



AUGUSTA UNIVERSITY

# MEDICAL COLLEGE OF GEORGIA

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Department of Physiology

## Master of Science in Medical Physiology

## Student Handbook

2022

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# MASTER OF SCIENCE IN MEDICAL PHYSIOLOGY

## STUDENT HANDBOOK

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## **A. INTRODUCTION and MISSION STATEMENT**

The Master of Science in Medical Physiology degree is directed toward individuals who wish to improve their academic credentials before applying to medical school or other professional schools in the biomedical arena. This program provides an avenue for students who have had a limited opportunity to receive medical science education as undergraduates or would benefit from an additional year of immersion in medical school-level academic coursework.

This is the only program of its type in the state of Georgia and contributes to Augusta University's institutional mission. The establishment of this program serves to enrich and diversify the applicant pool to the Medical College of Georgia, the states only public medical school, and support an increased demand for primary care physicians in Georgia. For students who do not enter medical school the program provides the knowledge required to excel in biomedical science professions and supports Augusta University's mission as a comprehensive research institution. The career paths open to students who complete this degree program are vital to the health of Georgia's communities.

The program will total 30 credit hours and is designed to be completed in one academic year (two semesters). Coursework consists of a series of core classes in physiology, pathophysiology, anatomy, and histology followed by electives consisting of more advanced didactic coursework in physiology or a laboratory research elective. Students will acquire knowledge in medical physiology, at a level equivalent to, and beyond, that obtained in the current medical school curriculum. The program will provide students with a unique curriculum designed to demonstrate that a student can perform at a high level in the physiology components of the pre-clinical curriculum at MCG. This will strengthen their application to medical or professional school.

## B. GENERAL INFORMATION

### i. Department of Physiology Location

1410 Laney Walker Blvd, Interdisciplinary Research Building (CA), 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> Floor

1456 Laney Walker Blvd, Carl T. Sanders R & E Building (CB), 2<sup>nd</sup> Floor

### ii. Department of Physiology Phone Numbers

Department Chair:	David Mattson, PhD	706-721-7742
Program Director:	Ruchi Patel, PhD	706-667-4449
Department Manager:	Cathy Davidson	706-721-7739
Administrative Support:	Melanie Gee	706-721-7741
	Shane Harper	706-721-0784
	Angela Smith	706-721-7735

### iii. Important Campus Phone Numbers

Academic Admissions	706-721-2725
Cashier's Office	706-721-2926
Financial Aid Office	706-721-4901
Graduate Studies Office	706-721-3278
Housing Office	706-721-3471
Registrar's Office	706-721-2201
Student Affairs	706-721-3356
Student Health	706-721-3448
Public Safety	706-721-2911
Housekeeping	706-721-2040
Chemical Safety	706-721-2591
Radiation Safety	706-721-9826
Information Technology	706-721-4000
Laboratory for Animal Services	706-721-3421

### iv. Augusta University (AU) on the Web

AU Home page: <http://www.augusta.edu>

Physiology: <http://www.augusta.edu/mcg/phy/index.php>

The Graduate School (TGS): <http://www.augusta.edu/gradstudies/index.php>

## C. ADMISSION REQUIREMENTS AND PROCEDURES

### i. Admission Criteria

Admission to the program is competitive and students admitted in regular status are likely to have exceeded the criteria listed below.

1. Minimum of a bachelor's degree or equivalent from an accredited college or university. To be used to satisfy degree requirement, evaluation of foreign educational transcripts must show degree(s) earned that are the U.S. equivalency of degree(s) required by the program.

2. Applicants must have successfully completed the prerequisite coursework described below:

**Biology** - One academic year of General Biology or Zoology with lab (2 semesters).

If a student places out of general biology using AP credit and chooses to use the AP credit and not take a general biology course in college, they must substitute one academic year of advanced Biology courses. Students must complete the laboratory requirement in college.

**Chemistry** - Two academic years of Chemistry during college, with at least 2 semesters of lab. Of the two years, one semester must be Organic Chemistry and one semester must be Biochemistry.

If a student places out of general chemistry using AP credit and chooses to use the AP credit and not take a general chemistry course in college, they must substitute advanced chemistry courses. Students must complete the laboratory requirement in college.

**Physics** - One academic year of Physics with 2 semesters of lab.

AP credit may be used to place out of this requirement.

