This handbook is meant to as a guide and resource related to governance of the PMB Graduate Program. This is one of three handbooks that are maintained by the PMB Graduate Program, the other two are the Graduate Student Handbook and the Graduate Faculty Handbook.

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Revised August 2020 by Sara Eliason, Peter Tiffin, and Peter Kennedy
Plant and Microbial Biology program overview

The Plant and Microbial Biology (PMB) Graduate Program strives to provide outstanding interdisciplinary education for careers in academia, industry, government, and public service. The program is committed to supporting diversity in both scientific pursuits and the community of people conducting that science.

The graduate program seeks to recruit and train students from wide variety of backgrounds and experiences and to provide them with:

- interdisciplinary educational, research, and professional development experiences;
- opportunities to work on a broad range of cutting-edge research topics in plant and microbial biology;
- opportunities to conduct independent research and develop as innovative educators;
- opportunities to participate in the national and international plant and microbial biology research community through seminars, colloquia, and conferences.

The PMB program expects students to develop the conceptual understanding, analytical skills, and technical knowledge that allow those students to make important contributions to our understanding of biology and that lay the foundation for professional success.

PMB handbooks and records

The three PMB handbooks (student, faculty, and governance) are intended to provide students and faculty in the PMB program with guidance on the expectations, requirements, and rules of the program. Because the requirements, expectations, and opportunities change, these documents need to be revised with some frequency. The GPC and DGS will review and update all three handbooks annually. For larger revisions, the GPC and DGS will consult with the PMB Steering Committee and PMB Graduate Program Faculty.

Petitions to change procedures, policies, and guidelines described in the handbooks are reviewed by the PMB Graduate Program Steering Committee. Upon the recommendation of the Steering Committee, proposed changes may be circulated among the program faculty. Members of the faculty may request a majority vote by the full faculty on any proposed change. This majority is defined as a simple majority of those voting on a given issue. Voting may occur electronically or during a meeting of the graduate faculty. Should no faculty member request a vote, proposals may be enacted by unanimous consent of the Steering Committee. Program changes, including matters of compliance with University policy, are enacted by notifying faculty and students electronically and by updating the program handbooks.

A record of decisions regarding the PMB program is available in the PMB decision record file: seliason:PMB\adminPMB\PMBdecisionrecord.xlsx.

Documentation of PMB program management processes and timelines are available in the:
  > standard operating procedures (seliason:PMB\adminPMB\PMBgradprogramSOP.docx),
  > annual calendar (seliason:PMB\adminPMB\annualcalendar.xlsx), and
  > PMBDGSTimeline (seliason:PMB\adminPMB\PMBDGSTimeline.docx).
Key People and Program Resources

**ACADEMIC PROCESS, RESOURCES, SUPPORT, FUNDING, ETC.**

Dr. Peter Kennedy  
Associate Director of Graduate Studies (DGS)  
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Dr. Candice Hirsch  
Associate Director of Graduate Studies (ADGS)  
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Sara Eliason  
Graduate Program Coordinator (GPC)  
140 Gortner  
selias@umn.edu   |   612.625.4222

**PHYTOGRADS – PMB GRADUATE STUDENT ORGANIZATION**  
Kelsey Peterson  
Ph.D. student and Phytograds president  
pet02786@umn.edu

**HUMAN RESOURCES OFFICE — IN SNYDER HALL**  
Kelsey Cook  
Graduate assistant appointments  
cookx632@umn.edu
Graduate faculty

**Membership**
Members of the graduate faculty for the PMB Graduate Program represent a broad array of administrative units within the University. All faculty members in the Department of Plant and Microbial Biology are automatically members of the PMB Graduate Program Faculty. Eligibility for faculty members outside of the PMB department is based on the applicant’s research record, their stated and potential contribution to the educational mission of the program, as well as the University Policy on the Eligibility to Serve on Graduate Committees: [https://policy.umn.edu/education/gradexamcommittee](https://policy.umn.edu/education/gradexamcommittee).

**Application Procedure**
Prospective PMB Graduate Program faculty members send a curriculum vitae and a letter to the DGS, expressing a commitment to participate in the program and acknowledging the responsibilities of graduate faculty. The Director of Graduate Studies (DGS) circulates these materials among the Steering Committee, which arrives at a decision on behalf of the program faculty. A simple majority of Steering Committee members must favor the nomination. (DGS and Associate Director of Graduate Studies are voting members. The DGS determines the result if the vote is tied). University faculty members seeking to join the PMB program are encouraged to present a research seminar in the PMB Colloquium.

