

**University of Minnesota
Medical Scientist Training Program
(MD/PhD)**



**Policies and Practices
2012-2013**

Policies and Practices for Students in the Medical Scientist Training Program (MD/PhD) at the University of Minnesota 2012-2013

This handbook describes the organization of the University of Minnesota Medical Scientist Training Program (referred hereafter as “the Program”) and is intended to help students become familiar with the Program and conduct their studies in a productive fashion. The guide therefore represents the current policies governing the Program. These policies may evolve, and this guide may be amended on a yearly basis. Under the terms of the University of Minnesota Program Agreement governing the administration of the Program, the Program Director has the authority to interpret or change existing policies. The Program Director will be available for discussion and clarification regarding any aspect of the Program.

It is the policy of the University of Minnesota to support the equality of educational opportunities.

All MSTP students are responsible for the content of this handbook and complying with policies and practices.

Details concerning the general regulations and organization of the Medical School and the Graduate School are included in the respective University of Minnesota handbooks. The information summarized in these handbooks are an extension of policies in place for students in the Medical Scientist Training Program at the University of Minnesota.

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**University of Minnesota
Medical Scientist Training Program (MD/PhD)**

Mission Statement

The mission of the University of Minnesota Medical Scientist Training Program (MD/PhD) is to train a diverse group of intellectually gifted students to become physician-scientists and leaders in the global effort to preserve and restore human health.

**University of Minnesota
Medical Scientist Training Program (MD/PhD)
Physician Scientist Code of Ethics and Professionalism**

To be a responsible physician by:

- Becoming effective listeners, in order to gain the patient's perspective.
- Encouraging the exchange of knowledge with colleagues, patients, and the community.
- Gaining a deeper understanding of the cultural and socioeconomic context in which each patient is experiencing their illness, so that we can respond to their needs for care appropriately.
- Respecting the autonomy of the patient.
- Embracing the principle of nonmaleficence.
- Learning to advocate for the patient in a time of uncertain and non-uniform coverage of care.
- Respecting the privacy and confidentiality of every patient.
- Learning to work effectively with a team of health care workers.
- Upholding high standards of conduct, such that we will not tolerate inappropriate or discriminatory behavior towards anyone on the basis of race, gender, religion, sexual orientation, or differing cognitive or physical abilities, in ourselves or in others.

To be a responsible scientist by:

- Becoming intimately familiar with the previous and current literature in our area of study, so as to increase the efficiency and relevance of our own work.
- Developing a deeper understanding of the scientific process, to allow a critical analysis of research outside of our field of focus.
- Being honest in our representation of the data we collect, and of its meaning, while also giving credit to others who have contributed intellectually or physically to its discovery.
- Respecting the lives and being personally responsible for the humane care of animals that we use in our research, as well as looking for ways to reduce the numbers of animals used.
- Ensuring the just selection and treatment of human subjects, as well as a true informed consent.

To excel as physician scientists by:

- Contributing to the advancement of our chosen field of research.
- Developing the skills and experience for successful collaboration with both full-time clinicians and basic scientists.
- Becoming translators between the languages of basic science and clinical medicine, in order to bridge the gap between these two.
- Using the scientific method in our clinical problem solving, and modeling the practice of evidence-based medicine.
- Drawing from our clinical experiences to focus on those things that will have the most impact on improving human health.
- Becoming adept at effective time management, in order to best meet the many demands put on us.
- Gaining sophistication in ethical reasoning as it applies to all aspects of science.
- Embracing a continuing commitment to excellence in all aspects of our training.

updated 2003

Contact Information

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Medical Scientist Training Program Office**
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Minneapolis, MN 55455
Tel: (612) 625-3680
Fax: (612) 626-5994
<http://www.med.umn.edu/mdphd/>

Medical School Student Support Services
B604 Mayo (MMC 293)
Tel: (612) 624-9608
Fax: (612) 626-4200
<http://www.meded.umn.edu>

University of Minnesota Graduate School
420 Johnston Hall
Tel: (612) 625-3394
Fax: (612) 626-7431
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1. MSTP OFFICE

The MSTP office is located in B-680/681 Mayo Building, housing workspace for the Assistant Director and the Program Assistant. The Director's office is located in Room D610C Mayo Building. All official documents for inter- and intra-University communication should be routed through the MSTP office for appropriate handling. A study space for MSTP students is located in the Medical School Student Resources Room, B691 Mayo.

2. PROGRAM GOVERNANCE

2a. MSTP Executive Oversight Committee

The MSTP Executive Oversight Committee promotes integration of the MSTP with the Medical School by providing oversight of student monitoring and advising, and addressing programmatic issues within the MSTP and the Medical School critical to the mission of the MSTP. The Executive Oversight Committee meets quarterly and consists of the MSTP Director, MSTP Associate Director, MSTP Assistant Director, Senior Associate Dean for Undergraduate Medical Education, Medical School Lead Academic Advisor, and Medical School Faculty Advisor for MSTP students. Members of the Executive Oversight Committee are listed in the Appendix.

2b. MSTP Steering Committee

The MSTP Steering Committee evaluates applications, interviews applicants, provides guidance on MSTP policies, and provides a link between the MSTP and graduate programs. Members of the Steering Committee assist the Director, Associate Director, and Assistant Director in ensuring the maintenance of academic standards through annual reviews of the progress of all students.

The Steering Committee is composed of health sciences faculty members from both basic science and clinical departments, as well as two student representatives (one voting representative and one alternate) in the graduate phase of training. The Director appoints all Steering Committee members, including the student representatives, and chairs the Committee. In the Director's absence, Steering Committee meetings are chaired by the Associate Director. Members of the Steering Committee are listed in the Appendix. The term of service for Steering Committee members is four years. Individuals may serve for more than one term, but these terms must be non-consecutive.

2b. MSTP Student Advisory Committee

The MSTP Student Advisory Committee (SAC) serves as an advisory committee to the MSTP Director and is the major driver of change and innovation in the MSTP. The MSTP Director consults with the SAC on all programmatic matters in ongoing efforts to enhance program quality and trainee satisfaction. The SAC identifies programmatic challenges and issues, discusses potential ways that the program could address these challenges, implements a solution and evaluates the effectiveness of the solution.

The SAC consists of two members from each MSTP class (based on year of entry). Each SAC member serves for a two year term and identifies a MSTP student from his/her class to serve on the SAC upon conclusion of the two year term. A student chair is elected each year. MSTP SAC members are listed in the Appendix.

3. FINANCIAL ASSISTANCE

Students are financially supported throughout the duration of their formal training in the MSTP, contingent upon satisfactory progress in meeting the requirements and fulfilling the responsibilities of each training phase. Several mechanisms exist to monitor progress and to determine whether the student is meeting the requirements of the Program. These are defined in **Section 18**. A written contract between the student and the Program forms the basis for support being awarded on a yearly basis. Annual renewal of this contract is governed by the following guidelines:

3a. General Policies

Subject to the availability of funds, financial support of a student who is progressing satisfactorily in the Program is renewed each year. Financial support will be terminated if satisfactory progress is not made. The present stipend level for first- and second-year MSTP students is \$25,000/year. Students in their third and fourth years of medical school also receive a \$25,000/year stipend. For students on NIH-funded fellowships, the NIH-mandated stipend is supplemented from other funds to reach \$25,000/year. The stipend during the graduate phase is paid at a level equal to that of other graduate students in the chosen graduate program. If the stipend level set by a given graduate program is below the amount paid during Medical School, the Program does not supplement the difference.

Students are also awarded payment of tuition and all required fees while in Medical School. The Program does not pay for "optional fees" assessed by the University to support student groups. These optional fees are automatically posted to student accounts whenever tuition charges are present. Students may opt out of paying these fees, but action must be taken by each student early in the semester to avoid these charges. Assistance on how to opt out will be sent to each student by the Medical School, or students may stop by the MSTP office for assistance. In the graduate phase, MSTP students are governed by the rules of their chosen graduate program and may be required to pay fees during this time. Clarification about whether a specific graduate program provides assistance to cover required University fees should be obtained directly from individual graduate program offices.

While in Medical School, the Program will pay health insurance premiums for the Academic Health Center (AHC) Student Health Benefit Plan. Students will be given the opportunity annually while in Medical School to choose between the AHC plan and a second plan called the Graduate Assistant (GA) Health Plan. Those students who choose the GA plan will be asked to notify the MSTP office of their choice in August of each year. The AHC and GA health plans offer distinct and unique benefits. Thus, it is recommended that students put some effort into deciding which of the two plans best fits their situation. Students should be aware that the University requires enrollees in the GA Health plan to pay 5% of the premium cost. This 5% is each student's responsibility and cannot be paid by the Program. This charge is normally posted to the student's University account in Fall and Spring semesters.

During the graduate phase, health insurance is provided in accordance with the policies and practices of the graduate program.

Information on health insurance is available at the following websites:

- AHC Student Health Benefit Plan:
<http://www.shb.umn.edu/twincities/ahc-students/ahc-student-health-benefit-plan.htm>
- Graduate Assistant Health Plan:
<http://www.shb.umn.edu/twincities/graduate-assistants/graduate-assistant-health-plan.htm>

3b. MSTP Responsibility for Support

The Program supports the student during the time they are registered in Medical School. Funding is initiated on or about July 1 prior to the formal start of Medical School classes. This period before the start of Medical School classes is spent in a full time laboratory rotation. Funding by the Program continues through the first two years of Medical School. Students will complete clinical rotations at the end of the second year (see section **12. Curriculum**) and will be supported by the Program through the last official day of these rotations. The second phase of the Program's responsibility for support begins the first day the student enters clinical rotations following completion of their PhD thesis. Stipend support will be provided for the total number of credits/weeks of clinical rotations completed plus 12 weeks of program allowances and 1 week for graduation week. Students who choose to spend time abroad (i.e. international travel) must check with the Program to determine whether they are still eligible for financial support.

Funding for student tuition, fees, insurance, and stipend comes from a variety of sources, including the National Institutes of Health Medical Scientist Training Program Grant, the Mayo Graduate Education Scholarship Fund, the Bakken/McKnight MD/PhD Endowed Scholarship Fund, University Fellowships, and the Medical School Dean's Office. Assignment of the funding sources is at the discretion of the Program Director and Assistant Director.

