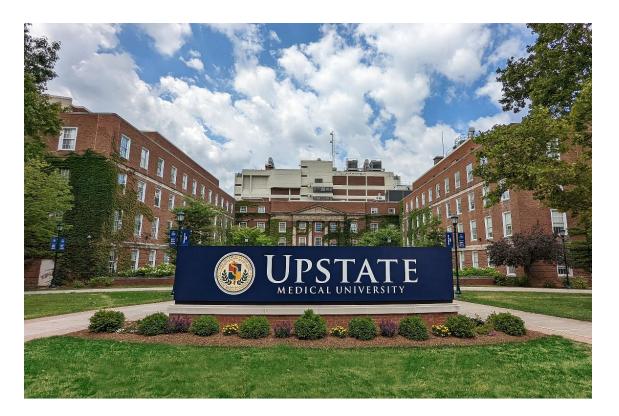
SUNY Upstate MD/PhD Program Guide



2024/5 SUNY Upstate MD/PhD Program Overview

Upstate Medical University's MD/PhD Program is designed for individuals interested in pursuing careers as physician- scientists in academic medicine. Students complete courses in the College of Medicine and engage in activities specific to the MD/PhD program during the first two years. They then advance into the laboratory where they spend three to four years completing additional coursework and dissertation research under the auspices of one of the funded faculty members in the College of Graduate Studies. The time in the laboratory culminates with the defense of the doctoral dissertation, after which students re-enter the College of Medicine to complete their training in the various clinical clerkships. The total time spent in the program averages eight years. Assistantships with an annual stipend are provided for all students for all years of enrollment in the MD/PhD program.

MD/PhD Team

Program Director: Dr. Amit Dhamoon, MD, PhD Program Coordinator: Andrea Cifonelli

*MD/PhD Admissions and Advisory Committee, 2023/4

Robert Ruiz	Director of Admissions
Amit Dhamoon	MD, PhD Program Director
Eric Olson	Neuroscience & Physiology
Matthew Elkins	Clinical Pathology
Peter Calvert	Ophthalmology and Visual
Tyler Paul	MD, PhD Candidate
Auyon Ghosh	Medicine
Xin Jie Chen	Biochemistry & Molecular Biology
Nevena Radonjic	Psychiatry & Behavioral Health
Frank Middleton	Biochemistry & Molecular Biology
Preethi Ganapathy	Ophthalmology and Visual
Jonathan Hess	Neuroscience & Physiology
Patricia Kane	Biochemistry & Molecular Biology

*subject to change for 2024/5

Mission

Our mission is to build a diverse community of physician scientist leaders by combining exceptional clinical training with outstanding research mentorship. We value humility, intellectual curiosity, and interpersonal connection and support the personal and professional development of our trainees to prepare them for careers as independent physician scientists.

Students in the MD, PhD Program at SUNY Upstate should strive to...

- Develop critical thinking skills, communication skills, and experimental skills to become a clinical scientist demonstrating excellence in both the practice of medicine and research.
- Develop grant writing skills to seek independent funding through grants and fellowships.
- Make a substantial contribution to their chosen field of research by presenting their work at national and international conferences and publishing peer-reviewed papers.
- Demonstrate ethical behavior, professionalism, and social responsibility on a consistent basis.

MD/PhD Program Policies

Student Expectations and Monitoring

The MD/PhD program is designed for students interested in combining a career in scientific research and medical practice. The program is based on an integrated curriculum that utilizes the rich educational and research related resources of the Colleges of Medicine and Graduate Studies. Students also engage in educational and mentoring activities specific to the MD/PhD program throughout their training. Although the focus of a student's training will vary over time as they transition to and from the College of Medicine and College of Graduate Studies, each student is part of the MD/PhD community overseen by the program director and program administrator.

Owing to the integrated nature of the training, MD/PhD students must adhere to the policies, standards and requirements of both the MD and PhD programs, as outlined in <u>Norton College of Medicine</u> and the <u>College of Graduate Studies</u>.

Further, because a student's performance and conduct in each of the degree-granting programs is considered relevant to the others, all students will be monitored by the MD/PhD program Academic Review Board, the MD program Academic Review Board and the relevant PhD program through Graduate Council.