**Participation**
Faculty members are expected to participate in the program annually through activity in at least one or more of the following activities:

- participate in program governance by serving on a committee, as ADGS, or as DGS;
- teach courses for graduate credit within the graduate program;
- host rotations for first year students;
- participate in prospective student recruiting, campus visit events, and interviews;
- serve as an advisor of a PMB student, or on PMB advisory or examination committees; and
- regularly attend PMB-sponsored seminars, PMB graduate program faculty meetings, and annual retreats.

The Steering Committee may periodically review faculty participation. Faculty who do not contribute to the program over a period of two years may be asked to renew their commitment to participate in some capacity or withdraw from the program.

**Graduate Faculty Meetings**
A meeting for the full graduate program faculty will be held each fall semester. At this meeting the DGS presents the state of the program budget and discusses any recent or proposed changes in governance, curricula, or program composition. PMB Graduate Program faculty members are expected to attend.

**External Committee Member**
People from outside the University may participate on students’ advisory and examination committees. The outside members must bring scientific expertise that cannot be found among the faculty at the University of Minnesota. To request an external committee member, the requesting student and their advisor must send letter of request and the proposed committee member’s CV to the DGS. If the DGS approves the committee member, then the DGS asks the CBS Associate Dean for Graduate Studies to approve of the appointment.
Program Leadership

The PMB program involves a partnership between the College of Biological Sciences (CBS) and the College of Food, Agricultural, and Natural Resource Sciences (CFANS). This partnership, which includes financial support from both colleges, is based on a memorandum of understanding that is reviewed every five years. The leadership team within the PMB Graduate Program include the CBS Dean and Associate Dean for Graduate Education, the CFANS Associate Dean for Research and Graduate Programs, the PMB program Director of Graduate Studies, the PMB program Associate Director of Graduate Studies, and the Head of the Department of Plant and Microbial Biology.

Members of the PMB graduate faculty serve the positions of Director of Graduate Studies (DGS), Associate Director of Graduate Studies (ADGS), and the Steering Committee for terms of two or three years each. The ADGS typically advances to the position of DGS.

The PMB department head identifies candidates for ADGS in consultation with program faculty, heads of affiliated departments, or by an ad hoc nominating committee at the head's designation. The appointment of faculty who agree to serve as ADGS and/or DGS is subject to a majority vote of the graduate faculty. This majority is defined as a simple majority of those voting. Voting may be in person or electronic.

Faculty appointments to the Steering Committee are subject to a majority vote of the graduate faculty. Other PMB graduate program committees including Admissions, Awards, Colloquium, and ad hoc committees are appointed by the DGS. Committee membership is expected to maintain disciplinary diversity and terms are staggered to maintain a level of experience on each committee.

Student Involvement

The PMB graduate students will nominate representatives to serve on the Steering and Colloquium committees. The representative to the Steering Committee is typically the PMB graduate student association (Phytograds) president. The Phytograds president also attends the PMB graduate faculty meetings. The Colloquium Committee and the organization of the annual PMB retreat each require student participation.

Director of Graduate Studies (DGS)

The Director of Graduate Studies (DGS) is a member of the PMB graduate faculty who was elected as the previous Associate Director of Graduate Studies. The primary administrative responsibility for the conduct of program affairs is vested in the DGS. The DGS consults with the ADGS and the Steering Committee on matters that require a broad base of input from the various areas of specialization within the program.

This individual serves a multi-year term, either 2 to 3 years depending on arrangement with other members of the PMB graduate program leadership. The term begins on July 1. A faculty member may serve multiple terms as DGS, but may not serve two consecutive terms in PMB graduate program leadership.

The DGS is provided with an augmentation, which they may take as summer salary or research funds. As of academic year 2020-2021, this augmentation is $10,000 per year and paid out of the Department of Plant and Microbial Biology funds, not PMB Graduate Program funds.
The Graduate School policy on the DGS appointment, roles, and responsibilities is online at https://policy.umn.edu/education/appointdgs.

The primary responsibilities of the DGS are to:
- provide academic guidance and oversight;
- manage academic operations including coordination of funding, aid, and fellowships;
- ensure responsible mentorship and student advising;
- resolve conflicts between students and advisors;
- address and report on incidents of academic dishonesty and sexual harassment;
- report on the financial resources allocated to the program;
- recruit and appoint members of the standing committees (admissions, awards, colloquium);
- monitor and develop program metrics, including student success and placement;
- develop strategies to increase the quality and diversity of the student body;
- coordinate reporting to the Graduate School, CBS, and CFANS administration; and
- oversee and participate in recruiting activities and the new student orientation at Itasca.

