GRADUATE STUDENT HANDBOOK

School of Biomedical Sciences

KENT STATE UNIVERSITY

HANDBOOK AND GUIDE FOR GRADUATE STUDENTS IN THE SCHOOL OF BIOMEDICAL SCIENCES

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Background

The School of Biomedical Sciences supports a graduate program dedicated to training researchers and educators involved in all areas of the basic sciences related to biomedicine. This inter-institutional, interdepartmental organization includes more than 100 graduate faculty, whose primary appointments are at Kent State University (KSU), the Northeastern Ohio Medical University (NEOMED), and the Lerner Research Institute (LRI) of the Cleveland Clinic (CCF). Approximately 70 graduate students join these faculty in five program areas: Cell and Molecular Biology, Human Evolutionary Biology, Neuroscience, Pharmacology and Physiology. Our students are expected to excel in all areas of the graduate experience, including coursework, teaching, and research. The following student handbook details these expectations, as well as procedures involved in obtaining a graduate degree. In addition, the University's Guide to Graduate Education can be accessed at: https://www.kent.edu/graduatecollege/academic-policies-forms

Financial Aid

As of Academic Year (AY) 2023-2024, graduate assistantship stipends are $26,000/yr for Ph.D. students and $23,690/yr for M.S. students. Students are expected to participate in graduate education, teaching, and research throughout the year, including summers. Being awarded a stipend involves a service commitment as described below. Graduate assistantships also include full tuition remission and subsidized health insurance for supported students. All registered students have free access to the Student Recreation and Wellness Center until they enroll in Dissertation II credits, at which time it is at the discretion of the program to pay this additional fee.

Please be aware that failure to satisfactorily perform any required duties can result in the termination of funding, regardless of the source of that support. All students are evaluated on an annual basis in order to determine if funding is to be continued for the coming year. Also be aware that funding is normally limited to 5 years of assistantship support for doctoral students and 3 years for master students. Those who have not completed their studies in the allotted time may remain in the program, but they will not receive financial support unless there are extenuating circumstances.

Service Commitment

All students receiving a stipend have service commitments. There are two major classifications: Graduate Assistant - Teaching (TA) and Graduate Assistant – Non-Teaching (RA). Teaching Assistantships (TA) require service as instructors most commonly in a laboratory setting. These assistantships may require up to 20 hours effort per week for 2 of 3 semesters during the academic year. Service performed during summer semester will be counted towards that 600-hour total.

Graduate Assistants – Non-Teaching are most commonly Research Assistants (RA). These students are funded from an advisor's non-school funds, typically a federal grant. RAs are not expected to teach but are required to apply their service commitments to research efforts (typically, 40/wk minus time to attend classes and professional development). Normally these efforts benefit the students since they are carrying out their dissertation research.

It is important to note that in each case, the stipend is for a 12-month appointment. Funded students are expected to continue research throughout the year, with vacation time coordinated with the respective advisor. In addition, any student unable to comply with the service requirement will lose financial support. In the case of a TA, that student must complete each semester's teaching assignment. Also, the TA must provide acceptable teaching, as indicated by student and faculty evaluations. Failure to do so will result in the cancellation of financial support. Similarly, each RA must provide an acceptable level of engagement in the advisor's research activities or be subject to contract termination.

Orientation

There are a variety of orientation events for incoming graduate students. Many of these are organized under Graduate Student Orientation (GSO). This begins the week before semester classes. Incoming students will receive information from the Graduate College about registering for the orientation. Incoming students must keep that week free for orientation activities. More information can be found on the website or contact the Director of Student Services in the Graduate College https://www.kent.edu/graduatecollege/gso

Each student must access Flashline as soon as possible after receiving a Letter of Admission. Flashline is the University portal to connect with the graduate catalog and course schedules. It is also used to register for courses each semester, apply for parking permits, obtain information on financial aid, and receive notifications on campus-wide items of interest. In order to use Flashline, each student must click on "Get Username and Login Help" under the word Flashline, which may be found on the University's opening web page. Open "I'm new to Kent State" and follow the instructions to get started. Help in establishing a Flashline account can be obtained at the Help Desk at 2-4357, or online at support.kent.edu. Students must retain: username, email address and Kent State ID number, in order to maintain communications with the University.