**English** - One academic year of English.

English, English-based Composition, Writing, Literature, or Communication are acceptable; Humanities courses may be used to meet one semester of this requirement.

AP credit may be used to place out of this requirement.

**Statistics** - One semester of Probability, Statistics, Biostatistics, or equivalent.

Statistics, Probability or Biostatistics courses that have a STAT or MATH course number will automatically meet this requirement. Other courses that have a different prefix must be approved as equivalent by the undergraduate institution where the course was taken through the Pre-Med or Pre-Health advisor. If such an advisor is not available, the approval may be granted by any Math or Science chair at the institution. AP credit may be used to place out of this requirement.

**Notes Regarding Prerequisites** - One academic year is equal to two semesters, three quarters, or one semester and two quarters.

\* All required courses should be taken on a graduating grading scale (e.g. A,B,C,D,F) when possible. A pass/fail system should not be used.

\* Where permitted above, Advanced Placement (AP) credits may be used if they are accepted by the college/university that the applicant attended, and the credits appear on the official transcript.

\* Online credit acceptable for non-science coursework (English & Statistics) on the basis that the coursework was completed at a regionally accredited institution, and the coursework appears on the official transcript.

\* Students must have completed, or be enrolled in, all prerequisite courses by January of the planned matriculation year. Special permission may be granted on a case-by-case basis by the program to complete the courses in a spring or summer semester, ending no later than July of the planned matriculation year.

3. Minimum overall GPA of 2.8 on a 4.0 scale at the Baccalaureate level calculated on all undergraduate work attempted in which letter grades were awarded.
4. An official MCAT or GRE score is required for admission. A minimum MCAT score of 494 (24<sup>th</sup> percentile) is required. A minimum GRE score of 290 total (combined Verbal and Quantitative scores) is required. There is not a minimum score for the analytical (writing) section; however, competitive applicants will have a minimum score of 3.0.
5. Official transcripts are required from all universities and colleges ever attended. Only in the case of transcripts from international colleges/universities will an official course-by-course transcript evaluation be accepted in lieu of an official transcript.
6. Recommendations (which include a reference form and letter of recommendation) from three individuals are required.
7. An official, professional course-by-course evaluation based on official transcripts and documents is required for all foreign educational transcripts and documents from one of the following three credentials evaluation services:
  - Educational Credential Evaluators, Inc. (ECE)
  - Josef Silny & Associates, Inc.
  - World Education Services (WES)Course-by-course transcript evaluations may also be accepted from a current National Association of Credential Evaluation Services (NACES), member on a case-by-case basis.

Official transcript evaluations based on unofficial transcripts, documents or copies will not fulfill this requirement.

8. English proficiency exam scores are required for applicants whose first language is not English. Augusta University will accept official Test of English as a Foreign Language (TOEFL) or International English Language Test (IELTS) exam scores. Official exam scores must be taken within 2 years of the date of application.

**ii. Admission Acceptance Procedures**

After all required information has been received, the Program Admissions Committee, consisting of the Department Chair, Program Director and at least two other members of the faculty of Physiology, will make an admission decision. Admission decisions are subject to final approval by the Dean of The Graduate School. The official final notification regarding admission will come from the Office of Admissions. Any appeals of this decision should be addressed to the Dean of The Graduate School.

Persons admitted to the program who meet all admission requirements will normally be granted regular graduate student status. Students deficient in one area of the admission prerequisites, but who otherwise show promise, may be awarded provisional status. Provisional graduate students must earn at least a 3.0 grade point average in their first semester to be considered for regular graduate status.

Students are responsible for petitioning the faculty for regular student status by submitting a letter requesting this change to the graduate concentration Co-Director. The faculty will consider the student's academic performance, professional demeanor, and ethical behavior in granting regular student status.

**iii. Fees and Financial Assistance**

Fees are determined by the University System of Georgia and are posted on the Augusta University website each year. Students are expected to arrange their own means of paying tuition and other fees. All Augusta University students are required to have comprehensive health protection which is covered by the university student health fees. Persons requiring financial assistance should first contact the Office of Financial Aid to inquire about funding alternatives, including the Work Study Program and low interest loans. Part-time employment is found by some students, but care must be taken that this does not interfere with academic obligations.



## **D. ACADEMIC POLICIES**

### **i. Grade Policy**

A minimum 2.8 cumulative GPA\* is required for the program. A minimum grade of a C or Satisfactory must be earned for all courses attempted toward the degree.