The DGS consults with the PMB department head and CBS and CFANS associate deans to:
- determine the size of the recruitment class, in order to prevent cost overruns;
- manage and evaluate financial resources;
- review the program and curriculum;
- resolve student/advisor conflicts;
- address concerns related to academic dishonesty and sexual harassment; and
- develop new courses or course requirements.

**ASSOCIATE DIRECTOR OF GRADUATE STUDIES (ADGS)**
The Associate Director of Graduate Studies (ADGS) is a member of the PMB graduate faculty and is elected by a majority of the graduate faculty.

1. The PMB department head identifies candidates for ADGS in consultation with program faculty, heads of affiliated departments, or by an ad hoc nominating committee at the head's designation.
2. The appointment of faculty who agree to serve as ADGS and/or DGS is subject to a majority vote of the graduate faculty. This majority is defined as a simple majority of those voting. Voting may be in person or electronic.
3. The PMB department head then requests approval from the CBS associate dean for graduate education for the incoming ADGS.

Appointment of the ADGS is expected to occur at least 1 year before the end of the current DGS term. The term begins on July 1. A faculty member may serve multiple terms as ADGS, but may not serve two consecutive terms in PMB graduate program leadership. The primary responsibilities of the ADGS are to:
- attend meetings of the steering committee;
- chair the admissions committee in the year preceding their rise to DGS;
- participate in the new student orientation at Itasca in the year preceding their rise to DGS;
- meet weekly with the DGS and GPC in the semester preceding their rise to DGS; and
- other responsibilities as agreed upon by the DGS and ADGS.
STEERING COMMITTEE

The Steering Committee consists of the DGS, the ADGS, four PMB graduate faculty representing disciplinary areas, the GPC, and a graduate student representative elected by the graduate students (usually the PMB student association, Phytograds, president). The GPC and the graduate student representative serve as ex officio members and do not vote. To facilitate representation of the diverse fields represented by the PMB program, the Steering Committee should include representatives from each of four disciplinary areas: (i) Genetics, Genomics, and Computational Biology, (ii) Cellular, Molecular, and Developmental Biology, (iii) Ecology, Evolution, and Phylogenetics, and (iv) Biochemistry, Physiology, and Systems Biology. Whenever possible, the Steering Committee should also consist of members belonging to both of the colleges supporting the program (CBS and CFANS).

Prior to an election of the committee, nominations are solicited from the entire graduate program faculty. The two faculty members receiving the most nominations in each area are asked to stand for election and the member in each area with the most votes is elected to a two-year term. Typically, two new Steering Committee members are elected each year. Steering Committee members representing disciplinary areas may not serve two consecutive terms (note, if they are elected as ADGS they will serve two terms on the committee, but not as a representative of a disciplinary area).

The Steering Committee:

- consults with and advises the DGS and ADGS on program procedures and policies;
- meets at least once per academic year;
- reviews and approves the PMB program budget;
- votes on nominations to the PMB graduate faculty;
- periodically reviews faculty participation in the program;
- works with PMB students to organize the annual program retreat;
- assists in various aspects of the program as requested; and
- reviews program courses as well as the overall curriculum.

In addition, the Steering Committee is responsible for evaluating applications to the Doctoral Dissertation Fellowship and the Phillip C. Hamm Memorial Scholarship, as well as other awards or funding opportunities that are available through or administered by the PMB Graduate Program. In all cases, the committee provides recommendations to the DGS/ADGS/GPC, and the DGS makes final award decisions. The committee also may be asked to help identify and prepare applications for external funding possibilities, such as training grants.

See seliason:PMB\faculty\pmb_gradfacultylist.xlsx for rotation of steering committee members.

GRADUATE PROGRAM COORDINATOR (GPC)

The Department of Plant and Microbial Biology has administrative responsibility for the PMB Graduate Program. The Department provides a program coordinator to assist students, handle applications, manage program communication, administer the budget and financial resources, and handle other administrative tasks. The DGS and GPC will meet regularly to address program needs, ensure that the program is running smoothly, and identify and respond to issues before they become problematic.
STANDING COMMITTEES
In addition to the Steering Committee, the PMB Graduate Program has three standing committees: Admissions, Awards, and Colloquium. Each of these committees consists of three to four faculty members appointed by the DGS. The membership of these committees should represent the broad spectrum of disciplines represented by the faculty in the Program. Committee terms are for two years, members may serve multiple consecutive terms.