3c. Mentor/Graduate Program Responsibility for Support

Upon completion of the initial two-year medical school training phase, financial responsibility shifts from the MSTP to the student's mentor/graduate program. The funding becomes the responsibility of the student's chosen thesis advisor. **It is the student's responsibility to consult with his or her mentor and graduate program to determine the policies on stipend, tuition and fees support.** The source of support can come from the mentor's grants, individual fellowships, training grants, or graduate program support. Although mentors are aware of their overall responsibility for providing stipend support for the duration of the graduate training phase, all students should be proactive and responsible for their own funding. This element of financial responsibility continues through the duration of the graduate training phase, independent of how long it takes the student to complete the requirements for the PhD (i.e. until successful completion of the thesis defense).

3d. Internal and External Funding for MSTP Students

The Program expects MSTP students to apply for internal and external predoctoral fellowships, particularly NIH F30/F31 awards. Information on NIH F30/F31 awards is available online at http://grants1.nih.gov/training/F_files_nrsa.htm. Students should plan to submit applications either just prior to or during the early phases of graduate training. Resources to assist students in the development of these fellowship applications are available from the Director or Assistant Director. The Program office should be notified of any applications submitted for fellowships. If the awarded fellowship is less than \$25,000/year, the Program will supplement the external award to the Program stipend level of \$25,000/year (while the student is enrolled in Medical School). In those cases where the fellowship itself is greater than \$25,000/year, the student is entitled to the entire amount. **MSTP students may not engage in any other type of external employment (i.e. other than the MSTP) without prior permission of the Director.**

4. PAYBACK REQUIREMENTS

Students who matriculate in the MSTP receive a stipend, tuition and support for fees and healthcare throughout their training. In the event that a student voluntarily leaves the Program, he/she may be required to pay back the funding received from the MSTP, either in part or in full. A specific example wherein payback is automatically collected is recovery of tuition from the Medical School semester during which the student voluntarily withdraws from the Program.

5. INSTRUCTION IN THE RESPONSIBLE CONDUCT OF RESEARCH

Responsible conduct of research is defined as the practice of scientific investigation with integrity. It involves the awareness and application of established professional norms and ethical principles in the performance of all activities related to scientific research. The MSTP adheres to the principles that responsible conduct of research training is an essential component of MSTP training, and that active involvement in the issues of responsible conduct of research should occur throughout a physician scientist's career.

In addition to the ethics training provided to all medical students and to graduate students in specific graduate programs, MSTP students must complete two additional RCR training components. First year MSTP students must complete Parts 1 and 2 of the Responsible Conduct of Research (RCR) core workshops offered by the Office of the Vice President for Research. A description of this training can be found at <http://cflegacy.research.umn.edu/first/> . This training is arranged by the Assistant Director during a student's first summer in the Program.

The MSTP also offers one-hour interactive RCR workshops on the following topics:

- Policies regarding human subjects in research
- Policies regarding live vertebrate animal subjects in research
- Mentoring and mentor/mentee responsibilities and relationships
- Authorship and peer review
- Data acquisition and management
- Conflict of interest (personal, professional, financial), intellectual property, and the scientist as a responsible member of society

A total of three workshops are offered each summer. Each topic is offered every other summer. MSTP students must attend each workshop by no later than the end of their fourth year in the program.

6. LABORATORY ROTATIONS

The purpose of a laboratory rotation is to acquaint students with research opportunities in the laboratory research environment of a MSTP preceptor. The rotations do not constitute a course, and students will receive no credit toward either the MD or PhD degree for this requirement. The following guidelines apply:

1. All students are expected to complete three laboratory rotations with three different MSTP preceptors by the end of Fall semester of Medical School year 2.
2. Each rotation should be at least 5 weeks in length, and as continuous as Medical School classes will allow.
3. Before committing to a rotation, students should evaluate potential preceptors and their research programs. Students can consult the MSTP website, other MSTP students, and also seek guidance from the Director. It is also important to meet with faculty individually to discuss the possibility of a laboratory rotation. Students should be sure to get clarification from faculty members regarding the faculty member's interest in having a rotation student, potential projects available for a new graduate student, and availability and duration of funding for a new graduate student. You are responsible for having a clear

understanding of what each preceptor expects of you during a rotation. For example, will you learn a specific laboratory method, conduct a small project, conduct a literature search, or write a paper? In turn, make certain you communicate what your expectations are to the preceptor. The most productive rotations occur when student and preceptor are on the same page regarding goals and expectations.

4. During the rotation, students will need to balance data generation versus compatibility testing. The rotation experience should be assessed in light of the following questions that need to be answered by the end of the rotation:
 - Are you excited about the research in the lab?
 - Do you like the lab environment?
 - Do you think you will have a productive working relationship with the faculty member?
 - Will the faculty member be your mentor and advocate?
 - Can you imagine spending 3-4 years of your life in this lab and enjoying it?
5. Following the completion of a rotation, students must submit a lab rotation evaluation to the MSTP office. The evaluation will briefly summarize the experience you had during the rotations.

7. MONDAY RESEARCH SEMINAR SERIES

The MSTP invites preceptors to present seminars about their research each Monday at 12:15 PM. The topics are diverse and all first- and second-year MSTP students are required to attend. These seminars are designed to keep students aware of and intellectually involved in biomedical research opportunities. Additionally, the seminars expose students to a variety of different areas of research, thereby facilitating their decision in selecting a faculty PhD thesis advisor and graduate program.

8. IDENTIFICATION OF CLINICAL ADVISOR

A clinical advisor must be selected upon completion of the second year of Medical School. A link to a list of available mentors and instructions on how to file your choice with the Medical School can be found on the Medical School years 3/4 web site, www.meded.umn.edu/year34/.

9. SELECTION OF PHD THESIS ADVISOR

Selection of the PhD thesis advisor is the most important decision made by a MSTP student during his/her tenure in the Program. The Director and Associate Director are available to advise students at any time regarding this important decision. Laboratory rotations and the Monday Research Seminar Series are two primary mechanisms for identifying thesis advisors. Students must be proactive in determining that the laboratory of their choice has adequate grant support to cover the cost of their stipend and lab support.

A PhD thesis advisor and graduate program must be declared no later than January 1 of the second year in Medical School. As part of this process, each student must submit a request for approval to the Director in the form of a detailed *MSTP Student Research Commitment Statement*. Advisor and laboratory selections are not officially approved without the Director's permission. The Research Commitment Statement should outline the following:

1. Describe each laboratory rotation, including the nature of the project worked on, the methodologies employed and the outcome. The dates and approximate amount of time you were able to work in the laboratory should be included. It would also be helpful to comment on the pros and cons of an individual laboratory as a choice for graduate training.
2. Indicate your mentor choice and the graduate program you have selected. Also list the required coursework in your graduate program and electives you may take. Indicate whether you will have teaching responsibilities.
3. Describe the nature of the research project you will pursue during the graduate training phase.
4. Describe your preceptor's current and projected grant support that will provide the financial support for your research. Comment on plans for submitting individual fellowship applications to support your stipend.

A Graduate Phase Transition Meeting is held in January/February of the second year where advisor choices and graduate programs are finalized with the Director, Associate Director, Assistant Director, and select Steering Committee members.

10. SELECTION OF GRADUATE PROGRAM

At the time of the selection of a PhD advisor, students will also need to identify the graduate program that they will join during the graduate phase. MSTP students may choose among the following graduate programs:

- Biochemistry, Molecular Biology & Biophysics (BMBB)
- Biomedical Engineering
- Integrative Biology & Physiology (IBP)
- Chemical Engineering
- Chemistry
- Epidemiology
- Medicinal Chemistry
- Microbiology, Immunology & Cancer Biology (MICaB)
- Molecular, Cellular, Developmental Biology & Genetics (MCDB&G)
- Neuroscience
- Pharmacology

The selection of a graduate program is dependent on the graduate program affiliation(s) of the chosen PhD thesis advisor. If the student's advisor is affiliated with more than one of the graduate programs listed above, the student will need to select one program to join. Each graduate program has specific requirements for MSTP students and they can and do differ between programs. Students can consult their advisor and the MSTP Director for guidance on this selection.

Students do not need to apply for admission to their selected graduate program. This is handled by the MSTP office.

11. REGISTRATION

During the first two years of Medical School, course registration is handled by the Medical School Student Affairs office. Registration for clinical rotations in Medical School is handled by students and subject to placement in a lottery system. Additional information on registering for clinics can be found in section **12. Curriculum**. While in Graduate School, students are responsible for class registration and health insurance enrollment. Check with your graduate program office for details. Please keep in

mind that the fall semester deadline for Graduate School registration will be either spring semester, or a later registration period that occurs in late August/early September. It is important for students to maintain full-time registration during every semester, including summer. Failure to do so will result in FICA and Medicare payments being withheld from stipend checks and can create problems with health insurance eligibility. Also, the Graduate School requires that you register in the fall and spring semesters in order to maintain active status as a graduate student. Failing to do so will require that you complete readmission paperwork and pay a fee. Please contact the MSTP office if you have any concerns or questions about registration.

12. CURRICULUM

MSTP students are required to complete the standard course work for both the MD and PhD degrees, plus the following:

a. Clinical rotations at the end of year two: Students are expected to complete a minimum of 6 weeks of clinical rotations following completion of USMLE Step 1 during the summer prior to starting Graduate School. Registration for these rotations is handled by the MSTP office. Students must contact the Assistant Director in February of Year 2 of Medical School to make their rotation requests.

The following is the list of rotations that students can choose from:

- Medicine I (6 weeks)
- Pediatrics (6 weeks)
- Surgery (6 weeks)
- OB/Gyn (6 weeks)
- Psychiatry (6 weeks)
- Neurology (4 weeks)

The selection of specific clinical rotations will depend on the clinical interests of the student and should be made in consultation with Program leadership.

b. Ambulatory Clinics for the Physician Scientist: All MSTP students are required to take the course designated "Ambulatory Clinics for the Physician-Scientist" (INMD 7540 & 7541). This course has been created specifically for MSTP students to:

- bridge the gap between science and clinical medicine
- explore a clinical area of interest
- provide an opportunity for students to learn to balance research and clinical care in their professional work (through time management of integrating clinic experiences into the final phases of PhD training)
- facilitate the transition back to full-time clinical training.

Students must take two semesters (i.e. two 18 week blocks of time), to be taken during the final 12-24 months of graduate training. Additional course information can be found on the Medical School website at http://www.meded.umn.edu/clerkships/INMD_7540-41.php.