\* Cumulative Grade Point Average (GPA) includes all courses taken (every time taken) while in the degree program with no D/F grade forgiveness.

### **ii. Professional Standards**

Students are expected to conduct themselves in a professional manner while enrolled in the program. Attention is called especially to the following:

- Students are to attend all class sessions in each course in which they are enrolled. Attendance will be monitored beginning with the first scheduled class period.
- On-time behavior is an important professional attribute. Consequently, students are expected to be in the classroom, prepared for class and ready to work at the beginning of each class period.
- When, due to uncontrollable circumstances, a student will be late or absent from class it is the responsibility of the student to notify the instructor and program director or prior to the event by email.
- Students are expected to perform in a professional manner while in the classroom. Inattention, apparent boredom or apathy, and behaviors inconsistent with the operation of the class will be considered to be unprofessional within the context of this program (e.g., use of laptop or other electronic devices for purposes other than those directly related to the course topic).
- Assignments are to be submitted promptly when due. All work is to be completed in accordance with professional standards and in keeping with principles of academic honesty.
- Interactions with others (including faculty, staff, and students) are expected to observe the ethical and professional standards.
- Students are to behave professionally in all laboratory spaces. This includes following all safety protocols including wearing of PPE, proper labeling and waste disposal; and keeping a proper laboratory notebook that includes all data collected.

### **iii. Academic Probation**

Any student who earns below a C for any midterm exam or whose cumulative GPA for the program falls below a 2.8 will be placed on academic probation. This is not noted on transcripts. A student on academic probation will be required to meet with the program director and faculty advisor to discuss the student's past performance, future expectations

and devise a remediation plan. While on probation, the student must earn a minimum of 3.0 each grading period until the cumulative GPA is raised to at least 2.8. Students who fail to earn at least 3.0 each period while on probation shall be recommended for academic dismissal from the program. The above are minimum standard for AU's TGS graduate programs.

Where circumstances warrant, and upon recommendation of the academic program concerned and approval of the TGS Dean, a student being considered for dismissal under the provisions of this policy may be permitted to continue as a student on probation. In such cases, the student must earn a GPA of at least 3.0 each grading period while on probation until a 2.8 cumulative GPA is achieved. Failure to do so will result in dismissal from the degree program. The second dismissal will be final. Students cannot graduate with a D or F grade in a course and must re-take the course to earn at least a C grade or higher. Students cannot graduate with a U grade in any non-repeatable S/U course and likewise must re-take the course to earn an S grade. Students earning a D, F, or U in a course required for the degree can be recommended for dismissal.

**iv. Dismissal**

Students who have earned a grade point average of less than a 2.8 for any grading period may be dismissed from the program. Dismissal may also occur when students display unethical and unprofessional behavior.

**iv. Academic Appeals**

Any student who has been dismissed from the program and would like to appeal that dismissal should follow the Student Academic Appeals Policy at <https://www.augusta.edu/compliance/policyinfo/policy/studentacademic-appeals-policy.pdf>. The Augusta University Student Academic Appeals Policy is specifically designed to address administrative decisions made with respect to an individual student which bears upon his/her career.

**v. Auditing Courses**

Students may audit graduate courses, but must secure permission of the instructor/course director, program director, and Dean of The Graduate School. No academic credit is awarded. Students auditing courses must pay the program's tuition and fees. No changes from audit to credit or credit to audit will be permitted after the last day of the schedule adjustment (add/drop) period. Courses taken as audit do not count toward financial aid eligibility. A student enrolled as an auditor is expected to attend class regularly and to complete assignments as assigned by the instructor. An auditor who does not attend regularly may be

withdrawn from the course. In order to audit a class, students must first apply at <https://www.augusta.edu/admissions/apply.php> (Click on non-degree seeking, Audit, Apply). Once this is complete, a Course Approval Form must also be completed. This form may be found at <https://www.augusta.edu/gradschool/student-resouces/>

**vi. Withdrawals**

All course work and other requirements must be completed within five (5) consecutive years from the date of enrollment. Leaves of absence (withdrawals) do not extend the five-year limit. Visit <https://www.augusta.edu/registrar/withdrawal> and /or <https://www.augusta.edu/student-life/medical.php> for additional information and form(s).