For the purposes of this integrated student monitoring policy, the MD/PhD Academic Review Board (ARB) will be comprised of the MD/PhD program director, the Dean of the College of Graduate Studies, the Dean of Student Affairs and the Associate Dean for Undergraduate Medical Education.

All three programs will perform regular reviews of each student. The MD/PhD ARB will provide integrated oversight of student performance and conduct. In this process, the MD/PhD ARB will seek advice and input from the applicable educational program in which a student is currently receiving their training (i.e., either medicine or graduate), as well as the alternate educational program, where appropriate.

In keeping with standard university practices and policies the MD/PhD ARB will also manage the process of reviewing and addressing any concerns in student academic performance or conduct in the joint program. In the event concerns arise, all programs will be kept informed through their respective program representatives that serve on the MD/PhD ARB.

Any student who is placed on any form of probationary or disciplinary status in one of the degree granting programs can also be placed on a similar status in the other degree programs. The MD/PhD program also reserves the right to take action based upon a student's progress in the individual programs.

Dismissal from one program may still allow a student to remain in one of the other programs. Students have the right to appeal programmatic decisions as outlined in by the <u>Norton Colleges of Medicine</u> and the <u>College of Graduate Studies</u>.

Student Advisement

- In addition to the advisory mechanisms provided by the Colleges of Medicine and Graduate Studies, students must meet with the program director, Dr. Dhamoon, once per semester. Student progress and/or student concerns will be addressed.
- Student progress is also tracked by check-ins and meetings with the program coordinator, Andrea Cifonelli. These vary throughout the year and are dependent on your status in the MD/PhD program.
- Dr. Dhamoon and Andrea are also available for consultation at any time, as needed.

Summer Research

All students in the program are required to spend a minimum 7-week summer laboratory research rotation prior to the start of MSI and MSII classes.

Entry into Dissertation Laboratory

Students select mentors and research projects before the end of their second year in medical school. They begin their lab work in accordance with the start time of Phase 2 training of their medical school cohort after sitting for STEP 1 of the US Medical Licensure Exam. Continuation of the thesis work is predicated on passing the Step 1 Board Exam. Prior to starting work in the College of Graduate Studies on their dissertation work, the USMLE Step 1 should be completed and passed.

Time limitation for Completion of the Qualifying Exam

The PhD qualifying exam must be successfully completed no later than one year following entry into the thesis laboratory. The College of Graduate Studies Dean can be appealed for an extension.

Following successful completion of the PhD qualifying exam, a thesis advisory committee should be established and meet, at least, once per semester. Completed committee reports will be required for registration in the college of graduate studies. The MD/PhD program director OR a member of the MD/PhD Admissions Committee will serve on each student's qualifying and thesis defense committee. Students should contact the most appropriate person based on their area of expertise.

Time limitation for Completion of the PhD

The purpose of this limitation is to avoid undue delay in the completion of the MD/PhD degree requirements and the timely return of the student to the medical school clerkships. This benefits the student, the program and the University as a whole.

No more than 6 years may elapse between matriculation into the MD/PhD program and successful defense of the PhD dissertation. The student and the advisor must jointly petition the Dean of College of Graduate Studies and the MD/PhD Program director for an extension beyond this time limit. The student and the advisor must jointly petition the MD/PhD director and the Dean of COGS for an extension beyond this time limit. If granted, the student must complete the defense of the dissertation by the end of the 7th year or return to the medical school clerkships. During the extended year, the stipend will continue to be supported by the sponsoring lab or department. Waiver of tuition will continue to be in effect. Failure to complete the PhD by the time limit will result in dismissal from the program.

Defense of Dissertation and Return to Medical School

Prior to entering the third year of medical school, students must complete the dissertation document and address revisions by the dissertation committee.

Program Specific Course Requirements

To remain in good standing in the MD/PhD Program, students are required to receive a 'Pass' or 'Satisfactory' grade in the MDPH 601, Research Design for Physician- Scientists, MDPH 602, MDPhD Grand Rounds and MDPH 603 MDPhD Patient Care and Clinical Skills (PhD years only).