Registration for INMD 7540 & 7541 requires careful coordination between each student and the MSTP administration. Here are some important guidelines:

- Do not begin the rotation without completing the registration form and turning it in to the MSTP office. Be sure to have appropriate signatures.

- Plan ahead so that you can get computer access and a badge for the rotation. These two items can take a week to setup.
- Copies of the Specific Aims page should be emailed to the Associate Director and Susan Shurson at the end of the rotation.
- You may be asked to help facilitate the process of collecting a grade and the evaluation from the preceptor.

A step by step summary of registering for this course is as follows:

- Meet with the Associate Director to discuss rotation preceptors and rotation time frame/schedule. Students should contact Susan Shurson to schedule the meeting with the Associate Director. The time frame for this meeting is at least one month prior to the date a student wishes to begin the rotation. Students should review the list of approved Ambulatory Clinic preceptors (available online at http://www.med.umn.edu/mdphd/prod/groups/med/@pub/@med/@mdphd/documents/content/med_content_347229.pdf) prior to meeting with the Associate Director and have several possible choices in mind. The Associate Director will provide information and assistance on how to set up a rotation with one of the course preceptors.
- Complete the Ambulatory Clinics for the Physician Scientist registration form. (available online at http://www.med.umn.edu/mdphd/prod/groups/med/@pub/@med/documents/asset/med_62590.pdf). Contact Susan Shurson with any questions you may have about completing the form.
- Meet with Susan Shurson to discuss your plan for completing the rotation. Students should set up this meeting no later than 2 weeks prior to the intended start date of their rotation. This meeting is required in order to be registered and receive credit, as well as to obtain proper computer authority at the site of the rotation. Students must bring the completed Ambulatory Clinics registration form to this meeting; Susan will discuss final details that may need to be addressed before beginning the rotation.
- Complete the rotation. Students should make every effort to adhere to the original time frame of the rotation. However, timing for completion can be somewhat flexible to accommodate schedule conflicts. In the event that the original plan must be altered, students must be sure that the total number of hours completed does not change. Students should contact Susan Shurson with any concerns about changes to the predetermined schedule of the rotation. An NIH Specific Aims page must be submitted to the course preceptor and Susan Shurson on the last day of the rotation. Samples of appropriate Aims pages can be found online at http://www.med.umn.edu/mdphd/prod/groups/med/@pub/@med/@mdphd/documents/content/med_content_293278.pdf. This will indicate that you have finished the course so that Susan Shurson can request a grade.

c. Clinical Rotations and Transition from Graduate Phase into Year 3-4 Clinics: The Medical School requires students to complete 76 credits/weeks of clinical rotations. Of the required 76 credits/weeks, 6 or 12 may be taken as "research for credit" electives. In order to exercise this option, an "Elective in Research or Independent Study" form will need to be completed, which is available from the Medical Education web site at www.meded.umn.edu/year34/forms.php. Please note that the Medical School will not grant retroactive credit for previous work.

Students must attend a workshop held by the Medical School Curriculum Affairs Office in the February prior to their return to full time clinical training. This meeting is used to inform medical students returning to clinical training about how to arrange a Medical School schedule and includes information on how to register during the lottery, deadlines for registration, paperwork to be completed, and other considerations and questions that may arise. Please note that students are responsible for their own registration for Medical School year three and four rotations. The on-line

registration process takes place in April prior to the beginning of period one. Information on the Medical School clinic curriculum can be found on the Medical Education website, <http://www.meded.umn.edu/year34/>.

13. GRADING POLICY

Students receive pass or no pass grades while in the first two years in Medical School. Honors are given to approximately the upper 10% of each class. Grades are recorded on an H (honors), E (excellent), S (satisfactory), I (incomplete), N (no credit, fail) during Medical School years 3 and 4. Students who receive I or N grades in courses will be reviewed by the Medical School Scholastic Standing Committee to determine a course of action.

The Graduate School uses two grading systems: A-F or S-N. Grades of A, B, C, and S are acceptable, but grades of S are not calculated in the grade point average. At least two-thirds of the credits completed in the Graduate School and included on any degree program (including a minor or supporting program) must be taken under the A-F system. The Graduate School also requires 7 semesters of full-time registration (7 or more credits per semester) or its equivalent, to include at least 24 doctoral thesis credits. You cannot register for doctoral thesis credits until you have passed the preliminary oral examination.

14. GRADUATE PROGRAM CREDIT TRANSFER

Selected courses from the MD curriculum have been approved for transfer to the Graduate School to fulfill certain graduate program requirements, such as the credit requirements for your graduate program's minor. Consult individual graduate programs for details as to which courses will transfer.

15. GRADUATE PHASE MILESTONES

The following are key milestones that must be reached in order to successfully complete the graduate phase of the MSTP:

- Completion of graduate phase coursework
- Pass written and oral preliminary exams
- Seek independent funding by submitting a NIH F-series predoctoral fellowship application (or equivalent)
- Select thesis committee and meet with thesis committee every 9-12 months
- Present research at a minimum of two national/international conferences
- Publish at least one first-authored paper in a peer-reviewed journal prior to return to clinic
- Complete Ambulatory Clinics for the Physician Scientist (two X 3 credits/weeks each).
- Present research seminar at MSTP retreat
- Present clinical/basic science seminar
- Write, submit and defend thesis no later than the end of the fourth year of the graduate phase

16. MSTP GRAND ROUNDS

MSTP Grand Rounds is a monthly case-based small group style discussion of a clinical problem and relevant state-of-the-art science. For each session, a student will collaborate with a University of Minnesota physician-scientist faculty guru to select a case that highlights the particular clinical problem and develop a "Morbidity and Mortality" style presentation of the case. Following the case

presentation, the student and faculty guru will lead the group in an interactive grand rounds style presentation of the current science aimed at understanding the highlighted clinical problem.

Specific objectives of MSTP Grand Rounds include:

- To highlight the impact of basic, translational and epidemiological research on prevention, detection and treatment of human disease
- To provide an opportunity for students to network with established University of Minnesota physician scientists in a field of interest
- To provide a regular venue for interaction among students, residents, fellows, and faculty interested in the application of basic research to clinical medicine

MSTP students in the graduate phase are required to give a minimum of one MSTP Grand Rounds presentation.

a. Preparing for a MSTP Grand Rounds presentation.

- Based on the clinical problem to be presented, contact a MSTP Grand Rounds Faculty Guru (list available at http://www.med.umn.edu/mdphd/prod/groups/med/@pub/@med/@mdphd/documents/content/med_content_366101.pdf) requesting his/her assistance in preparing the presentation. Drs. Bitterman and Shimizu can be consulted for advice with regard to the selection of the clinical problem and appropriate faculty gurus. Examples of cases from the Department of Medicine can be obtained from Dr. Bitterman.
- In consultation with the faculty guru, select a day and time for the MSTP Grand Rounds Presentation. Notify Susan Shurson at shurs002@umn.edu at least three weeks in advance so that the MSTP Office can secure an appropriate room for the meeting.
- Develop the presentation in consultation with the selected faculty guru. There should be two components to the presentation:
 - Clinical case presentation (25 minutes) consisting of:
 - History
 - Physical exam
 - Initial imaging and laboratory information
 - Sequential release of information (in the sequence available to the primary MD team)
 - Engage the audience in analysis after each element of clinical data is presented
- Interactive presentation of current science aimed at understanding the highlighted clinical problem (25 minutes)

17. MSTP STUDENT CLINICAL/BASIC SCIENCE SEMINAR

MSTP students in the graduate phase (generally in their final year) are required to give a formal presentation that bridges an area of basic research with a specific clinical problem. This presentation encourages independent thought by students regarding the future direction of experimentation in a topic area chosen by the student. The topic cannot be identical to the focus of their thesis research, but can be in the same general field (e.g. neuroscience, genetics, etc.). Each student must arrange and present his or her own seminar; assisting another MSTP student with his or her seminar will not fulfill the requirement.

The MSTP office will contact students about scheduling their seminar prior to completion of the graduate phase of the Program. Students should then schedule a meeting with the Associate Director to discuss the general topic area that will be covered in the seminar. Based on this discussion, the Associate Director will schedule the seminar in one of the existing research conferences held regularly by each Clinical Science Department in the Medical School. Feedback is provided to the student by the clinical department head or the vice chair for research. All students are strongly encouraged to attend these seminars, especially students who have completed their second year of Medical School.

Students must complete the clinical/basic science seminar requirement before they return to medical school for clinical rotations. Third year medical school funding from the MSTP will not commence until this requirement has been fulfilled.

18. MSTP POLICY ON RETURNING TO CLINIC

The timing of re-entry into the clinical training phase is challenging and should not be underestimated. Careful planning on the part of the student and thesis advisor is essential. *Students must complete their thesis and contact the MSTP office before attempting to re-enter the clinical training phase.* This includes successful final oral defense of the thesis and submission of the final version of the thesis (i.e. approved by all graduate thesis committee members) to the Graduate School. **If the student anticipates a problem in meeting this requirement he/she must meet with the Director to explain the circumstance.**

The return to Medical School training after the time spent in the research phase is a significant adjustment that will require a large amount of each student's time. Completion of the thesis before resuming full-time clinical training is a policy adopted by the MSTP in order to prevent the inherent time conflicts between clinical training and fulfillment of thesis requirements. Any student who returns to full-time clinical training without having completed his/her thesis or meeting with the Director will be pulled from the first rotation and each successive rotation until the thesis is defended. This delay may jeopardize the continuation of stipend support and may prevent the student from completing the required rotation(s) in time to graduate.

Medical School requirements for the clinical training phase include the following:

A minimum of 76 total credits/weeks (1 credit = 1 week) of clinical courses.

- 56 credits/weeks in the following required courses:
 - Medicine I, 6 weeks
 - Medicine II, 6 weeks
 - Psychiatry, 6 weeks
 - Obstetrics/Gynecology, 6 weeks
 - Pediatrics, 6 weeks
 - Surgery, 6 weeks
 - Neurology, 4 weeks
 - Primary Care Clerkship, 8 weeks (4 weeks in Family Practice Clinic; 4 weeks in Medicine, Pediatrics, Medicine/Pediatrics, or Geriatrics Clinic)
 - Surgical Subspecialties (Neurosurgery, Orthopaedic Surgery, Otolaryngology or Urology) - 4 weeks in one or 2 weeks each in two
 - Emergency Medicine, 4 weeks
- 20 credits/weeks in electives
 - 8 credits/weeks minimum being direct patient interaction or "hands on"

- 12 credits/weeks non-direct patient interaction or non “hands on” (may be fewer with more “hands-on” credits/weeks)
 - Students may take 6 or 12 credits/weeks as “research for credit” electives. In order to exercise this option, an "Elective in Research or Independent Study" form must be completed, which is available from the Medical Education web site at www.meded.umn.edu/year34/forms.php. Please note that the Medical School will not grant retroactive credit for previous work.