**Withdrawal with option to return**

Students who plan to take a semester or more off from what is required by their official approved program curriculum should request a withdrawal with the option to return from The Graduate School Dean, through their program director, using the Withdrawal Form <https://www.augusta.edu/registrar/withdrawal>. Withdrawal requests may be for absences no more than three consecutive semesters in length. The semester in which the student withdraws is considered semester one. Students withdrawn (with the option to return) less than three consecutive semesters will be required to be reactivated. Such reactivation requests must be specifically approved by The Graduate School Dean using the Reactivation Form <https://www.augusta.edu/registrar/withdrawal>. A withdrawal does not modify a student's obligation to complete the degree within the maximum time limit allowed for that degree. Students must notify their program director and The Graduate School of their intent to return at least three weeks prior to the beginning of the semester (grading period) in which they plan to return. Students who have not enrolled in Augusta University for three consecutive semesters must apply for readmission through the Office of Academic Admissions using the online application process following published procedures and deadlines. Acceptance back into the program is not automatic.

**Inactivation after Non-Attendance**

A student who does not enroll for three consecutive terms will be classified as inactive by the Registrar. Re-enrollment after withdrawal is not automatic, and the individual will be required to re-apply for admission and be evaluated through the standard admissions process.

**Medical, Hardship and Military Withdrawal**

Students may request a medical withdrawal when the student experiences a medical emergency or serious health condition which prevents them from completing their course work for the current semester. Students may request a hardship withdrawal when an unexpected occurrence has been experienced in their life that requires that he/she withdraw from all classes for the semester. Students who are active-duty military and receive

reassignment orders that would prevent completion of the term may request a military withdrawal.

**Dismissal and Withdrawal from The Graduate School and University with No Option to Return**

Students who have been dismissed from a program or from The Graduate School or have chosen to withdraw with no option to return, will not be eligible to return to the program or The Graduate School, whichever applies. A student withdrawing from their program and all courses in which they are currently enrolled must complete the Withdrawal Form <https://www.augusta.edu/registrar/withdrawal> to include all required signatures.

**vii. Graduation**

The Graduate School requires a cumulative GPA of at least 2.8 to graduate. Students cannot graduate with a D or F grade in any course and must re-take the course to earn at least a C grade or higher. Students cannot graduate with a U grade in a course and likewise must re-take the course to earn an S grade.

Each candidate for a graduate degree must apply for graduation. Graduation information and the Application for Graduation Form is available at:

<https://www.augusta.edu/graduation/graduationinformation.php>.

Please read the application carefully and provide ALL requested information.

Spring Applicants: submit application Fall Midterm BEFORE completion of requirements  
Summer & Fall Applicants: submit application Spring Midterm BEFORE completion of requirements  
Students must have completed all degree requirements and be certified for graduation in order to participate in graduation and hooding ceremonies. Satisfactory fulfillment of any additional requirements and/or milestones required by the student's program or the institution must also be completed to be eligible for graduation

## E. CURRICULUM

### i. Program Overview

Physiology is the fundamental basis of medicine. Physiology emphasizes understanding the mechanisms of life by integrating molecular, cellular, tissue, organ, and whole-body function. While the physiology courses will predominantly focus on the mechanisms of healthy body functions and normal responses to the environment, the pathophysiology courses will provide an opportunity to learn more about the mechanisms of disease. In the fall semester, the anatomy and histology courses complement the physiology course and provide an understanding of the structure of cells, tissues and organ systems so that the function of these systems can be fully understood. In the spring semester, you will have the opportunity to elect to focus on advanced topics in physiology or engage in research. The content of all courses will integrate and provide a rigorous core curriculum in medical physiology mirroring the learning objectives of the first year of medical school.

### ii. Program Structure

The program consists of core courses and electives which will total 30 credit hours and be completed in one academic year.