Individual Pre-doctoral Fellowship (F30) Applications

Within six months of successful completion of the qualifying exam, students are required to submit (typically the grant written in partial fulfillment of the qualifying exam) and pursue an application(s) to the NIH for a Ruth L. Kirschstein National Research Service Award, if eligible. If a student is not eligible for an F30, the student must apply for an alternate grant in which they are eligible within the same time frame. An extension of this deadline may be granted for extenuating circumstances by petition to the MD/PhD Academic Review Board.

Publication Requirement for Graduation

Prior to graduation from the program each student must have at least one submitted first-author publication of experimental data from their thesis work in a peer-reviewed journal.

Academic Performance

Except as noted below, a student will be dismissed from the MD/PhD program for deficient academic performance as outlined in the Student Handbook for the Colleges of Medicine and Graduate Studies With specific regard to the MD/PhD program, a student will be dismissed from the program for receiving a deficient grade in two or more courses or in over 25% of the non-elective credits attempted in one academic year.

Voluntary Withdrawal from the MD/PhD Program

Upon withdrawal from the program, stipend support and tuition remission will immediately terminate. Students who make the decision to voluntarily resign from the MD/PhD program without completing the PhD degree requirements:

- Will be required to pay back the tuition waived during their time in the College of Medicine. Students may appeal waiver of this payback requirement for special circumstances (typically health-related), which have forced their withdrawal from the program. The student will not be expected to pay back the personal stipend received while in the program.
- Students resigning from the MD/PhD program, and accepted into the medical curriculum, will be placed into an available clinical track.

Involuntary Withdrawal from the MD/PhD Program

In accordance with the processes, procedures and policies set forth in the Student Handbook, MD/PhD students may be dismissed from the program for reasons that include, but are not limited to, violations of the Code of Student Conduct, University Policy and Academic Performance. Upon dismissal from the program, stipend support and tuition remission will be immediately terminated.

MD/PhD Program Student Advisement

MSI and MSII students must meet with the Program Director, Dr. Dhamoon, at least once per semester. Please use this time to discuss any issues you may have in the program, curriculum, personally, etc. Dr. Dhamoon is also available for consult at any additional time outside registration by appointment. Students are encouraged to discuss potential lab rotations and mentor choice with Dr. Dhamoon; final choice of lab rotation and thesis advisor will require approval.

Each student, beginning in the fall of their first PhD year, will establish a monthly shadowing with a clinical mentor. The MD/PhD program will assist students in connecting with clinical mentors. It is the student's responsibility to report for clinical shadowing monthly.

Qualifying Committee- MD/PhD students should follow departmental Qualifying Exam Committees guidelines to organize a committee.

Dissertation Defense Committee- The Program Director or a faculty serving on the MD/PhD Admissions and Advisory Committee will serve on each student's dissertation defense committee. Students should contact the most appropriate person based on the area of research.

Peer-mentorship- Students in their first year in the program will be matched with a peer mentor, an MD/PhD student in their later years of the program. They will exchange contact information and attend casual meetings together that are both scheduled and as needed. The remainder of the mentee/mentor relationship will be left to what is comfortable for both students.

Second Job Rule

MD/PhD and Graduate Students receiving a tuition waiver cannot be working another paid job. With approval of your thesis advisor and program director, you may do a limited amount of volunteer unpaid work (gaining teaching experience or developing clinical skills).

Student Communication

Personal Information: Keeping your information updated and on track with the MD/PhD Program Coordinator, Andrea Cifonelli (<u>cifonela@upstate.edu</u>) is critical. If you change your address, marital status, health insurance coverage, etc., please be sure to let Andrea know.

Labs and Program Selection: Both Dr. Dhamoon and Andrea should be aware of what labs you rotate through during the summer before the first year of medical school and the summer in between the first and second year. You, your lab mentor, and Dr. Dhamoon must sign off on the Rotation Enrollment Form prior to starting in the laboratory.

Several months prior to entering the PhD portion of the program, you should choose your dissertation advisor and degree-granting program. Please submit your selection to Andrea.

MSIII Clerkship Track: Before you leave the College of Graduate Studies and head into your MSIII Clerkships, you need to have an advisement meeting with Dr. Matthew Mason and Dr. Dhamoon to select a clerkship track. Then, you must notify Andrea of your preferred clerkship track at a date determined by the Phase 2 coordinators in COM (subject to change each year). MD/PhD students are not entered into the track lottery as the other College of Medicine students.