Although satisfactory completion of a minimum of 76 credits/weeks is required for the MD degree, students may register for a maximum of 85 credits.

For MSTP students, completion of clinical courses should occur as follows:

Clinical rotations at the end of year 2	6-8 credits/weeks
Ambulatory Clinics for the Physician Scientist (part of 20 credits/weeks of electives)	6 credits/weeks
Clinical rotations after completion of PhD (Years 3 & 4)	64-71 credits/weeks
TOTAL	76-85 credits/weeks

In planning Year 3 & 4 schedules, MSTP students should also factor in the following program allowances:

Vacation breaks (total during Years 3 & 4)	4 weeks
Professional Development Time (preparation for USMLE step 2 exam, residency interviews)	8 weeks
TOTAL	12 weeks

17a. Financial Support During the Clinical Training Phase.

Financial support by the MSTP for the clinical training phase begins the first day the student enters clinical rotations following completion of their PhD thesis. Stipend support will be provided for the total number of credits/weeks of clinical rotations completed plus 12 weeks of program allowances and 1 week for graduation week. Thus, the total duration of stipend support will be between 77 and 84 continuous weeks (64-71 credits/weeks for clinical rotations plus 12 weeks of program allowances plus 1 week for graduation week) during the clinical training phase.

Stipends for the clinical training phase provided by external fellowships (such as an NIH F30/F31) will be paid to the student in accordance with the requirements outlined by the funding agency and may include stipend support beyond the maximum 84 weeks described above. However, the total duration of any supplementation provided by the Program will be determined as described above (62-71 credits/weeks for clinical rotations during Years 3 and 4 of Medical School plus 12 weeks of program allowances plus 1 week for graduation week).

17b. Timing of Return to Clinic

Although MSTP students may return to clinic during any period, careful planning is required if a student wishes to avoid a period between the end of stipend support and official graduation from Medical School. For example, a student who has completed 14 credits/weeks prior to the return to clinic (8 credits/weeks of clinical rotations after Year 2 and 6 credits/weeks of ambulatory care) and

plans to complete only the minimum of 76 credits/weeks of clinical rotations required by the Medical School should return to clinic no sooner than the beginning of period 4 (end of September).

Students should consult with the Assistant Director to carefully plan their M3 and M4 training sequence, as the exact timing is dependent on the total number of credits/weeks that will be completed in M3 and M4, the total number of credits/weeks that were completed following Year 2, and other objectives that the student wishes to complete during clinical training (such as away rotations). In general, most MSTP students should plan to return to clinic sometime between the beginning of period 3 and the end of period 4.

17c. Request for Approval to Return to Clinic

In January of each year, MSTP students who anticipate completing their PhD thesis and returning to clinic during the following academic year should prepare a clear and concise document with the following information:

1. Student's name, year entered, thesis advisor, and graduate program.
2. Update on status of manuscripts detailing those papers published, in press, submitted, and in progress. Program policy states that a student must have at least one first-authored paper published or in press in a peer-reviewed journal prior to returning to clinic.
3. An outline of research progress that includes experiments left to complete before research is done.
4. A timeline of thesis research to be completed.
5. A brief description of the student's areas of interest in Medicine and the name of the clinical advisor chosen by the student.
6. A list of the total number of credits (minimum 76, maximum 85) of clinical rotations that will be completed to meet the Medical School requirements for the clinical training phase. This list should include the clinical rotations completed at the end of Year 2, the two ambulatory care courses (and the physician scientist preceptors who worked with the student), and the proposed list of clinical rotations to be completed in Years 3 and 4. Credits/weeks should be provided in this list.
7. A timeline for the return to clinic.

This document must be turned in to the MSTP office by January 31. Once the request has been submitted, students will be scheduled to attend a Return to Clinic Advisory Meeting with the Director, Associate Director, Assistant Director, and several members of the MSTP Steering Committee. The meeting will give students an opportunity to update their status and obtain feedback on the feasibility and appropriateness of their plan.

19. EVALUATION OF STUDENT PROGRESS

Students are required to submit an annual progress report that is due June 1 of each year. Forms are available on the MSTP website (<http://www.med.umn.edu/mdphd/current/forms.html>) or from the Director. In addition to a summary of activities over the past year and plans for the next year, the progress report includes a section on career goals and professional development. Students should use this part of the report to think about short- and long-term career objectives and implement a development plan that will allow the student to acquire and/or strengthen specific skills essential for reaching career objectives. Additional information to help students in this process is provided in the Appendix.

The progress report is used by the program in several ways. First, the progress report documents satisfactory progress in the program and is required for yearly re-appointment in the program.

Second, the information provided on student activities is used to meet reporting requirements to the NIH, to update student biographies on the MSTP website, and to document accomplishments in the Program. Third, the progress report is used as a foundation for monitoring and advising by program leadership. The Director reviews each report and uses it as a starting point for discussions in one-on-one meetings.

In addition to the written progress report, each student will have periodic meetings with the Director, Associate Director, and/or Assistant Director to discuss his/her progress in the Program. These meetings are mandatory and take place during the following times during a student's tenure in the Program:

- July before the start of Year 1 of Medical School
- Fall of Year 1 of Medical School
- End of Year 1 of Medical School
- January/February of Year 2 of Medical School (Graduate Phase Transition Meeting with Director, Associate Director, Assistant Director)
- August prior to start of graduate phase
- Yearly during graduate phase (late summer/fall)
- 9-12 months before thesis defense (Return to Clinic Advisory meeting with Director, Associate Director, Assistant Director)
- End of Year 3 of Medical School (with Director)
- End of Year 3 of Medical School (with Associate Director)
- End of Year 4 of Medical School (exit interview)

Students should progress toward the completion of their degrees in a manner consistent with a full-time investment in the Program.

Required elements of satisfactory progress include:

1. Maintaining adequate academic standards in the first two years of Medical School with no failed courses in clinical training and at least a B average (3.0) in Graduate School.
2. Maintaining ethical standards of academic and personal conduct in accordance with the policies and practices of the Medical School, Graduate School and University of Minnesota.
3. Passage of USMLE steps 1 and 2. Step 1 must be completed before beginning clinical rotations and prior to entering the graduate phase. Step 2 must be completed in year four of medical school.
4. Fulfillment of required activities in the Program that include but are not limited to:
 - a. Attendance of the Monday Research Seminars by year 1 and 2 students.
 - b. Submission of completed annual progress reports by June 1.
 - c. Attendance at and participation in the annual MSTP retreat.
 - d. Presentation of posters annually at the Alfred F. Michael Medical Student Research Day.
 - e. Participation in the monthly student meetings.
 - f. Attendance and participation in the Student Sponsored Lecture Series.
 - g. A minimum of one MSTP Grand Rounds presentation during the graduate phase.
 - h. Completion of two semesters of "Ambulatory Clinics for the Physician Scientist" prior to returning to clinic.
 - i. Fulfillment of the Clinical/Basic Science Seminar requirement prior to returning to clinic.

5. Demonstration of full-time effort and progress toward completion of the PhD dissertation. This includes:
 - a. Selection of a thesis mentor and graduate program by January 1 of year 2 of Medical School.
 - b. Completion of the thesis in a timely manner. This will vary with the area of research focus and the graduate program affiliation. As a guideline, three to four years is generally sufficient. However, quality of science rules the day and students should not compromise this goal by attempting to prematurely return to clinical training.
 - c. Students must have at least one first-authored refereed manuscript published or in press prior to returning to clinic.

20. REMEDIES FOR UNSATISFACTORY STUDENT PROGRESS

A MSTP trainee may be dismissed from the Medical Scientist Training Program for failure to make satisfactory progress as defined by the *Policy and Procedures of the Committee on Student Scholastic Standing in the Medical School*, and policies inherent to the individual graduate program in which the trainee is pursuing their PhD. The dismissal of a MSTP trainee can also occur because of failure to successfully traverse major checkpoints in Years 1 and 2 of Medical School, the graduate training phase, or Years 3 and 4 of Medical School. Major checkpoints are: 1) successfully passing all courses and completing USMLE part 1, 2) completion of the graduate phase of training within 4 years, and 3) successful completion of all clinical requirements and graduation from Medical School no more than two years after completing the PhD.

Any student making inadequate progress or having non-academic problems will be requested to meet with the Director. Upon clarification of the circumstance or identifying potential deficiencies or problems, the Director may either: 1) conclude that no further action is warranted, or 2) discuss the student's circumstance with the Associate Director. Following discussion with the Associate Director, the Director will send a letter to the student restating the problem, what must be accomplished by the student to resolve the problem, and a time frame in which the problem must be resolved. A student who receives such a letter will be placed on probation. One week prior to the deadline for resolving the problem, the student will submit in writing to the Director precisely what has been done to resolve the problem. The Director will share this information with the Associate Director, a recommendation will be made, and the outcome communicated to the student in writing. If the student is dismissed from the Program, all financial support from the Program will cease coincident with the date of the dismissal letter. The final authority to remove the probationary status or dismiss the student is at the discretion of the Director.

21. LEAVES OF ABSENCE

Circumstances may arise that require a student to take a leave of absence. This must be approved by the Director and arranged with the MSTP office and the graduate program or Medical School, as appropriate. A leave of absence will not be honored if the student does not notify the Program administration and receive approval. Students should submit a formal written request for a leave with the MSTP office. Whether or not the student continues to receive financial support during the leave of absence will be dictated by the circumstances, under the authority of the Director.

22. TRAVEL

Since scientific meetings are an important component in the education of medical scientists, travel to scientific meetings is encouraged. Funds are available from the MSTP for students to travel to a

national scientific meeting of their choice. A budget limit of \$1,000 per student that can be used at any time during a student's tenure in the Program, has been adopted. To exercise this option, students should submit a written request to the Assistant Director, well in advance of the chosen meeting. The request should include the following:

- Name of the meeting
- Where and when the meeting will occur
- Relevance of the meeting to the thesis project
- An itemized proposed budget
- An endorsement from the student's thesis advisor.