Required coursework:

Fall Semester	Spring Semester
PSIO 6110-MEDICAL PHYSIOLOGY I (8 credit hours) - Principles of Medical Physiology - Medical Cardiopulmonary Physiology - Medical Renal Physiology PSIO 6710 - Pathophysiology I (2 credit hours) PSIO 6410 - Medical Anatomy (2 credit hours) PSIO 6510 - Medical Histology (2 credit hours) PSIO 6610 - Seminar (1 credit hour)	PSIO 6810-MEDICAL PHYSIOLOGY II (6 credit hours) - Medical GI Physiology - Medical Endocrinology - Neurophysiology PSIO 6720 - Pathophysiology II (2 credit hours) PSIO 6610 - Seminar (1 credit hour)  <b>** Elective (choose Didactic or Research track):</b> <b>Didactic Electives (6 total credit hours)</b> PSIO 7110 - Advanced Cell & Molecular Physiology (2) PSIO 7210 - Advanced Renal Physiology (2) PSIO 7310 - Advanced Cardiovascular Physiology (2) <b>Research Elective (6 credit hours)</b> PSIO 7410 - Research (6)

\*\* Electives are dependent upon availability. Students will be required to ask for permission (from the program director) prior to enrolling in the didactic or research elective tracks.

iii. **Program Schedule:**

Fall 2022 Schedule:

TIME	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-9:00am	PSIO 6110	PSIO 6110	PSIO 6510		PSIO 6110
9:00-10:00am	Med Physiology I	Med Physiology I	Med Histology	Seminar	Med Physiology I
10:00-11:00am				PSIO 6610	
11:00-12:00pm					Quiz Sessions
12:00-1:00pm					
1:00-2:00pm		PSIO 6410	PSIO 6110	PSIO 6710	
2:00-3:00pm		Med Anatomy	Med Physiology I	Pathophysiology I	
2:00-3:00pm					
2:00-3:00pm					
3:00-4:00pm					

Spring 2023 Schedule (Tentative):

TIME	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-9:00am	PSIO 6810	PSIO 6810	PSIO 6810		
9:00-10:00am	Med Physiology II	Med Physiology II	Med Physiology II	Seminar	
10:00-11:00am				PSIO 6610	
11:00-12:00pm					Quiz Sessions
12:00-1:00pm					
1:00-2:00pm				PSIO 6720	
2:00-3:00pm				Pathophysiology II	
2:00-3:00pm					
2:00-3:00pm					
3:00-4:00pm					

\*\* In addition to core didactic course work students will be enrolled in the Research Elective (PSIO 7410) which will require a minimum of 18 hours per week in the lab.

**iv. Program Outcomes:**

On completion of this program students will be able to:

1. Describe the principles of human physiology (general principles, cardiopulmonary, renal, endocrine, gastrointestinal, and neurophysiology) and demonstrate a level of knowledge in these topics equivalent to that of first year medical students.
2. Demonstrate a level of knowledge in anatomy and histology to adequately describe structure-function relationships of the human body.
3. Illustrate an advanced level of knowledge in cell & molecular physiology, cardiovascular physiology, and renal physiology.
4. Integrate current knowledge of physiologic systems to outcomes in clinical situations in which the physiological systems are dysregulated (pathophysiology).
5. Critically evaluate scientific literature, data, and case studies in physiology and pathophysiology.
6. Demonstrate effective written and oral communication.
7. Understand and adhere to the ethical principles of research.

## F. PROGRAM INSTRUCTORS



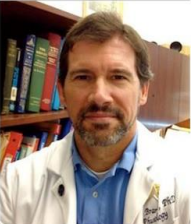
Justine Abais-Battad, PhD  
Instructor, Department of Physiology  
Research Interests: Role of immunity, gut microbiota, and sex in the dietary modulation of salt-sensitive hypertension  
Contact: [jabaisbattad@augusta.edu](mailto:jabaisbattad@augusta.edu)



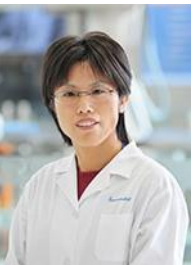
Zsolt Bagi, MD, PhD  
Professor, Department of Physiology  
Research Interests: Coronary microvascular disease in patients with diabetes mellitus and diastolic heart failure.  
Contact: [zbagi@augusta.edu](mailto:zbagi@augusta.edu)



Professor Wendy Bollag, PhD  
Professor, Department of Physiology  
Research Interests: Adrenal steroid synthesis and ACTH signaling.  
Contact: [wbollag@augusta.edu](mailto:wbollag@augusta.edu)



Michael Brands, PhD  
Regents' Professor, Department of Physiology  
Research Interests: Integrative cardio-renal physiology in diabetes and inflammation. Roles of insulin and renin-angiotensin-aldosterone system.  
Contact: [mbrands@augusta.edu](mailto:mbrands@augusta.edu)