Travel

MD/PhD students presenting their dissertation work at national scientific meetings can apply for \$500.00 of support per meeting from the MD/PhD program. This funding is available to students in their PhD years. Funding will be limited to two awards during PhD training and will be awarded if alternative funding is unavailable to students during this time.

- Students will be required to complete a <u>Request Form for Travel Funding</u>.
- If the travel request is approved, students are required to keep receipts for transportation (plane, bus, taxi, etc), meals, hotel, and any other costs associated with the particular trip.
- Receipts must be turned into the MD/PhD Program Coordinator, Andrea Cifonelli, in a timely fashion once a student is back from the conference for the paperwork to be submitted for reimbursement.

Student Involvement in Recruitment

Interview Days: As you may remember during your interview season, we rely heavily on students to help us with the process. The MD/PhD Program Coordinator, Andrea Cifonelli, will send an email requesting your help with certain parts of the interview process depending on your year in the program.

You could be asked to join applicants virtually for student panels and/or connect individually. There are also several times during the year that students may receive a request to help at an Open House, student panel, or other recruitment event. Your volunteering helps improve our program and is appreciated.

Registration in the College of Graduate Studies

Students must be registered each semester to maintain an "active student" status. Student registration generally happens twice each year in June and November.

College of Graduate Studies, PhD Years

At a minimum, MD/PhD students are required to take the following courses in the COGS:

- Responsible Conduct of Scientific Research (Research Ethics) 2 credits (Fall of 1st year in COGS)
- Research Design for Physician-Scientists– 3 credits (Fall of 1st year in COGS)
- Any relevant program requirements (timing varies)

Transfer and Elective Credits

College of Medicine

MD/PhD students may take elective research credit in the College of Medicine. Students will receive a maximum of 12 credits for this research. Additional time in the laboratory beyond 12 weeks will not be granted elective credit that counts toward fulfilling the graduation requirement of 25 COM elective credits. To apply for this research credit, MD/PhD students will complete the Add/Drop form and the Unique Elective Form. The Add/Drop form will require the signature of a director of the MD/PhD program, and the chair of the department in which the research will be conducted, and the Associate Dean of Curriculum.

MD/PhD Students are eligible to apply for up to 9 credits from the Grand Rounds Course towards College of Medicine Elective credits. Credits earned for Grand Rounds course and Research Elective Credits cannot exceed 12 out of the required 25 College of Medicine Elective Credits.

College of Graduate Studies

There can be 24 credits transferred from the COM to the COGS. These credits are based on criteria set forth by the Graduate Programs Coordinator, the Dean of College of Graduate Studies, and the MD/PhD Program Director. The courses transferred are those that fulfill the COGS core curriculum and typically ones that correlate with the degree-granting program you choose.

Summer Lab Rotations & Choosing a Lab

Students must complete lab rotations:

Before their first year of medical school In-between years one and two of medical school

Before beginning the program, students will receive advisement from both students in prospective labs and from the Program Director to help you choose a lab to rotate in.

The lab mentor (Principal Investigator, PI) will evaluate you on each rotation.

Students should select a PhD lab by late February of the second year of medical school. Dr. Dhamoon will discuss the selection. Students will have a tracking meeting with the Program Coordinator, Andrea Cifonelli, to make updates about the decision. The chosen PI must agree to the following terms;

- They must fund the \$32,000 annual stipend at the start of your transfer into COGS
- If a student receives a fellowship/grant, the PhD mentor will supplement the stipend to meet the \$32,000 minimum.

Fellowship Guidelines

MD/PhD students are required to submit a grant proposal in order to obtain external funding. The Sponsored Programs Office is a great resource in doing so. Please refer to these references when considering applying for a grant or fellowship.