The MSTP will only consider providing support if the student is exhibiting at a poster session or giving an oral presentation.

Additionally, the MSTP encourages students to travel to the yearly National MD/PhD Student Conference and the American Physician Scientists Association Annual Meeting. The MSTP will provide funds for several students per year to travel to these conferences. Notices are sent to students each spring and interested students are asked to submit their names for consideration. Priority is given to those students with seniority in the Program and to those doing research in an area most closely related to the topic of the conference.

23. PROGRAM MEETINGS AND STUDENT-INITIATED ACTIVITIES

a. First & second year Monday Research Seminars

Monday Research Seminar (12:20 PM) is presented to students in the first and second years of training by faculty from the approved mentor list. Faculty present overviews of past research accomplishments, opportunities for future thesis projects, and provide a general overview of their career development to date. Monday Research Seminar provides students an opportunity to gain a better understanding of the current research performed at the University, information that should be used while choosing a field for thesis work. Interactions with faculty during seminar can assist students in identifying laboratories through which to rotate, and serves as an important exposure to biomedical research while enrolled in Medical School.

b. Annual MSTP Retreat

The retreat occurs each summer (usually in July) and is organized by the elected student representatives with logistical support from the MSTP Office. The retreat showcases the research being conducted by students in the latter phase of graduate training, and also features presentations by guest speakers and workshops on a variety of topics relevant to MSTP training and career development. The retreat also provides an important venue for students in various phases of the Program to meet, socialize and discuss topics of concern. The retreat is an important element of the Program and attendance is mandatory. Students in clinical rotations must work with the MSTP office to secure the necessary one day leave.

c. Monthly program meetings

Student-organized program meetings are held on the second Monday of each month in the evening. Meetings will cover a range of topics, including science/research presentations by students and faculty guest speakers, career development discussions and panels, networking opportunities with other physician scientists, and social activities. These meetings will also provide students with updates on the Program and the Medical School, and an opportunity to provide feedback to the Director and MSTP Student Advisory Committee on program activities. The monthly program meetings are an essential element of the MSTP and attendance by all MSTP students is mandatory.

d. Women Physician Scientist Breakfast

The mission of the MSTP Women Physician Scientist Student Association is to inspire, encourage, and enable the women physician scientists in the Medical Scientist Training Program (MD/PhD) to achieve their personal and professional goals in becoming academic physician scientists. The MSTP Women Physician Scientist Student Association fosters relationships between women physician scientists in the scientific and medical communities by hosting monthly breakfast meetings. At each breakfast meeting, two MSTP student hosts lead a discussion on a topic that is related to professional development, mentoring and/or leadership. Some topics involve discussion after reading journal articles and current literature. Female physicians and scientists in the University community are invited and encouraged to join the student group in discussions and share their professional experiences in academic medicine and science .

e. Alfred F. Michael Medical Student Research Day

This colloquium is held annually in March and consists of a student poster session, reception, and guest lecturer. MSTP students in the graduate phase are **required** to submit an abstract and participate in the poster session. It will be the responsibility of the student and his/her faculty advisor to prepare the posters; display materials will be provided by the colloquium.

f. Student Sponsored Lecture Series

The objective of the MSTP Student Sponsored Lecture Series (SSLS) is to invite an exceptional investigator to give a formal research presentation to the medical school community and to meet informally with all students. It also provides a means to help showcase the role of the physician scientist in clinical medicine, basic research, and in health care delivery. The Program is committed to supporting one speaker per year. While the SSLS Committee is responsible for implementing the lecture series, all students in the Program may provide input for SSLS decisions. In addition, the Committee is committed to cooperating with other groups in order to provide programs of mutual interest. These groups include all clinical and basic science departments.

24. ACKNOWLEDGMENT OF MSTP FELLOWSHIP SUPPORT IN PUBLICATIONS

All students who have been supported by the MSTP T32 training grant at some time during their studies should acknowledge the support in all publications (except abstracts) as follows: “Jane Doe was supported by NIH MSTP grant T32 GM008244” or “This work was supported by (list of other support) and by NIH MSTP grant T32 GM008244 (J.D.).

It does not matter whether the student is supported by the MSTP grant at the time the work is done or the manuscript is submitted. The important point is that the MSTP grant made it possible for the student to be here and do the work: “once an MSTP [student], always an MSTP!” Students who are/have been supported by any other fellowship should acknowledge the support using the format for acknowledging MSTP support.

25. MISCELLANEOUS POLICIES AND PRACTICES

a. Vacation policy: Program students are entitled to two weeks (10 business days) of vacation per year. Any additional vacation time awarded by the Medical School or graduate degree program should be viewed as an opportunity to devote more concerted time to lab rotations or thesis research.

b. Free time during clinical years: **Free time during clinical years should be used for interviewing, residency application, studying for Step 2, research or other elective rotations. The Program expects that students continue to be productive in research. See section 17a Financial Support During the Clinical Training Phase for additional information on policies governing Program financial support during clinical training.**

c. Thesis copies: The Program requires a bound copy of your finalized thesis for the MSTP office. The Program maintains a library of completed MSTP student theses in the Program office for applicants who are curious about the work of past students. The Program will reimburse you for the cost of one bound thesis if a receipt is submitted in a timely manner.

d. Medical School graduation: Attendance of graduating MSTP trainees at the Medical School commencement ceremony is mandatory. Special recognition is given to MSTP graduates during the ceremony, and hooding is performed by the Director and Associate Director.

26. TIMELINE FOR MSTP TRAINING

The overall “timeline” (including critical dates) of the training program is summarized below (for a 7-8 year program of study). The academic year begins July 1.

Date	Comments
Summer before Year 1	<ul style="list-style-type: none"> • Lab rotation • Monday Research Seminars • Responsible Conduct in Research training • Meet with Director (July)
Year 1	<ul style="list-style-type: none"> • First year Medical School curriculum • Monday Research Seminars • Meet with Director (fall) • Lab rotation (spring semester) • Submit annual progress report (June 1) • Meet with Director (June)
Summer of Year 1	<ul style="list-style-type: none"> • Lab rotation • Responsible Conduct in Research Training
Year 2	<ul style="list-style-type: none"> • Second year Medical School curriculum • Monday Research Seminars • Complete laboratory rotations • Choose clinical advisor • Choose thesis advisor/Graduate Program and complete Research Commitment Statement (January 1) • Graduate Phase Transition Meeting • Al Michael Medical Student Research Day • Submit annual progress report (June 1)
May-June of Year 2	<ul style="list-style-type: none"> • USMLE Step 1 Examination
June-August of Year 2	<ul style="list-style-type: none"> • Complete 6-8 weeks of clinical rotations in periods 1 and 2 • Meet with Director (August)
Graduate Phase Years 3-5,6	<ul style="list-style-type: none"> • Complete required graduate courses • Initiate full-time thesis research • Complete and pass preliminary written and oral examinations • Select thesis committee • Meet with thesis committee (every 9-12 months) • Meet with Director (annually) • Seek independent funding by submitting a NIH F-series predoctoral fellowship application (or equivalent) • Present research at a minimum of two national/international conferences • Publish at least one first-authored paper in a peer-reviewed journal prior to return to clinic • Write, defend and submit thesis no later than the end of

	<p>the fourth year in graduate phase</p> <ul style="list-style-type: none"> • Present a minimum of one MSTP Grand Rounds (in year 2 of graduate phase) • Enroll and complete two semesters of “Ambulatory Clinics for the Physician Scientist” (last 1-2 years before returning to clinic) • Present Clinical/Basic Science Seminar (last year) • Present research seminar at annual MSTP retreat (last year) • Submit request to return to clinic (by January 31 of last year of graduate phase) • Return to Clinic Advisory Meeting (last year) • AI Michael Medical Student Research Day (annually) • Submit annual progress report (June 1)
Year 6-7	<ul style="list-style-type: none"> • Resume clinical rotations • Submit annual progress report (June 1) • Meet with Director (summer) • Meet with Associate Director (summer)
Year 7-8	<ul style="list-style-type: none"> • Complete clinical rotations • USMLE Step 2 Examinations • Apply to residency training programs • Residency Match results (March) • Complete Program with both MD and PhD degrees • Attend Medical School graduation • Meet with Director (exit interview)

**26. Policies and Procedures of the
Committee on Student Scholastic Standing**
<http://www.meded.umn.edu/handbook/policies/cosss.php>
Effective beginning July 29, 2010

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I. INTRODUCTION

These are the policies and procedures followed by the Committee on Student Scholastic Standing (COSSS) when evaluating medical students' academic performance and related issues. The role of the Committee is to monitor each student's progress through Medical School and to ensure that each student is qualified to receive the Doctor of Medicine degree. These policies and procedures will be applied taking into account the unique circumstances of each student's situation.

The policies of the Committee are developed to conform to broader University policies on academic performance and ethics. Insofar as student behavior reflects on any student's qualifications or potential to become a competent and ethical professional, such conduct will be within the jurisdiction of the Committee.

The responsibilities of the Committee on Student Scholastic Standing (COSSS) are: to ensure that the students of the Medical School have met the requirements for awarding the M.D. degree; to monitor each student's progress through Medical School; and to ensure that the work of the Committee has been conducted properly, providing fairness to each student. These responsibilities are defined in the [Constitution of the University of Minnesota Medical School \(Article II, Section B.2\) and the Bylaws to the Constitution \(Article I, Section D.3\) \(pdf\)](#).

The responsibility of the Committee on Student Scholastic Standing is expressed in the following statement:

"The COSSS is a standing committee of the Executive Faculty and reports to the Executive Faculty and the Faculty Assembly. The Faculty Assembly was established by the Executive Faculty (tenured and tenure-track faculty) and

charged with responsibility for the academic affairs and internal policies of the school, including entrance requirements, curricula, instruction, examinations, grading, degrees and disciplinary matters. The Faculty Assembly is composed of members of the various Medical School departments with appointment designated as 94XX in the University Professorial ranks with the exception of volunteer community-based faculty.”