Admissions Committee
The Admissions Committee, which is chaired by the DGS or ADGS (ex officio member of the committee), works with the GPC to review applicants to the PMB program and identify applicants to offer admission. The admissions committee is expected to consider applicants’ experiences and potential for success, program budget and expected budgets in the coming years, interest by one or more faculty members to serve as an advisor, and the composition (in terms of gender, experiences, national or racial identity, disciplinary areas, etc.) of the students currently in the PMB program. In order to allow program faculty to identify potential advisees, the Admissions Committee is expected to make all applications available to all PMB Graduate Program faculty, so that faculty members have an opportunity to express interest in specific applicants. To help in recruiting a diverse student body the admissions committee is expected to fully consider students who have earned undergraduate degrees at the University of Minnesota or nearby institutions.

Some students are admitted to PMB with an identified advisor, while others are admitted with the expectation that they will do rotations before selecting an advisor. Regardless of how students are admitted, the program and thus the faculty in the program have made a commitment to the student’s success. Faculty who have committed to hosting a student on a rotation should view these rotations as an opportunity to recruit that student, not as an opportunity to evaluate the student’s performance for possible acceptance into their lab. It is possible that the program might admit students for whom there are not multiple faculty committed to potentially advise that student. Such students may be admitted, but they should be clearly told that no faculty has committed to serve as their advisor.

Admitted students are sent a letter from the DGS with the details of their financial offer. The program strives to provide full support (a half-time research assistantship or fellowship from departmental, program, University, or external sources plus tuition and health insurance benefits) to all students for one semester of their first year (usually the first semester). In some years, when financial resources are available, the program has been able to support first-year students for the entire first year.

Full details of the PMB admissions process are outlined in the PMB Standard Operating Procedure document (seliason:PMB\adminPMB\PMBgradprogramSOP.docx).

Colloquium Committee
The Colloquium Committee is responsible for organizing a seminar series involving outside speakers, program graduate faculty, and graduate students. The Colloquium Committee includes three to four PMB Graduate Program faculty members and one or two PMB graduate students selected by the Phytograds. The PMB Colloquium is composed of ten seminars per semester, although the number of seminars and invitees from outside of the University of Minnesota will vary from year to year and depend on the number of seminars that need to be presented as part of faculty searches, promotion and tenure proceedings, and budget limitations. Joint hosting of and sharing costs for seminar speakers with other departments or programs (e.g., EEB, APS, BTI) is strongly encouraged.
The Colloquium Committee includes three to four PMB Graduate Program faculty members and two or three PMB graduate students selected by the Phytograds.

The Colloquium Committee is expected to:

- ask PMB faculty and graduate students for potential speakers they are interested in hosting;
- ensure invited speakers include a balance of topics representing the full spectrum of the research interests of PMB program members;
- ensure invited speakers include scientists from diverse backgrounds and experiences;
- provide guidance and support for student-invited speakers;
- formally invite the speaker, or ask the host to invite the speaker; and
- work with departmental staff to arrange travel, accommodations, meals, and advertising of seminars.

Details of PMB Colloquium logistics and guidelines are available in seliason:PMB\events\colloquium\PMBColloquiumResponsibilities2019.docx.

Annual Retreat

An annual PMB Graduate Program retreat will be held each year. All PMB students and faculty members are expected to attend. The retreat provides opportunities for interactions among students and faculty members, discussion of program issues, and highlighting student research. Students organize the retreat with the assistance of a faculty member from the PMB steering committee and the GPC. Some time is usually devoted to a DGS-led discussion of program-related issues. PMB doctoral students in their fourth, fifth, or sixth year are expected to present a seminar as part of the PMB retreat.

The PMB Steering Committee decides on the retreat date, where to hold the event, and which Steering Committee member will act as the faculty retreat organizer. PMB students in their fourth year are the retreat organizing committee.

Processes for planning and running the annual retreat are outlined in the PMB Standard Operating Procedure document (seliason:PMB\adminPMB\PMBgradprogramSOP.docx) and the annual calendar (seliason:PMB\adminPMB\annualcalendar.xlsx).