The FLASHcard is the official University ID and is required for all BMS students. New students must take identification with them to the FLASHcard Office, located on the first floor of the Student Center, in order to be issued a card. These cards are used for many things on campus, including using the Wellness Center, checking out library materials and obtaining the 10% discount provided to students at the University Bookstore.

Please keep in mind that the email accounts issued to all students, faculty and staff are used for all official University business. All students, faculty and staff must use their University-provided

email accounts. All information disseminated to BMS students is through their kent.edu e-mail addresses.

Forms

All relevant forms for graduate students can be downloaded and should be completed at the appropriate times during your progression through the degree. The College of Arts and Sciences requires all forms be typed (no handwriting other than signatures). Some forms can be found here: https://www.kent.edu/biomedical/forms-current-graduate-students. All forms need to be sent to the office of the School of Biomedical Sciences.

Advising

New incoming graduate students consult with the Director of the School regarding their courses for the first semester. Prior to the start of the semester, admitted students are provided a list of graduate faculty interested in advising graduate students. Students can read their research descriptions and identify those that interest them. The Director can assist in this process.

M.S. students will work with the Director to find an advisor before or at the start of the fall semester based on their interests. M.S. students do not do formal laboratory rotations, but complete informal mini rotations to help choose a lab by the end of their first semester.

Ph.D. students do three laboratory rotations during the first year, in order to find the best match between student and advisor. Faculty interested in advising students may provide brief presentations on their work during the fall semester seminar series to help students with subsequent rotation selection and to familiarize students with the different types of research going on in the program. Students may contact potential advisors, but they must get the approval of the Director prior to starting a rotation in that faculty member's lab. An approval form must be signed by the advisor and the Director prior to commencing each of the rotations.

Each of the three lab rotations are expected to last approximately half a semester. Students must send an evaluation of the experience to the Director immediately upon completion of the rotation. The evaluation form is found on the web site. In addition, the rotation advisor will provide the Director with a brief description of the student's efforts during that rotation.

Each student must complete a summary form, following the third rotation. This form is also found on the web site and must include a rank-ordered list of potential advisors. Both the students' summaries and the faculty evaluations will be used during the spring semester to match students with the most appropriate advisor. While it is hoped that each student will be placed with her/his first choice, this might not always be possible, due to financial constraints**.** Any student who applies to our program with the expressed desire to work with a specific faculty member may not be required to complete all three rotations if the faculty member

financially supports the student. The same is true for students who are admitted to the program with funding through a specific faculty member.

Students are expected to engage fully in the research experience during each rotation. Students should read the advisors' publications, examine grant proposals, master lab methodologies, and become familiar with the questions each faculty member seeks to answer. Students should attend lab meetings and interact with other lab members, as well as the advisor. Whether or not students fully engage in these processes will be obvious from the evaluations written by the students and the advisors.

Although it is rare for a student to change advisors following the above selection process, it can be done. Students or faculty wishing to terminate the advising relationship must first discuss this with the Director. The Director will then bring the issue to the School's Executive Committee if no simple resolution can be found. The Committee will then direct the student to an appropriate advisor. However, be aware that any student who cannot identify a willing advisor is subject to dismissal. Although a student who does not find a suitable advisor following three rotations may be allowed to add a rotation, the inability to find an advisor by the end of the summer, or after a reasonable length of time in program, will lead to dismissal.

Program Requirements

Coursework

All funded students must register for at least 8 credits in fall and spring semesters and 6 credits in summer semesters in order to be full-time and, therefore, receive a stipend. Failure to maintain those credit levels may result in cancellation of financial support. It is the student's responsibility to make sure that they are properly registered by the start of each semester.

Students must maintain a GPA > 3.0. Failure to do so may result in dismissal from the program, since a GPA > 3.0 is required to graduate as a matter of University policy. In addition, students must accumulate no more than four credit hours below a 2.0 gpa (C- or worse), or seven hours below a 3.0 (B- or worse).

All BMS students are required to take a set of core courses. These include: Introduction to Biomedical Sciences, Responsible Conduct of Research, and one from a choice of statistics courses. Similarly, each program area stipulates core courses and electives, which may be found on the web site. Course substitutions must be approved by the Director.