The COSSS is composed of 15 faculty members broadly representing the basic science and clinical areas; two student representatives (one voting representative and one alternate); and the following non voting ex officio members: the Associate Dean for Students and Student Learning; and the Director for Clinical Advising. Faculty members are nominated by the Faculty Advisory Council Nominating Committee with the input of the COSSS and elected by the Faculty Advisory Council. Each faculty member will serve a term of three years and may be re-elected to serve additional terms. Each student representative is selected by the Student Council in their second academic year for a two year term beginning in their third year of medical school. Student representatives must be in good academic standing at the time of their appointment to the Committee, and must remain in good standing throughout their tenure on the Committee. Additional medical school administrative staff will attend all Committee meetings and record the Committee's actions. An attorney from the Office of the General Counsel will be available to advise the COSSS as needed. The Committee members will vote annually to elect a member to serve a one-year term as Committee Chair. The Chair can be re-elected to serve additional terms. The Committee Chair will appoint a Committee member to serve a one-year term as Associate Chair, subject to approval (by majority vote) of the Committee. The Associate Chair can be re-appointed (subject to approval by the Committee) to serve additional terms.

As a rule, the Committee will only act upon motions presented to the group. The Committee Chair shall only retain voting privileges in the event a tie is achieved by the voting membership. The Chair will attend and preside over all COSSS meetings; if unable to attend, the Chair may appoint the Associate Chair or another voting faculty member to sit as Acting Chair. Two-thirds of the voting COSSS membership must be present to establish a quorum in order to consider and act upon all agenda items. Decisions of the Committee are carried by a motion and determined by a majority vote of members present. Members may choose to vote in favor of a motion, against a motion, or may abstain from voting altogether. Should at any time a member have a bias or conflict of interest, that member may recuse him or herself from the Committee's deliberation and consideration of an action item without regard to whether a quorum will remain in place.

II. GRADUATION REQUIREMENTS

Medical students must complete all required courses satisfactorily and meet the credit requirements, and successfully complete the Clinical Competency Assessment and Milestone Examinations for the M.D. degree as outlined in the current Medical School Handbook or as stated by the Office of Curriculum and Evaluation, the course director, and/or the COSSS; complete all regularly scheduled assignments; take all scheduled examinations; and follow the procedures outlined in the Student Handbook when there is a problem in taking an examination at the scheduled time. Failure to follow this latter procedure could result in the forfeiture of the student's opportunity to take an examination at another date. Not following this procedure also could result in a failure for the course. It is each student's responsibility to be aware of any grades and/or evaluations received in each course. Any student with questions about examinations or grading procedures is encouraged to consult the Associate Dean for Students and Student Learning. Final decisions on student progress and promotions are made by the COSSS.

A. COMPLETION OF ALL YEAR 1 AND 2 COURSEWORK

Medical students must complete all Year 1 and 2 basic science and clinical coursework during the first two years of medical school. Extensions of this two-year time limit may be granted on a case by case basis by the COSSS.

Grading. In Years 1 and 2 the grades used are P (Pass), N (Fail), and I (Incomplete). Students who have not completed all coursework including any outstanding makeup examinations may not begin any Year 3 clinical courses without receiving permission of the COSSS.

Re-Examinations. Students who receive an N (Failing) grade in a Year 1 or 2 course must petition the COSSS for permission to either sit for a re-examination (if available) or retake the course. The decision rests with the COSSS; however, the course director's recommendation will be solicited and given serious consideration. If re-examination is approved by the COSSS and the student passes the re-examination, a passing grade will replace the original N (failing) grade on the student transcript. If the student fails the re-examination, the N (failing) grade will remain on the transcript and the student will be required to repeat the course. If the COSSS deems that re-examination is not appropriate, the student must repeat the course. The original N (failing) grade as well as the grade received upon repeating the course will be recorded on the student's transcript. Should the COSSS decide to not grant the student permission to either sit for a re-examination or repeat a failed course, the student will then be subject to a hearing for dismissal.

Grade Changes: Passage of a failed course by re-examination shall result in a change of an N grade to a P grade. Standards set for re-examinations shall reflect the standards of the regular course examinations.

Repeating Basic Science Courses: After taking the re-examination(s), students who have not achieved a passing grade(s) may repeat the course(s) the following year if COSSS approval is obtained. Failure to obtain COSSS permission is evidence of failure to make satisfactory academic progress and will trigger a hearing for dismissal from Medical School (see VI. Dismissal Hearings and Appeals). The repeat of any Medical School course takes precedence over any other coursework, and requires taking all examinations, unless a COSSS-approved alternative arrangement has been made with the course director.

It is the student's responsibility (in consultation with the Office for Medical Education) to register and integrate the course into the schedule during the following year. In instances where an individual retakes a basic science course, both grades, i.e. the original N and the subsequent P will be recorded on the student's transcript. Any student with an N or I grade in any Year 1 or 2 course will not be eligible to begin Year 3 courses until successful completion of these courses.

A student is permitted to take a Year 1 or 2 course twice, but is only permitted one re-examination (pending COSSS approval) in that course. Failure to pass the course the second time will trigger a hearing for dismissal.

B. COMPLETION OF ALL CLINICAL SCIENCE COURSEWORK

All medical students are required to complete a minimum of 76 clinical credits in Years 3 and 4 in addition to the clinical course(s) in Years 1 and 2.

Grading. In Years 3 and 4, the grades used by the Medical School are as follows:

H (Honors), E (Excellent), S (Satisfactory), P (Pass), I (Incomplete), and N (Failing). An H represents outstanding achievement. An E represents achievement that is significantly greater than the level required to satisfy course requirements but not judged to be at honors level. An S represents achievement that satisfies the basic clinical course requirements.

I (Incomplete Grade)

An I (Incomplete) grade is given when work in a course has not been completed, either through an excused absence from course activities or delay in completion of requirements as permitted by the Course Director. The student should contact the Course Director to determine what is required to remove the Incomplete.

N (Failing) Grade

An N (Failing) grade is given after the final course examination, when a student's performance in the course fails to meet the Medical School's minimum passing standards. It may also be given when, through an unexcused absence, a student fails to meet course requirements. N grades may also be assigned for failure to meet the Medical School's established standards of professionalism within a course.

Grade Changes

In clinical courses an N grade can be changed only by successful repetition and completion of the course. Both grades will appear on the student transcript.

Repeating Clinical Courses. Students who receive an N (Failing) grade in a clinical course will be required to appear before the COSSS to request permission to repeat that course. Clinical courses include Physician and Society, Physician and Patient, and/or Essentials of Clinical Medicine and all required courses in the Years 3 and 4 curriculum. Failure to receive permission to repeat the course from the COSSS is evidence of failure to make satisfactory academic progress, and triggers a hearing for dismissal (see VI. Dismissal Hearings and Appeals).

C. FLEXIBLE MD PROGRAM

Some students may elect to apply for the Flexible MD program. This program is designed to promote independent exploration, learning and growth for medical students on a path towards achievement of the MD degree. In order to qualify for the Flexible MD program, a student must propose to the Flexible MD Oversight Committee an academic project or experience that will serve as an alternative or addition to the standard curriculum, that is designed to achieve personal educational goals, and that provides an alternative to achieve specified competencies as part of progress towards the MD degree. The Flexible MD Program may take up to one year. Students must have successfully completed all Year 1 and 2 courses and be in good academic standing to be eligible. All proposals must be approved by the Flexible MD Oversight Committee. Those students who are approved will be monitored by the COSSS.

D. SUCCESSFUL COMPLETION OF THE USMLE STEP 1 AND STEP 2 CK AND STEP 2 CS EXAMINATIONS

Students are expected to successfully complete Years 1 and 2 curriculum and Step 1 of the United States Medical Licensing Examination (USMLE) within four years from the student's beginning date of enrollment, and the Years 3 and 4 curriculum and USMLE Step 2 CK and CS within a three year period, not to exceed seven years total from the beginning

date of enrollment. Students enrolled in dual degree programs such as the MD/PhD program or others (i.e., MD/MPH, MD/JD, MD/MHI, MD/MS in Biomedical Engineering, and MD/MBA) are granted additional time as long as they otherwise remain in good academic standing in the Medical School. Students who fail to meet these expectations must appear before the COSSS to request permission to remain in the program. Failure to receive permission constitutes evidence of failure to make satisfactory academic progress and will trigger a hearing for dismissal.

It is the policy of the Medical School, as approved by the Executive Faculty, that each student must pass Step 1, Step 2 CK, and Step 2 CS of the United States Medical Licensure Examination (USMLE) before receiving the MD degree. Passing standards are those established by the NBME. Year 2 students on the Minneapolis campus and transfer students from Duluth taking the Step 1 Examination for the first or second time may enroll in the Year 3 curriculum pending notification of the results. Under no circumstances will such a student be permitted more than 18 weeks of clinical work before receiving notification of passing USMLE Step 1. Students receiving a failing Step 1 score for the second time may not enroll in any additional clinical work. Students accepted on transfer from all other medical schools must provide evidence of having passed Step I before commencing clinical work.

E. GRADUATION

Graduation from Medical School requires successful completion of all basic science coursework, completion of the required clinical courses in Years 1 and 2, and the required number of clinical credits in Years 3 and 4, and successfully passing Step 1, Step 2 CK and Step 2 CS of the United States Medical Licensure Examination.

III. REFERRALS TO COSSS

Student issues brought to the attention of the COSSS may or may not require the individual student to meet directly with the Committee. If an appearance is required, a written notice will be sent by the Associate Dean for Students and Student Learning.

A. DECELERATED PROGRAMS

Requests for a decelerated program during Years 1 and 2 and extension of Years 3 and 4 beyond two years require approval of the COSSS. Students must submit adequate reasons and/or documentation in support of any request that will extend graduation beyond the traditional four years (see II.C. for details on the Flexible MD Program). A student desiring an extended clinical program must submit a "Delayed Graduation Request Form" (available in Office for Medical Education) or a letter stating the reason for the request and a description of the proposed extension to the COSSS at least two months prior to the requested effective date. The COSSS also may recommend or require a student with academic difficulties or other problems to be placed on a decelerated program.

B. LEAVES OF ABSENCE

Leaves of absence are granted to students at the sole discretion of the COSSS. Students must submit adequate reasons and/or documentation in support of a leave of absence request. Reasons for leaves include, but are not restricted to, the pursuit of academic research and study, academic difficulties and personal or health issues. The approval process for the Flexible MD Program includes a request for delay of graduation. A student desiring a leave of absence must submit a completed and signed "Request for Leave of Absence" form (available in the Office for Medical Education) or letter stating the purpose for the leave and its anticipated duration, to the COSSS at least two months prior to the requested effective date. The Committee may also require a student to take such a leave. If a decision regarding a leave of absence needs to be made prior to the next COSSS meeting, the Chair may act of behalf of the Committee. This decision will be reviewed at the next COSSS meeting. Leaves are granted for a specific period of time. Two months prior to the end of that period of time, the student must either request permission to return from the leave or file for an extension. If the student fails to contact the Committee when the leave expires, the COSSS will hold a hearing for dismissal.