Weiqin Chen, PhD  
Associate Professor, Department of Physiology  
Research Interests: Players that mediate adipose tissue development and how the dysfunction of adipose tissue causes metabolic diseases under obesity and lipodystrophy.  
Contact: [wechen@augusta.edu](mailto:wechen@augusta.edu)



John Henry Dasinger, PhD  
Senior Postdoctoral Fellow, Department of Physiology  
Research Interests: Role of the immune system in the amplification of hypertension and renal damage with a special emphasis on the development of preeclampsia.  
Contact: [jdasinger@augusta.edu](mailto:jdasinger@augusta.edu)





Jessica Faulkner, PhD

Assistant Professor, Department of Physiology

Research Interests: Mechanisms of high blood pressure, vascular damage and fetal growth restriction in obese and lean pregnancy.

Contact: [jefaulkner@augusta.edu](mailto:jefaulkner@augusta.edu)



Jessica Filosa, PhD

Professor, Department of Physiology

Research Interests: Signaling mechanisms governing bi-directional communication among the various cell types within the brain, neurovascular coupling.

Contact: [jfilosa@augusta.edu](mailto:jfilosa@augusta.edu)



Daria Ilatovskaya, PhD

Associate Professor, Department of Physiology

Research Interests: Water and electrolyte homeostasis, mitochondrial bioenergetics, regulation of ion channel function and their role in the development of cardiorenal pathologies, such as hypertension and polycystic kidney disease, and sex-related differences in these conditions.

Contact: [dilatovskaya@augusta.edu](mailto:dilatovskaya@augusta.edu)



John Johnson, PhD

Associate Professor, Department of Pharmacology and Toxicology

Research Interests: Role of Protein Kinase C isozymes in cardiac mitochondrial dysfunction and ischemia/reperfusion injury.

Contact: [jjohnson@augusta.edu](mailto:jjohnson@augusta.edu)



Mykola Mamenko, PhD

Assistant Professor, Department of Physiology

Research Interests: Establishing the contribution of intracellular calcium signaling in renal epithelial cells into water and electrolyte handling by the kidney and at revealing novel mechanisms associated with PKD and NDI.

Contact: [mmamenko@augusta.edu](mailto:mmamenko@augusta.edu)



David Mattson, PhD

Chair and Professor, Department of Physiology

Research interests: Studies in the Mattson laboratory examine the normal and pathophysiological regulation of renal function and arterial blood pressure.

Contact: [dmattson@augusta.edu](mailto:dmattson@augusta.edu)



Morganne Manuel, PhD  
Assistant Professor, Department of Cell Biology and Anatomy  
Medical Educator, Office of Academic Affairs, Medical College of Georgia  
Contact: [momanuel@augusta.edu](mailto:momanuel@augusta.edu)



Riyaz Mohamed, PhD  
Assistant Research Scientist, Department of Physiology  
Research Interests: Cellular and molecular mechanisms driving sex differences in renal health and function under normal physiological conditions and in disease states.  
Contact: [rmohamed@augusta.edu](mailto:rmohamed@augusta.edu)



Paul O'Connor, PhD  
Professor, Department of Physiology  
Research Interests: Role of red blood cell vascular congestion in acute kidney injury as well as the mechanisms underlying the protective effects of alkali therapy to slow chronic kidney disease.  
Contact: [paoconnor@augusta.edu](mailto:paoconnor@augusta.edu)



Philip O'Herron, PhD  
Research Assistant Professor, Department of Physiology  
Research Interests: Neurovascular coupling; the mechanisms and the functional role of the overshoot of blood supply in functional hyperemia.  
Contact: [poherron@augusta.edu](mailto:poherron@augusta.edu)



Ruchi Patel, PhD  
Assistant Professor, Department of Physiology  
Medical Educator, Office of Academic Affairs, Medical College of Georgia  
Contact: [rpatel8@augusta.edu](mailto:rpatel8@augusta.edu)



Mong Wang, PhD  
Associate Professor, Department of Physiology  
Research Interests: Eicosanoids in the regulation of renal function and blood pressure, role of renal tubular 20-HETE and EETs on sodium retention in obese rats, renal EET biosynthesis in pregnancy.  
Contact: [mwang@augusta.edu](mailto:mwang@augusta.edu)



Yisang Yoon, PhD  
Professor, Department of Physiology  
Research Interests: Molecular mechanisms of mitochondrial shape change and to understand physiological significance of mitochondrial dynamics.  
Contact: [yoon@augusta.edu](mailto:yoon@augusta.edu)