Course Substitutions and Waivers

Any requests for substitutions must be made prior to enrolling in the course that the student is attempting to use as a substitute. Thus, if a student wants to substitute course B for course A, they should not sign up for course B until their request has been approved. If a student is to be exempted from a required course for their program, the following steps must be followed.

1. The student and advisor must consult with the student's guidance committee to make sure the deviation sought is appropriate in the view of the guidance committee. The student should bring a course substitution/waiver form to the meeting for the committee to sign indicating their approval.
2. The student's advisor must submit a written request, along with the required form, to the Director requesting that a specific deviation be authorized.
3. The rationale must be clearly stated. This rationale is what will be used by the Director in making a recommendation to the Executive Committee, so it must be clear and complete.
4. In the case of arguments for deviations based on prior coursework (i.e., course substitutions), the student must supply to the Director a syllabus, class notes, and any other information available about the prior course. The Director will then solicit a written statement from the instructor of the Kent course, for which the substitution is requested.
5. The Director, in consultation with the Executive Committee, will evaluate the original request and any support documentation and make a determination. This determination will be forwarded to the advisor and student.

Transfer Credit

A maximum of 12 semester hours of graduate credit may be accepted by transfer from accredited institutions provided (1) the work was of "A" or "B" quality; (2) the work fits into the student's program at Kent State; (3) credit is less than six (nine) years old at the time of the master's (doctoral) degree is conferred at Kent State; (4) an official transcript *with an accompanying explanatory letter* is filed in the School; and (5) the student's adviser, Director and the graduate dean approve.

An "accredited" institution is one that is approved or accredited by the appropriate regional accrediting agency (e.g., North Central Association of Colleges and Schools) for graduate-level work.

Guidance Committee

Shortly after each student is matched with an advisor, she/he must form a Guidance Committee. This Committee consists of the advisor plus two graduate faculty members in the

student's program area. The choices are made by the student with input from the advisor. It is best to select members with some interest in the area of research, because they are likely to be more useful as the student progresses.

Requirements for Degree Completion

The requirements for MS students are:

- Course work, including 17 credits of graded courses, with GPA > 3.0
- Guidance Committee Approval
- Program of Study
- Thesis Topic Approval
- Thesis

* Master's students in the School of Biomedical Sciences can also matriculate into the PhD program after completion of no more than 14hrs of coursework, but at least 9-10hrs of coursework, if they meet the PhD entrance requirements and with the approval of their guidance committee and the Director of the School of Biomedical Sciences. Students who wish to matriculate must be in good standing and have enthusiastic support from their advisor and guidance committee.

Checklist that provides the series of events in the timeline to degree completion for master's students: Checklist Masters Program

The requirements for PhD students:

- Course work, a minimum of 17-20 credits of courses is excepted for students entering the program with a bachelor's degree, with GPA > 3.0. Students entering the program with a master's degree should consult with their guidance committee and Director of the School of Biomedical Sciences.
- Program of Study
- Candidacy Exam
- Prospectus
- Publications
- Dissertation

Checklist that provides the series of events in the timeline to degree completion for doctoral students: Checklist Doctoral Program

Program of Study

The Program of Study form is two pages and is available for downloading from our web site (https://www.kent.edu/biomedical/forms-current-graduate-students). The information submitted includes the courses the student has taken, or plans to take, at the graduate level. It

also includes the make-up of the student's Guidance Committee, verification of thesis topic approval for master's students and the organization and timing of the Candidacy Exam for doctoral students. This form should be completed during the third academic semester, with signed approval of the student's Guidance Committee. This committee consists of the student's advisor and two other graduate faculty from that Program Area. For example, a student in the Neuroscience program will need to have an advisor in that area, as well as two other faculty members with graduate appointments in that area.

The Program of Study is used to: 1) determine the adequacy of the student's coursework, including the completion of course requirements in the program, 2) establish the make-up of the student's Candidacy Exam and 3) estimate completion times for the various exams and defenses. The Guidance Committee must agree on the student's course work and the arrangement of the Candidacy Exam. The procedures for this exam are described below. Once the Program of Study is completed and signed, it is emailed to the School office for the approval of the Director and placement in the student's file.

Candidacy Exam

The purpose of the candidacy examination is to test a student's readiness to proceed with their dissertation research, thus is taken at the end of a student's second year in the program. The examination is designed to test a student's mastery of concepts in their field, ability to formulate logical and testable hypotheses and design studies that use feasible methodology and appropriate controls to answer questions in the field, capacity to critically evaluate content to make appropriate conclusions, and aptitude to coherently write and orally present their own ideas.

