consultation.

Links to the MUSC Blood Borne Pathogen Exposure protocol and forms can be found here: [https://education.musc.edu/students/student-health/blood-borne-pathogen-exposures](https://education.musc.edu/students/student-health/blood-borne-pathogen-exposures)
Student Clinical Competency

During the third, fourth, and fifth semesters of the Cardiovascular Perfusion program, the Clinical Coordinators at all of the clinical sites will complete evaluations at both the mid-term and end of each rotation to document the student's clinical competency. Clinical competencies are an opportunity for the student and faculty to review the student's progress, the program's ability to meet the student's needs and to formulate an action plan to accomplish the goal of producing competent perfusion professionals.

FACULTY ADVISOR

Each student is assigned a faculty advisor. It is the responsibility of the students to schedule a meeting with their advisor at least once each semester. Cardiovascular Perfusion students may consult their faculty advisor with challenges that cannot be resolved on a teacher-student basis. It is the responsibility of the student to contact their faculty advisor whenever they are failing a course in order to develop a plan for successful completion of the semester.

DEPARTMENT POLICIES

Grievance Policy

Any complaint of a student concerning academic performance may proceed in two ways:
1. A student having a complaint based upon his/her performance in a specific department or course shall attempt to resolve such complaint himself/herself with the academic department involved.
2. If the matter is not resolved to the satisfaction of the student and the student continues to feel that a wrong has occurred, the student may petition the Department Chair in writing.

A student complaint arising from an action of the CVP Academic Progress Committee (Cardiovascular Perfusion Faculty) should be addressed to the Dean in writing. A complaint must be received by the Dean within seven (7) calendar days following receipt of notice by the student of the action of the CVP Academic Progress Committee or such complaint shall be waived. The Dean will refer to an ad hoc Academic Review Committee for their consideration and recommendation.

1. The Chairman of the ad hoc Academic Review Committee shall provide the student with written notice of the hearing not less than seven (7) calendar days prior to the hearing.
2. The student must present all relevant evidence in his/her behalf at the hearing and may be accompanied by a faculty advisor of choice.
3. The Dean, after a review of the record and the recommendation of the committee, shall render a decision and advise the student in writing.

Appeal Process

Refer to the university honor code in the Bulletin of the Medical University of South Carolina https://education.musc.edu/students/enrollment/bulletin/honor-code
Borrowing of Faculty or Department Resources

The program and faculty have books, recordings, and other resources that are available to students. **Books, journals, periodicals, etc, may NOT be removed from the Division space without prior consent from the faculty. Students are expected to promptly replace all books, journals and periodicals after use.**

Communication via Social Media

The CVP program recognizes the role that social media plays in electronic communication and networking. However, inappropriate use of social media such as Facebook or Twitter can cause serious negative ramifications to patient confidentiality, student professionalism, and overall public impression of the Program, the College, and the University.

Inappropriate use of social media includes but is not limited to:

- Discussion or comments of clinical experience regardless of the use of patient or clinical site identifiers
- Slander of fellow students or faculty
- Expressing opinions that can perceived as the opinions of MUSC or the CVP program

Please be aware that protected confidential student and/or patient information may not be shared or posted. All comments, photos, or other information shared via this social media platform should remain appropriate and professional and should in no way infringe upon regulations as stated in FERPA, the Family Act. To read more about FERPA, please visit this site: [http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html](http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html).

EXPENSES

Academic Charges

University and College tuition and fees for in-state and out-of-state students can be obtained from the student financial aid office. Additional fees that are specific for the Cardiovascular Perfusion program include:

- **Program Fee** $750.00 per semester

*Other applicable fees for specific purposes (i.e. returned check, financial reinstatement, etc) are listed in the University Handbook.*

Books and Course Syllabi

Book expenses vary from term to term, with the greatest expense incurred the first semester. Books may cost $800.00 or more initially. The second term may cost up $300.00 for books, and most likely less than $100.00 for each remaining term.

Medatrax

Medatrax is a web-based software program used for clinical case record tracking and evaluation. It will be purchased by the student directly from Medatrax at the start of the summer semester. MUSC
perfusion faculty will monitor student performance at all the clinical sites on a daily basis to insure that case evaluations are up to date, and that adequate clinical experiences are occurring at every clinical site.

**Professional Liability Insurance**

While a student in the Cardiovascular Perfusion program, the College covers liability insurance costs. An additional, personal practice policy may be required for specific rotations. The student may also be responsible for any ancillary fees from clinical affiliates. The fees for each site are variable, and may include: credentialing, ID badge, and parking fees. The Clinical Education Team at MUSC shares these fees with students during the clinical site placement selection process.