Prospective Student Campus Visit

A campus visit for prospective students will be held each year during the spring semester. Students will be invited based on selection by the Admissions Committee. The GPC, in consultation with the DGS and members of PhytoGrads, will coordinate the visit. Activities during the visit include meeting with prospective faculty mentors, current PMB graduate students and post-docs, and the Admissions committee. Additional activities include a poster session featuring research by current PMB graduate students, a dinner is typically hosted at the home of a PMB grad program faculty member, tours of facilities on the UMN campus, and opportunities to explore life in the Twin Cities. Prospective students will be provided with accommodation at a hotel during their visit and all of their travel costs will be covered by the program.
Program Funding

PMB GRADUATE PROGRAM
The PMB Graduate Program funding comes from the Provost’s office through the CBS dean’s office as well as the CFANS dean’s office. Each year, both dean’s offices notify the DGS and GPC of the total funding available for program operations in the upcoming fiscal year (July 1 – June 30).

The DGS and GPC have the responsibility for developing the annual PMB program budget, for tracking expenditures, and for advocating for program funding needs with the dean’s offices of both colleges. The DGS and GPC present the draft budget to the PMB Graduate Program Steering Committee at the group’s fall meeting. The Steering Committee may recommend adjustments to the program budget and must approve the budget. The DGS or GPC then presents the program budget to the full PMB Graduate Program faculty at the fall faculty meeting.

PMB Graduate Program funding priorities are to:

- support graduate students with first-year graduate research assistantships, summer fellowships, and the additional student fee costs for international students;
- support development and enrichment opportunities, such as career development funds for students to attend conferences and workshops and running the PMB Colloquium;
- support student community-building and outreach activities; and
- support recruitment of prospective students from diverse backgrounds and experiences.

TEACHING ASSISTANT FUNDING
Teaching assistants for PMB courses are supported from the Department of Plant and Microbial Biology teaching assistant account. The DGS and GPC make teaching assistant assignments based on PMB instructional needs, PMB graduate student financial need, PMB graduate student subject matter expertise, and teaching assistant funding available. Prior to finalizing teaching assistant assignments, the DGS and GPC consult with the PMB department head to ensure courses have sufficient instructional support and sufficient teaching assistant funding is available. PMB courses with labs have priority for teaching assistants. Any other teaching assistant requests from instructors will be honored as funds and graduate teaching assistants are available.

Teaching assistants in general biology classes (e.g., BIOL) are supported from the Biology Teaching and Learning (BTL) teaching assistant account. PMB graduate students who request a teaching assistantship and who are not assigned to a PMB course are recommended to the BTL student services staff for placement as teaching assistant in a general biology course. BTL does not guarantee availability of a specific number of teaching assistant slots in any given semester.

Processes for providing funding to PMB graduate students and assigning teaching assistants are outlined in the PMB Standard Operating Procedure document, seliason:PMB\adminPMB\PMBgradprogramSOP.docx.

STUDENT PAY RAISES
Pay increases for PMB graduate students are considered each year. If a pay raise is approved, it takes effect in the fall semester. To implement a pay raise, the DGS and GPC consult with other CBS and
associated CFANS grad programs on their plans for raises; review current and prospective budget and student numbers; determine the appropriate pay raise (typically 2% to 3%); consult with the PMB Steering Committee on a pay raise proposal and get their vote; and notify students, faculty advisors, grant administrators, and payroll contacts, both in CBS and in other departments.
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<th>Year</th>
<th>Name</th>
<th>Department</th>
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<tbody>
<tr>
<td>2018 – 2020</td>
<td>Robert Stupar</td>
<td>Dept. of Agronomy and Plant Genetics</td>
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<tr>
<td>2017 – 2018</td>
<td>Peter Tiffin</td>
<td>Dept. of Plant and Microbial Biology</td>
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<td>2015 – 2017</td>
<td>Sue Gibson</td>
<td>Dept. of Plant Biology</td>
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<td>2013 – 2015</td>
<td>Cindy Tong</td>
<td>Dept. of Horticultural Science</td>
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<td>2011 – 2013</td>
<td>George Weiblen</td>
<td>Dept. of Plant Biology</td>
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<tr>
<td>2010 – 2011</td>
<td>Gary Muehlbauer</td>
<td>Dept. of Agronomy and Plant Genetics</td>
</tr>
<tr>
<td>2008 – 2010</td>
<td>Jane Glazebrook</td>
<td>Dept. of Plant Biology</td>
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<tr>
<td>2006 – 2008</td>
<td>Jerry Cohen</td>
<td>Dept. of Horticultural Science</td>
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<td>2004 – 2006</td>
<td>Carolyn Silflow</td>
<td>Dept. of Plant Biology</td>
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<tr>
<td>2002 – 2004</td>
<td>David Sommers</td>
<td>Dept. of Agronomy and Plant Genetics</td>
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