Sponsored Programs – Pre-Award Services Jennifer Rudes – Director, 4-5384 <u>rudesj@upstate.edu</u> • Alert sponsored programs as soon as you know where you are applying and what you are applying to, they will help you through this entire process

Sponsored Programs – Post Award Services

Deb Weber - Sponsored Programs Admin., 4-4666 weberd@upstate.edu

Once a project is accepted, establishes new accounts, renewals, and extensions

Works with PIs and Fellows regarding questions on budget adjustments and sponsor guidelines

Contacts sponsors as needed for clarification on guidelines and other requirements

Assists with questions on electronic completion of Termination Notice via xTrain at Fellowship ending

Term of Fellowship

As an MD/PhD student, be sure to request the maximum number of years of support the fellowship will allow or the number of years you need to complete your degree. You can apply for up to 6 years on an F30 and this would include your last two years of medical school. You may factor in a 3% increase for each year's tuition and fees.

Potential Award/Fellowships for MD, PhD Students

National Institutes of Health (NIH) Components of the National Institute of Health, Specialties for Awards National Institute on Aging (NIA/NIH) National Institute on Alcohol Abuse and Alcoholism (NIAAA/NIH) National Institute on Deafness and Other Communication Disorders (NIDCD/NIH) National Institute on Drug Abuse (NIDA/NIH) National Institute of Environmental Health Sciences (NIEHS/NIH) National Institute of Mental Health (NIMH/NIH) National Institute of Neurological Disorders and Stroke (NINDS/NIH) Office of Dietary Supplements (ODS/NIH) National Cancer Institute (NCI) National Center for Complementary and Alternative Medicine (NCCAM) National Eye Institute (NEI) National Heart, Lung, and Blood Institute (NHLBI) National Institute on Aging (NIA) National Institute on Alcohol Abuse and Alcoholism (NIAAA) National Institute of Allergy and Infectious Diseases (NIAID) National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) National Institute of Biomedical Imaging and Bioengineering (NIBIB) National Institute of Child Health and Human Development (NICHD) National Institute on Deafness and Other Communication Disorders (NIDCD) National Institute of Dental and Craniofacial Research (NIDCR)

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) National Institute on Drug Abuse (NIDA) National Institute of Environmental Health Sciences (NIEHS) National Institute of General Medical Sciences (NIGMS) National Institute of Mental Health (NIMH) National Institute of Neurological Disorders and Stroke (NINDS) National Institute of Nursing Research (NINR)

Alternate Award/Fellowships for MD, PhD Students

American Association of University Women American Cancer Society American Chemical Society, Division of Analytical Chemistry: Pfizer Graduate Travel Awards in Analytical Chemistry American Diabetes Association American Federation for Aging Research Scholarship American Heart Association Regional Affiliates Predoctoral Fellowship American Physiological Society American Society for Pharmacology and Experimental Therapeutics Howard Hughes Medical Institute Medical Fellows Program Josephine de Karman Predoctoral Fellowship NATO Predoctoral Fellowship With Partner Nations Paul and Daisy Soros Fellowship for New Americans

Additional Resources

Administration

Amit Dhamoon, MD, PhD- MDPhD Program Director <u>dhamoona@upstate.edu</u> Andrea Cifonelli- MD, PhD Program Coordinator <u>cifonela@upstate.edu</u> Jennifer Brennan- Graduate Studies Executive Coordinator <u>brennanj@upstate.edu</u> Cheryl Small- Assistant to the Dean of the College of Graduate Studies <u>smallc@upstate.edu</u> Shaunna Arnold- Coordinator of Career Development, Alumni and Special Events <u>arnoldsh@upstate.edu</u> John Gillies- Coordinator of Curriculum, Assessment, and Analytics <u>GilliesJ@upstate.edu</u> Mark Schmitt, PhD- Dean of the College of Graduate Studies <u>schmittm@upstate.edu</u> Steven Taffet, PhD- Assistant Dean of the College of Graduate Studies <u>Taffets@upstate.edu</u>, Lawrence Chin, MD, FAANS, FACS – Dean of the College of Medicine <u>chinl@upstate.edu</u> Lynn Cleary, MD- Vice President of Academic Affairs <u>clearyl@upstate.edu</u> Dave Amberg, PhD – Vice President of Research <u>ambergd@upstate.edu</u>