The Candidacy Exam can be completed in one of two fashions:

Option one:

The written portion of the exam will consist of a grant proposal written by the student, with no input from faculty members. The format of the proposal will be the NIH NRSA fellowship or other common fellowship format. If the NIH format is used, it will consist of three parts, the Specific Aims (1 page max), the Research Strategy (6 pages max, includes Significance and Background and Approach), and Literature Cited.

The topic of the proposal may NOT be the student's area of research but may be in a related field. For example, if the student were studying the role of serotonin receptors in regulating feeding behavior, they could write their proposal on some other aspect of serotonin function, or some other aspect of feeding behavior regulation. The candidacy exam is meant to test the critical thinking and hypothesis development of the student, thus the topic chosen should be sufficiently separated from the discussions and hypotheses being tested in their lab.

The student provides 2-3 potential topics to the committee along with a brief (paragraph) that describes the types of questions they would address in each topic. Ultimately, the topic of the candidacy exam is at the discretion of the committee. The committee should approve a topic that they believe is best suited to evaluate the student. **The student is given 5-6 weeks to write the proposal.** The committee can provide general guidance on the structure of a grant and good grantsmanship but cannot provide input on the content of the grant (e.g., hypothesis development, experimental design, appropriate controls, etc.).

The committee will then evaluate the written proposal to judge the student's knowledge of the background material and the logic of the scientific approach. If they are satisfied, the exam will proceed to the oral portion of the exam, in which the committee members can ask questions about the proposal or background material to ascertain the student's depth of knowledge on the topic, and ability to justify his/her experimental approaches. If the written proposal is judged to be unacceptable, then the student may be given a second chance, at the discretion of the advisory committee. The goal is for the committee to work towards and make a unanimous decision, but in the end at least two of the three committee members must agree to at least a conditional pass for the student to progress forward in the program.

Students will be assigned a grade of either Pass, Fail, or Conditional Pass. Conditional Pass should be used infrequently and only in special circumstances.

<u>Option two:</u>

The written portion of the examination is divided into three parts: the Major, Minor I and Minor II. The questions for each portion are conceived by the Guidance Committee member assigned that section, as shown on the Program of Study form. The committee members suggest readings for the student related to each section. The readings for the Major should provide information more general to the Program Area. For example, a student in Cellular and Molecular Biology might be assigned chapters from textbooks previously used in graduate courses. Readings for Minor I should be more related to the student's future area of research, while those for Minor II should be closely aligned with the student's research. This section is normally handled by the student's advisor. The written portion must be taken within a one-week period. Testing for the Major should be tailored to be completed within eight hours, while the questions for Minor I and Minor II should require approximately four hours each to complete. An example of the labeling of the sections might be: Major – Neuroscience, Minor I – Neurochemistry and Minor II – Neurodegeneration. **The student should be provided approximately 5 weeks to prepare for the written portion of the exam.**

The written portion of the exam can be graded as pass, fail or conditional pass. With a conditional pass, the committee assigns further conditions that must be met by the student, in

order to pass the exam. For example, they may provide more material and follow-up questions or completion of a short paper on a topic. **The student should be provided approximately 3 weeks to prepare for additional examination**.

The oral portion of the candidacy exam should be held as soon as possible following successful completion of the written portion. Most commonly, committee members ask for more detailed answers to questions previously posed in the written part.

Should the student fail either portion of the examination, another opportunity to succeed may be offered, or they may be failed for the Candidacy Exam, which leads to dismissal from the doctoral program. The goal is for the committee to work towards and make a unanimous decision, but in the end at least two of the three committee members must agree to at least a conditional pass for the student to progress forward in the program.

Prospectus

The student's guidance committee is expanded at the time of the Prospectus to include an additional faculty member who does not have graduate faculty status in the student's program area. For example, the added member may come from another BMS program if the faculty does not have graduate faculty status in the program the student is enrolled. Faculty from non-BMS departments at Kent State can also serve as outside members. Alternatively, an accomplished scientist from outside of Kent State may be given temporary graduate faculty status in order to act as the outside member of the committee. An outside member who is not a current member of the school or faculty at Kent State University must submit their CV to the BMS office for consideration of temporary graduate faculty status.