Aleksandra Zamaro, MD  
Postdoctoral Fellow, Department of Physiology  
Research Interests: The role of mitochondrial bioenergetics and inflammation in renal and cardiovascular pathology.  
Contact: [azamaro@augusta.edu](mailto:azamaro@augusta.edu)

## **G. FORMS and CHECKLISTS**

- i. Milestones Checklist
- ii. MS in Medical Physiology Track sheet
- iii. Research Elective Contract PSIO 7410



## **Milestones for MS Program**

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### Fall Semester

August 12 <sup>th</sup> 2022	Complete Enrollment and Registration
August 16 <sup>th</sup> 2022	Orientation
August 17 <sup>th</sup> 2022	First Day of Classes
September 12 <sup>th</sup> 2022	Physiology Faculty Research Day (Noon -5pm)
October 1 <sup>st</sup> 2022	Graduation Forms Due
December 7 <sup>th</sup>	Last Day of Classes
December 12 <sup>th</sup>	Final Exams
December 14 <sup>th</sup>	Research Elective Contract Due

### Spring Semester

January 4 <sup>th</sup> 2023	Complete Registration
January 9 <sup>th</sup> 2023	First Day of Classes
May 3 <sup>rd</sup> 2023	Last Day of Classes
May 8 <sup>th</sup> 2023	Final Exams
May 12 <sup>th</sup> 2023	Graduation & Commencement Ceremony



## Master of Science in Medical Physiology Program Track Sheet

---

Name: \_\_\_\_\_

Student ID #: \_\_\_\_\_

Application for Graduation \_\_\_\_\_

Graduate GPA 2.8 or higher \_\_\_\_\_

Fall 20__	<u>Grade</u>	<u>Credit hours</u>
PSIO 6110 – Medical Physiology I	_____	8
PSIO 6710 – Pathophysiology I	_____	2
PSIO 6410 – Medical Anatomy	_____	2
PSIO 6510 - Medical Histology	_____	2
PSIO 6610 – Seminar in Physiology	<u>S/U</u>	1
 Spring 20__		
PSIO 6810 – Medical Physiology II	_____	6
PSIO 6720 – Pathophysiology II	_____	2
PSIO 6610 – Seminar in Physiology	<u>S/U</u>	1
<input type="checkbox"/> Elective Didactic Track		
PSIO 7110 – Advanced Cellular and Molecular Physiology	_____	2
PSIO 7210 – Advanced Renal Physiology	_____	2
PSIO 7310 – Advanced Cardiovascular Physiology	_____	2
<input type="checkbox"/> Elective Research Track	<u>S/U</u>	6



## **Semester Research Contract PSIO 7410 (6 credits)**

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*Completed contract with all signatures must be submitted to the Program Director by 5pm December 14<sup>th</sup> 2022, for permission to enroll in PSIO 7410.*

Student Name and ID #: \_\_\_\_\_

Faculty Research Mentor: \_\_\_\_\_

### **Research Expectations**

Students and Faculty Research Mentors should meet and agree upon the expected times the student will be in the lab and the availability of the Faculty Research Mentor. A minimum of 18hrs per week is required for PSIO 7410 which is a 6-credit hour course.

### **Student Weekly Time Schedule:**

MONDAY:

TUESDAY:

WEDNESDAY:

THURSDAY:

FRIDAY:

SATURDAY/SUNDAY:

Expected hours in the lab per week: \_\_\_\_\_

### **Faculty Research Mentor Availability:**

Weekly meeting time with Graduate Student: \_\_\_\_\_

Common times when the Faculty Research Mentor is available:

MONDAY:

TUESDAY:

WEDNESDAY:

THURSDAY:

FRIDAY:

**Research Proposal**

Please provide a brief description of the specific research problem student will work on.

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The above expectations have been discussed and agreed upon by both the graduate student and the Faculty Research Mentor. All substantial changes to the plan must be discussed by both parties and submitted in writing to the Program Director.

Signatures:

Date

Student: \_\_\_\_\_

Faculty Research Mentor: \_\_\_\_\_

Program Director: \_\_\_\_\_

*Completed contract with all signatures must be submitted to the Program Director by 5pm December 14<sup>th</sup> 2022, for permission to enroll in PSIO 7410.*