**Immunizations and Emergency Care**

All students entering MUSC must provide proof of immunizations and are required to have hospitalization insurance in the event of illness or injury. Students not meeting these requirements will not be allowed to attend classes. Student Health Services staff will contact all students accepted into the program to coordinate and confirm compliance prior to beginning of classes. Emergency care for students is addressed in the Medical University Student Handbook. Students that are injured during external clinical rotations

**Drug Testing**

All students shall undergo random drug testing before starting clinical rotations.

**Professional Dues**

Students are required to join the (2) national perfusion associations; the American Society of Extracorporeal Technology (AmSECT) and the American Academy of Cardiovascular Perfusion (AACP). For membership in AmSECT the annual student membership fee is $15.00. The fee for membership in AACP is $25.00/year.

**STUDENT RESEARCH DAY**

Student Research Day (SRD) is an all-day event, held annually in the Fall semester. It is designed to encourage participation in scientific presentations that are similar in format to major national meetings. Student Research Day is an excellent learning opportunity for our students in a supportive environment.

The role of SRD is multifaceted: it helps to enhance the student's presentation skills; it provides experience for students in preparation for regional and national meetings; it showcases the excellence of the research performed at MUSC; and it assists in our ongoing recruitment efforts for both students and faculty.

The Cardiovascular Perfusion program is well known for its success in integrating research competencies into its perfusion education curriculum and participation in SRD is highly encouraged.
2019-2020 PROFESSIONAL AND REGIONAL MEETINGS

58th AmSECT International Conference.
St. Louis, MO (March 5-8, 2020)

40th Annual Seminar of The American Academy of Cardiovascular Perfusion.
Reno, NV (February 5-8, 2020)

Students are encouraged to submit papers and posters for presentation and to attend these perfusion meetings. All students are required to attend at least one national perfusion conference during their first year.

OUTSTANDING STUDENT AWARD

Each year one student from the senior Cardiovascular Perfusion class is chosen as the recipient of the Outstanding Student Award. The selection is made by vote of the Cardiovascular Perfusion faculty and is based upon the following criteria: maturity, team orientation, patient and professional attitude, attitude toward research, and dependability.

JAMES P. DEARING LECTURE

Part of the culture and tradition of the Cardiovascular Perfusion program is the James P. Dearing Memorial Lecture given the month of graduation. This lecture is usually given by a visiting perfusionist/professor. It is a requirement that all students attend this lecture.

CERTIFICATION EXAMINATION

The American Board of Cardiovascular Perfusion was established in 1975 for the purpose of certifying individuals engaged in the practice of clinical perfusion (CCP). The examination process is divided into two criterion-referenced written examinations: Perfusion Basic Science and Perfusion Clinical Applications.

Admission requirements to the Perfusion Basic Science examination are:
1. Graduation from a program accredited by the Commission on Accreditation of Allied Health Education Programs;
2. Performance of seventy-five clinical cases while in training;

Admission requirements to the Perfusion Clinical Applications examination are:
1. All requirements listed for the perfusion Basic Science exam;
2. Perform 40 clinical cases after graduation;
Both Applications for Examination for the American Board of Cardiovascular Perfusion (ABCP) may be requested by calling or writing:
The American Board of Cardiovascular Perfusion
2903 Arlington Loop
Hattiesburg, MS 39401
(601) 268-2221

AMERICAN BOARD OF CARDIOVASCULAR PERFUSION
CODE OF ETHICS

The American Board of Cardiovascular Perfusion believes that the Certified Clinical Perfusionist (CCP) shall be dedicated to providing competent medical service with compassion and respect for human life. In the spirit of promoting ethical professional development, the following Code of Ethics has been formulated in the interest of both safety for the patient during cardiovascular perfusion and the protection of the public.

I The Certified Clinical Perfusionist who willfully misstates fact during the application, examination, or recertification processes is guilty of unethical conduct. Likewise the willful misstatement of fact regarding the title or membership in a professional community is considered unethical conduct.

II The Certified Clinical Perfusionist who consciously fails to promote both the safety and protection of the public is guilty of unethical conduct.

III The Certified Clinical Perfusionist who willfully disregards the patient for monetary gain is guilty of unethical conduct. Examples of such conduct are unjustified reimbursement for services performed or prejudicial compensation.

IV The Certified Clinical Perfusionist who shows willful disregard for sound patient care by acts of omission is guilty of unethical conduct.

V The ethical Certified Clinical Perfusionist shall subscribe to all other applicable ethical standards of the medical community.

VI The Certified Clinical Perfusionist accepts the responsibility for subscribing to the preceding Code of Ethics and for reporting unethical professional conduct.
Student Handbook Acknowledgement Form
Fall, 2019

Division of Cardiovascular Perfusion
College of Health Professions

I have received, read and understand the contents of the 2019-20 Medical University of South Carolina Cardiovascular Perfusion Program Student Handbook.

Name (Printed)

Signature

Date: ________________________________