Student Affairs

Julie White, PhD -Dean of Student Affairs <u>whitejul@upstate.edu</u>, 4-4816 Robert Ruiz – Associate Dean of Student Affairs, <u>ruizr@upstate.edu</u> Ryan Green – Director of Campus Activities <u>greenry@upstate.edu</u> 4-5618 Jennifer Martin-Tse – Registrar <u>martintj@upstate.edu</u>, 4-4604

Student Health

Fourth floor, Jacobsen Hall, 4-5470 Medical Director: Jarrod Bagatell, MD Clinical Manager: Bridget McCarthy, FNP Clinical Manager: Linda Goff, FNP Clinical Manager: Jessica Di Peso, FNP

Wellness Coordinator: Suzanne Brisk, MS, CWP

Administrative Manager: L. Sophia Brooks, MHA

Student Administrative Assistant: Lori Brooks Phone: 315 464-5470 Email: <u>eshealth@upstate.edu</u>

Upstate Family Medicine Phone: 315 492-3400 (after hours, holidays and weekends)

Student Counseling

Student Counseling Center Psychiatry & Behavioral Sciences TU4 1st Floor 719 Harrison Street Phone- 464-3138

Initial Appointments

- Students who are seeking services will meet with a staff person in Student Counseling for an initial consultation. During this time, we will talk with you about your concerns and make recommendations for services that may be helpful. Recommendations may include ongoing services through SCS or referral to a community provider.
- If you would like to make an appointment for an initial consultation, please contact Student Counseling at 464-3138. We strongly recommend that you call in advance for an appointment, as we are not able to accommodate walk-in sessions. Please note that intake consultation times are pre reserved in staff calendars, but that scheduling is more flexible if you return for ongoing services.
- Messages left after business hours or over the weekends will be returned on the next business day. Most appointments occur within 5 to 7 school days of the initial call; however, at high-volume times of the year this time may be extended.
- Please Note: No outside party can make an appointment for a student. All appointments must be set up by the person seeking services. If you are concerned about a friend or fellow student, you may set up a consultation appointment to talk about your concerns.

Ongoing Services

• If counseling services are recommended after the initial consultation, all appointments for Services are scheduled between you and your counselor.

If You are in Crisis

In the case of a genuine emergency, students should call 911 (from cell) or Public Safety (464- 4000 from campus landline) or go directly to the nearest emergency room.

Students in crisis during business hours may contact the Center at: (315) 464-3138. Let the secretary know that your need is urgent when you call. We will return your call as soon as possible to determine if follow-up assistance or intervention may be indicated. Please be aware that messages left after business hours will not be received until the next business day.

Other options during times of crisis include:

CONTACT24-hour Crisis Hotline 315 251-0600 Trained counselors are available by phone 24/7 to provide free, anonymous crisis counseling, crisis intervention, and referral for community services.

St Joseph's Hospital- CPEP (Comprehensive Psychiatric Emergency Program) 315 448-6555 301 Prospect Ave., Syracuse, NY 13203

• This emergency program is available 24/7 to anyone with an emotional or psychiatric crisis. CPEP provides crisis intervention, assessment, and treatment, as well as referral for ongoing services. Students seeking services here will need to use personal health insurance to cover associated costs.

SUNY Upstate Medical University Emergency Room 315 464-5540 (switchboard) 750 East Adams Street, Syracuse, NY 13210-2375

• SUNY Upstate provides emergency assessment, psychiatric hospitalization, and outpatient mental health care. Individuals in crisis may present to the ER or call the switchboard to speak to ER personnel.

Vera House/Rape Crisis Center

315 468-3260

Vera House provides a 24-hour hotline, counseling, support, and advocacy/referral services for women, men and children who are victims of domestic violence or sexual assault.

The National Graduate Student Crisis Line is a free, confidential hotline to assist graduate students who are feeling overwhelmed by stress or other concerns. Call 1-800-472-3457 to reach a trained counselor 24 hours a day.

The Crisis Text Line provides free, anonymous crisis intervention via text, 24/7. https://www.crisistextline.org/

The Middle Earth Hotline provides trained peer counseling assistance for crisis and non- crisis support. Callers may remain anonymous. Call 518-442-5777 1:00 pm – midnight, Mondays through Thursdays, or 24/7 Fridays through Sundays.

Request for a Tutor

Graduate Studies Forms