The Prospectus is a brief document in which the student describes the work that they plan to do to complete their dissertation. Preliminary data may be included if available. The purpose of the prospectus is to allow a student's committee to give feedback on the research plan and ascertain that the student understands what it is that he or she is proposing. From the student's perspective, approval of the Prospectus provides an indication that if they complete the proposed work their committee will find it sufficient for their dissertation.

The Prospectus should be prepared similar to the research narrative portion of a grant proposal. The format involves specific aims, a research strategy, which includes the significance of the proposed research, as well as potential innovations, the approach to be used, preliminary data and references. **The prospectus is to be completed within six months of passing candidacy exams.** One does not need "more data" to write a prospectus. Research plans can always change in the face of the first experiments done, and the student should keep their committee up to date about major deviations from the plan in the prospectus.

The dissertation committee evaluates the written Prospectus and convenes for the oral prospectus defense. This is not an exam like the candidacy exam – this is an opportunity for the committee to evaluate the student's knowledge of their research plan and for the student to get feedback. The committee may approve the prospectus after defense by student or may require the student to make additional changes to the plan. The approved Prospectus acts as a contract that describes the research to be completed by the student. A major change to the student's research requires the approval of a majority of the Committee and the Director of the School.

Publications

Prior to the final submission of the completed thesis, master's students are required to have at least one peer-reviewed journal article (any authorship) submitted and under review. Prior to the final submission of the completed dissertation, doctoral students are required to have, at a minimum, one first author, peer-reviewed journal article published or in press, or two articles (at least one first authored) submitted to journals and under review.

Thesis

The Master's Thesis should be prepared according to the Style Guide found at: http://www.kent.edu/cas/graduate-forms. The committee for the oral defense consists of the initial Thesis Committee and the defense proceeds according to the procedures outlined in the Thesis Final Guidelines document at the above link. Graduation deadlines for Arts & Sciences graduate students as well as necessary forms can be found at: https://kent.edu/cas/graduate.

Dissertation

The Dissertation should be written and defended by the end of the fifth year in the program. At least 30 days in advance of the anticipated week of oral defense, a Graduate Faculty Representative must be appointed by the Associate Dean of Arts and Sciences to complete the Dissertation Committee. To request the Graduate Faculty Representative, complete the online form at: http://www.kent.edu/cas/graduate-faculty-representative.

The Graduate Faculty Representative is involved in all aspects of the defense, including voting on the outcome. The Dissertation must be prepared according to the College of Arts and Sciences Style Guide and Instructions for Preparing Dissertations and Theses for Electronic Submission to OhioLINK. The completed Dissertation is provided to all committee members. After ten days, the members vote on the defensibility of the document. If there is no more than dissenting vote, the oral defense can be scheduled no sooner than ten days later. So, committee members must have a minimum of 20 calendar days from the time they receive the Dissertation until its defense. Should more than one member of the examining committee find the dissertation to be inadequate, the student must comply with suggested changes. Once the committee is satisfied with the document, the defense may take place.

The Graduate School Representative may assume the role of Moderator, or a separate moderator can be selected by the dissertation committee from the members of the graduate faculty who have been approved to direct dissertations as long as the faculty member is not in the candidate's program. The role of the Moderator is to maintain the decorum and timing of the defense.

While the Dissertation Final Examination procedures involved in the defense may vary at the discretion of the examining Committee, the defense normally commences with a short presentation by the candidate. The Committee members then pose a round of questions, with each member limited to a predetermined amount of time, usually ten to fifteen minutes. The second round is most commonly limited to five minutes of questioning from each member. Questions from the audience are encouraged and may take place before or after the Committee's questions, depending on the sequence agreed to prior to commencing the defense. When the questioning has run its course, the moderator will adjourn the defense and call for a vote. All members of the examining committee will sign the Report of Final Examination form, recording their votes of "yes" or "no", committee members may not abstain. A candidate is considered to have passed if there is no more than one dissenting vote.

Graduation deadlines for Arts & Sciences graduate students as well as necessary forms can be found at: https://www.kent.edu/cas/graduate.