C. ACADEMIC PROGRESS AND PERFORMANCE REVIEWS

The COSSS will review the academic performance of each student to assure that he/she is making satisfactory academic progress. The COSSS will request this information from the Basic Science and Clinical Course Directors and/or the Associate Dean for Students and Student Learning. Students experiencing performance difficulties may be required to appear before the COSSS or its subCommittee for further review.

D. BASIC SCIENCE OR CLINICAL COURSE FAILURES

Students who have failed any basic science or clinical course must appear before the COSSS or its subcommittee who will report to the full committee. If a student is granted permission to re-take a course and fails the course again or fails any other clinical or basic science course, a hearing for dismissal will be held.

E. NON-SATISFACTORY ACADEMIC PROGRESS

At the discretion of the COSSS, a student who has not completed a basic science course or clinical rotation on schedule, or who has failed to make satisfactory academic progress in completing the basic science or clinical curriculum as prescribed, may be required to appear before the COSSS.

F. USMLE STEP 1, STEP 2 CK OR STEP 2 CS FAILURES

The Committee on Student Scholastic Standing has established the following policies with regard to the United States Medical Licensing Examinations:

1) Students who fail to pass Step 1 after two attempts, or either part of Step 2 – Clinical Knowledge (CK) or Clinical Skills (CS) – after one attempt must appear before the COSSS or meet with a Committee representative to obtain permission to retake the licensing examination. The Committee may recommend or require remedial action before the student retakes the exam.

2) Failure to pass Step 1 after three attempts or either part of Step 2 – Clinical Knowledge (CK) or Clinical Skills (CS) – after two attempts will result in a hearing for dismissal at which time the student's entire academic record will be considered.

G. BEHAVIORAL, CONDUCT CODE OR PROFESSIONALISM VIOLATIONS

Any student who has violated any policy of the medical school may be required to appear before the COSSS. At that time, the student's entire academic record will be considered and the COSSS may impose sanctions, make recommendations, and/or decide to hold a hearing for dismissal.

IV. COSSS DECISIONS AND OUTCOMES

The COSSS is empowered by the Executive Faculty to make decisions which can affect, alter, modify or even halt a student's academic progress. The COSSS may make its decisions with or without the student's consent or approval. Students who wish to challenge or appeal decisions made by the COSSS may do so, but only in accordance with the terms and guidelines found in Section IV: Hearings and Appeals.

A. ACADEMIC DIFFICULTIES (BASIC SCIENCE, CLINICAL SCIENCE AND USMLE)

Students who experience academic difficulty will be required to appear before the COSSS. At its discretion, the Committee will then determine whether the student shall be:

- 1) allowed to continue academic progress without interruption;
- 2) allowed to continue academic progress at a reduced academic load;
- 3) required to suspend academic progress in Medical School until specified conditions are met;
- 4) given the opportunity to take re-examinations, if available;
- 5) complete defined remedial coursework;
- 6) placed on academic probation; or
- 7) subject to a hearing for dismissal.

B. NON-SATISFACTORY ACADEMIC PROGRESS

The Committee may subject students who have failed to make satisfactory academic progress to a number of options including, but not limited to:

- 1) Allowing the student to complete the currently enrolled course;
- 2) Granting a leave of absence, or
- 3) Recommending a hearing for dismissal.

C. BEHAVIORAL, CONDUCT CODE OR PROFESSIONALISM VIOLATIONS

The Committee may subject students who have violated the [University of Minnesota Student Conduct Code \(pdf\)](#), [Medical Student Professionalism Code](#) or the [Statement of Intellectual Responsibility](#) to a number of options including, but not limited to:

- 1) Allowing the student to continue academic progress without interruption;
- 2) Requiring that certain conditions be met to resume academic progress;
- 3) Imposing a leave of absence;
- 4) Suspending academic progress in Medical School until specified conditions are met;
- 5) Requiring additional or specially-designed coursework;
- 6) Requiring participation in programs outside of the Medical School; or
- 7) Recommending a hearing for dismissal.

V. ACADEMIC STANDING AND SATISFACTORY ACADEMIC PROGRESS

A. GOOD ACADEMIC STANDING

Students are in good academic standing when they obtain a passing grade in each course in the curriculum, complete other requirements including Milestone Examination, and make satisfactory academic progress toward degree completion. In order to make satisfactory academic progress, students must adhere to the established Medical School schedule for degree completion within four years of the beginning date of enrollment, including satisfactory completion of

the established curriculum in each successive term. The COSSS may modify this schedule by giving a student permission for a leave of absence, part-time status or other modified programs, such as the Flexible MD.

Even with modifications approved by the COSSS, students will be expected to complete Years 1 and 2 curriculum and USMLE Step 1 within four years of the beginning date of enrollment, and the Years 3 and 4 curriculum and USMLE Step 2 within a three-year period, not to exceed seven years total from the beginning date of enrollment, with the exception of those enrolled in the MD/PhD or other dual degree programs as noted above. Students who fail to meet this expectation are not making satisfactory academic progress and must appear before the COSSS ([see III. Referrals to COSSS](#)).

B. ACADEMIC DIFFICULTIES

At Risk Status. An important function of the COSSS is to help the student attain satisfactory academic performance. If a student has received a failing grade (N) or an incomplete grade (I) in any basic or clinical course, or has failed the USMLE Step 1 or Step 2 CK or Step 2 CS once, the student is notified by letter from the Associate Dean for Students and Student Learning, and placed on "At Risk" status. The student may be required to meet with the COSSS. Note that students placed on At Risk status are no longer in good academic standing. Students on At Risk status who experience further academic difficulties may be placed on Academic Probation, or be subject to a hearing for dismissal.

Students with a grade of N in a basic science or clinical course must appear before the COSSS to receive permission to take a re-examination, or to repeat the course. Students who successfully pass the course through re-examination or by repeating the course return to good academic standing. Failure to pass the course on re-examination or by repeating the course will result in the student being placed on Academic Probation (see below, 2. Academic Probation) and will trigger a hearing for dismissal.

In certain cases the COSSS may determine the circumstances surrounding a course failure are of sufficient concern to justify placing the student on Academic Probation (see below, 2. Academic Probation).

Any student who has questions concerning overall academic progress in Medical School, is encouraged to make an appointment to discuss the matter with the Associate Dean for Students and Student Learning. Students may also be placed on At Risk status by the COSSS if, in the Committee's judgment, the student is not demonstrating progress on an approved decelerated schedule.

Academic Probation. Students with continuing and/or more serious academic deficiencies including any of the following will be placed on Academic Probation:

- a) Students who fail a basic science or clinical course upon re-examination or after re-taking the course,
- b) students with two failures on USMLE Step 1,
- c) students with one failure on USMLE Step 2 CK or Step 2 CS,
- d) and any student who otherwise fails to make satisfactory academic progress toward degree completion.
- e) In addition, any student who has previously failed a course (irrespective of whether they had subsequently passed the course via re-examination or retake) will be immediately placed on Academic Probation should they fail a second course.

Students placed on Academic Probation will meet with the COSSS. At the conclusion of this meeting the COSSS members will determine whether to continue the student on Academic Probation, or to hold a hearing for dismissal. Students who are placed on Academic Probation will be provided with written notification of the conditions they must satisfy in order to return to good standing. Failure to satisfy these conditions will trigger a hearing for dismissal.

VI. DISMISSAL HEARINGS AND APPEALS

Serious academic deficiencies or other violations of Medical School or University policies, including but not limited to those outlined herein, may result in a student dismissal from Medical School. While it is anticipated that in many instances students who receive notification of a hearing for dismissal are likely to already have been placed on At Risk or Academic Probation status, it should be understood that under appropriate circumstances a student previously in good academic standing could be subjected to a hearing for dismissal.

A hearing will be held by the COSSS prior to dismissal. The hearing is intended to allow presentation of relevant facts and arguments to the COSSS before a decision is reached. At that time the student's entire overall performance in Medical School and other pertinent information about the student's qualifications to become a physician will be reviewed. Based on that review and on evidence presented at the hearing, the COSSS will render its decision. As an alternative to dismissal, the COSSS may require successful completion of remedial course work or modifying the standard curriculum.

A. GROUNDS FOR DISMISSAL OR OTHER ACTION

Grounds for dismissal from the University of Minnesota Medical School by the COSSS include, but are not limited to:

Academic Deficiencies. A student may be required to take remedial work or may be dismissed for failure to demonstrate satisfactory academic performance including, but not limited to, any one of the following:

- a) One or more failures in Medical School coursework;
- b) Three failures on USMLE Step 1 or two failures on Step 2 CK or Step 2 CS;
- c) Failure to satisfactorily complete any required Medical School course; or
- d) Failure to make satisfactory academic progress.

Behavioral, Conduct Code or Professional Violations. A student will be subject to COSSS recommendations, sanctions or dismissal for the following behaviors:

- a) Conduct which violates any of these behavior codes: [University of Minnesota Student Conduct Code \(pdf\)](#), [Medical Student Professionalism Code](#) or the [Statement of Intellectual Responsibility](#); policies/rules of affiliated sites which apply to students in a clinical experience.
- b) Conduct which violates behavioral and/or ethical standards of the medical profession; disrupts the operations of the University, Medical School or clinical training sites; or disregards the rights or welfare of patients, fellow students, Medical School clinical staff or other individuals.
- c) Unlawful conduct or improper behavior within or outside the University of Minnesota community which impairs the student's capacity to function as a medical student/prospective physician.

B. PROCEDURES FOR HEARING TO CONSIDER DISMISSAL

1) While considering dismissal, the COSSS will be guided by considerations of fairness to the student and other persons involved. Any student subject to a formal hearing to consider dismissal will be given the opportunity to be present before the COSSS, and the hearing will be recorded. An oral recording of the hearing will be available to the student within thirty (30) days from the date of the hearing.

2) Students will be sent written notice of such a hearing at least ten (10) days before the hearing date. The notice will include a statement of the grounds for possible dismissal.

3) The COSSS will consider as evidence in a case all material contained in the student's file in the Office for Medical Education, grades and examination scores, documents submitted at the hearing, and the statements of all witnesses appearing before the COSSS.

4) Students who are the subject to a hearing may:

- a) Examine their student file prior to or at the hearing.
- b) Examine witnesses appearing before the COSSS and present their own statement and/or the statements of their witnesses.
- c) Have an advisor appear at the hearing. The advisor may be a faculty member, fellow student, attorney, or any other person. If students intend to have an advisor present they must notify the COSSS of the advisor's name and status two days prior to the scheduled hearing date.

5) A quorum of 2/3 of voting members must be present to conduct the hearing. At the beginning of the hearing, students have the right to challenge any member of the COSSS whose objectivity they feel is in question. Likewise, COSSS members are permitted to voluntarily remove themselves from a hearing. The COSSS will rule on all challenges.

6) All witnesses will be advised that the proceedings will be recorded.

7) In an executive session after the hearing, the COSSS members hearing the evidence will reach a decision by simple majority vote.

8) For students subject to a dismissal hearing on academic grounds, the COSSS may:

- a) Continue the student's present enrollment in the curriculum on either a full-time or part-time basis.
- b) Place the student on Academic Probation or At Risk status with specific criteria to satisfy in order to return to good academic standing and/or remain in the Medical School.

c) Require the student to stop academic progress in order to receive appropriate intervention before being allowed to proceed in the full curriculum. Re-entry in the full curriculum is contingent upon successful completion of the designated remedial program.

d) Interrupt the student's curriculum for a specified period. At the end of the stipulated time, the student may petition for permission to resume the full curriculum. Failure to contact the COSSS at that time will be interpreted as a resignation from Medical School.

e) Dismiss the student from Medical School.

9) For students found to have committed non-academic behavioral violations, the COSSS may impose disciplinary sanctions, including but not limited to: warning, required compliance, probation, suspension and/or dismissal. Such sanctions will become a permanent part of the student's academic file.

10) The COSSS will notify the student of its decision and provide the student with a statement of the reasons for the decision.

11) Students may submit a written request to the COSSS for reconsideration of the decision within ten (10) days of the hearing, but only upon the basis of new information not reasonably available at the time of the hearing.

12) Following reconsideration, decisions of the COSSS are final, subject to the student's right to appeal findings of behavioral violations to the Provost's Appeal Committee.

VII. STUDENTS WITH PERSONAL, MEDICAL OR EMOTIONAL PROBLEMS

The COSSS considers the student as a whole person and realizes a student may have personal, medical or emotional problems which contribute to the student's academic deficiencies and/or behavioral violations. These problems may be recognized by the student, faculty members, fellow students, or the COSSS.

If the problem is substance abuse/dependence the student will be required to follow a standard monitoring plan developed by the Medical School. This monitoring information does not become a permanent part of the student's file unless the student violates the plan. If this occurs, the student must meet with the Associate Dean for Students and Student Learning and/or COSSS chair, who will determine whether the student is required to appear before COSSS.

When a student appears before the COSSS based either on academic deficiencies or alleged behavioral violations, the Committee may recommend evaluation and/or counseling for the student if it determines that personal, medical or emotional difficulties have contributed to the student's situation. The student's progress in addressing these difficulties may be a factor in the Committee's decision regarding the student's status in the Medical School. If a student with academic deficiencies or behavioral violations is placed on a mandatory leave of absence, the student may be required to demonstrate progress in treatment or counseling as a condition of re-entry into the Medical School and continuing student status. The student's provider must provide a letter to COSSS certifying that the student is ready to re-enter medical school. Any evaluation or treatment information transmitted to the COSSS is private, will be maintained separate from the student file and will not be released outside the Committee without the written consent of the student, except as legally required.

Appendix

MSTP Executive Oversight Committee (August 2012)

Yoji Shimizu, PhD
Peter Bitterman, MD
Susan Shurson, MA
Kathy Watson, MD

Ted Thompson, MD
Marshall Hertz, MD

MSTP Director
MSTP Associate Director
MSTP Assistant Director
Senior Associate Dean for Undergraduate
Medical Education
Medical School Lead Academic Advisor
Medical School Faculty Advisor for MSTP
students

MSTP Steering Committee
(August 2012)
mdphd-committee@lists.umn.edu

Yoji Shimizu, PhD	Laboratory Medicine and Pathology
Peter Bitterman, MD	Medicine
Susan Berry, MD (2013)	Pediatrics
Daniel Mueller, MD (2013)	Medicine
Paul Mermelstein, PhD (2013)	Neuroscience
Anna Petryk, MD (2013)	Genetics, Cell Biology & Development
Kristin Hogquist, PhD (2013)	Laboratory Medicine and Pathology
Carol Lange, PhD (2014)	Medicine
Michael Georgieff, MD (2014)	Neuroscience
Sharon Murphy, PhD (2014)	Biochemistry, Molecular Biology & Biophysics
John Osborn, PhD (2014)	Integrative Biology & Physiology
Logan Spector, PhD (2014)	Pediatrics
Bryce Binstadt, MD PhD (2015)	Pediatrics
William Engeland, PhD (2015)	Neuroscience
Lisa Schimmenti, MD (2015)	Pediatrics
Kylie Walters, PhD (2015)	Biochemistry, Molecular Biology & Biophysics
David Potter, MD PhD (2015)	Medicine
Chun Wang, PhD (2016)	Biomedical Engineering
Dan Kaplan, MD, PhD (2016)	Dermatology
Erik Peterson, MD (2016)	Medicine
Angela Panoskaltis-Mortari, PhD (2016)	Pediatrics
Li-Na Wei, PhD (2016)	Pharmacology
Martin Dworkin, PhD*	Microbiology
Christine Lambert	Student Representative
Sakeen Kashem	Student Representative
Tucker LeBien, PhD**	Laboratory Medicine and Pathology
Theresa Baultrippe**	Medicine School Admissions

*emeritus

**ex officio

MSTP Student Advisory Committee
(August 2012)
mstp-student-advisory@lists.umn.edu

Mithun Sheno, PhD	2013	2004 entering class
Angela Hewitt	2013	2005 entering class
Christine Lambert*	2013	2006 entering class
Charlie Billington	2014	2006 entering class
Brian Andersen	2013	2007 entering class
Ryan Nelson	2014	2007 entering class
Ben al-Haddad	2013	2008 entering class
Shawn Mahmud	2014	2008 entering class
Alexa Weingarden	2013	2009 entering class
Judit Perez-Ortiz	2014	2009 entering class
Cameron McDonald-Hyman	2013	2010 entering class
Sakeen Kashem**	2014	2010 entering class
Amritha Yellamilli	2013	2011 entering class
Matt Wheelwright	2014	2011 entering class
Michelle Corkrum	2013	2012 entering class
Cliff Csizmar	2014	2012 entering class

*Steering Committee Student Representative

**SAC Chair and Steering Committee Student Representative

MEDICAL SCIENTIST TRAINING PROGRAM (MD/PhD)
University of Minnesota
Professional Development Plan

One important component of the MSTP Annual Progress Report is to develop and refine a Professional Development Plan. The purpose of this plan is to: 1) identify professional goals and objectives; 2) assess your skill set relative to your career goals; and 3) develop a plan to acquire skills and competencies necessary to achieve your short- and long-term career objectives.

An important component of this process is to conduct a self-assessment of your skills, strengths, and areas that need further development. You can engage mentors, faculty, colleagues and friends in the assessment process. With your specific career goals in mind, list individual goals for the next year. Think about methods to achieve these goals, methods to assess progress and a plan for time management to accomplish these goals within a one year time frame. Implement your plan by discussing your goals with your mentors, enlisting the assistance of your mentors in the implementation, and periodically reviewing your progress.

The questions below are to assist you in thinking about your specific objectives and goals in each area.

Academics

- Am I spending enough time and effort on my coursework in order to learn what I need to know?
- Am I adequately prepared for the USMLE Step 1 exam?
- What courses will provide me with the foundational knowledge needed in my field(s) of interest?
- What courses will provide me with the specialized background needed in my field(s) of interest?
- What primary literature should I be reading?
- How do I learn about new developments in my field?

Clinical Skills

- What clinical skills do I need?
- How will I maintain my clinical skills during the graduate phase?
- Am I able to effectively integrate clinical medicine with basic research and vice versa?
- Do I have a plan for identifying a clinical area for my residency and fellowship?

Research

- What laboratory skills do I need?
- Am I spending enough time and effort in the lab to accomplish my goals?
- Am I managing my time for experiments, reading and writing?
- Can I plan and execute an experiment and record the results in a form that could be published?
- Can I interpret my results and assimilate new knowledge to formulate good scientific questions?
- Am I thinking creatively, troubleshooting my own experiments, and developing my independence?
- Am I willing to learn new techniques and to take risks?
- Do I have a clear plan for completing my PhD thesis research?

Funding

- What grants will I apply for and when are the deadlines?
- What feedback have I received on my grant writing skills?
- How will I improve my grant writing skills?
- Can I write an original and competitive research proposal?

Publications

- Have I developed a focused set of goals that will lead to publication of a paper?
- How do I efficiently translate results into publication quality data?
- How far away am I from my first publication?
- How can I improve my writing?

Conferences

- Have I presented my work and/or attended a scientific meeting?
- How can I improve my presentation skills?
- Am I increasing the depth and breadth of my knowledge by attending seminars within and outside of my field?

Networking

- Have I formed appropriate support relationships with mentors, peers and administrative staff?
- Do I have opportunities to network with individuals who will be a good fit for my future career aspirations?
- Who are key contacts, in addition to my thesis advisor, for editing and helping me think through ideas?
- Am I discussing my timetable for completion and career plans with my mentors?

Leadership skills

- How can I improve my multi-tasking skills?
- Am I seeking out and taking advantage of opportunities to present my research?
- Do I ask questions and enter into discussions in seminars, conferences and journal clubs?
- What opportunities have I had to develop skills related to conflict management?
- Have I had opportunities to supervise others and to serve as a mentor?
- What leadership experiences have I had that have allowed me to identify objectives, implement plans and acquire decision making skills?

Career Goals

- What are my short-term career goals? How will I achieve these goals within the next two to five years?
- What are my long-term career goals? How will I achieve these goals within the next 10 to 15 years?
- Am I thinking ahead about my next career stage having evaluated my strengths, weaknesses, and passions?