Time to Completion

Master students should complete their degree within six calendar years after first enrolling in the program. Doctoral students should complete their degree within ten calendar years after first enrolling in the program. Any formal leave of absence taken by a student will not count against this time to completion limit. The student and advisor can petition for an extension following University policy. Financial support is typically only offered for a five-year period for doctoral students and for a three-year period for master students.

Annual Performance Evaluations for Graduate Students

Students are expected to make continuous and satisfactory progress towards degree completion. To document progress and provide clear feedback to students, performance evaluations are required to be submitted on a regular basis. There are three primary categories of evaluation: Research, Academics, and Professional Development. Students and advisors complete, discuss, and sign the performance evaluation before submitting them to the Director. Evaluations are performed at a minimum of once per year (typically due in January) but can be more frequent to ensure short-term goals are met.

Graduate students within the program must remain in good academic standing. This means a minimum GPA of a 3.0 and progress towards degree completion. For M.S. students, milestones

include the formation of a guidance committee and submission of a program of study form and an approved thesis topic by the end of year 1, and completion (or near completion) of their thesis by the end of year 2. For PhD students, milestones include the formation of a guidance committee and submission of a program of study form by the end of year 1, completion of their candidacy examination by the end of year 2, submission of an approved prospectus by the end of year 3, and completion (or near completion) of their dissertation by the end of year 5. All students are expected to handle themselves in a professional and ethical manner.

Student-Advisor Relationship

The relationship between a student and advisor is critical to the success of a student. Each student and advisor have their own style, personalities, strengths, and weaknesses. Keep this in mind during your rotations because ultimately you will need to decide what lab and faculty member is right for you. Sometimes the research interests and personality of the student and advisor do not mesh. It is not uncommon for a student to switch advisors, but this should only be done after detailed meetings with the original advisor and the person that would serve as the new advisor or co-advisor.

Expectations for Advisees

1. Take responsibility for your education and training.
    a. Create a schedule & to-do list
    b. Initiate regular meetings with your advisor
    c. Schedule regular meetings with your guidance committee (at least annually)
    d. Create an individual development plan (https://myidp.sciencecareers.org/)
    e. Set goals and seek opportunities for additional training
2. Consult with your advisor before sharing lab materials or data with others
3. Ask permission prior to using another investigators' equipment
4. Gain training before using equipment
5. Submit forms and documents ahead of time. Don't wait until the last minute and expect signatures and feedback immediately.
6. Submit high quality work that reflects your effort
7. Respond promptly to e-mails. This includes your mentor, committee members, administrative secretaries, lab coordinators, students, etc.
8. Consult with your advisor on significant professional decisions & goals
9. Seek help when needed. Asking for help is a sign of maturity. Floundering or living in torment is not helpful.
10. Be open-minded and understanding. You will interact with others who are different from you or who may be struggling. Help create a positive, accepting environment.

Expectations for Advisors

1. Consult with students as they begin their graduate career & form a guidance committee
2. Clearly communicate expectations to students
3. Provide a safe and secure environment and ensure students obtain necessary health and safety training (e.g., IRB, responsible conduct of research, human-subject protection, IACUC, hazardous materials, etc.)
4. Suggest pertinent bibliographical sources
5. Provide constructive feedback & encourage students to participate in professional conferences & skill development
6. Read and return work to students promptly (*ideally within one month*) and with useful comments/feedback
7. Help advisees prepare for presentations at conferences and job talks
8. Advise students on applying for grants to support their research and writing and read drafts of grant proposals
9. Provide timely and thoughtful letters of recommendation for students
10. Provide honest and direct feedback of a student's progress at regular intervals including during the annual evaluation & progress report

Student Conduct

All students must adhere to the KSU Code of Student Conduct. In addition, it is important to remember that you are working members of our department and as such it is expected that you will conduct yourself in a professional manner, in the classroom, the laboratory, and/or as an instructor.

Vacations, Leaves and Dismissals

Vacations: Stipend support for a student is based on a 12-month appointment. Vacations are not guaranteed during this period, but they are encouraged. They must, however, be taken with the approval of the advisor and program Director. Vacations may NOT be taken by a TA during a teaching semester, without prior approval of the Director. More than three weeks of vacation per year may result in a reduced stipend.

Leaves of Absence: A leave of absence may be taken for a legitimate reason for up to one year. The Leave of Absence Policy can be found at: Kent State University Leave of Absence Policy. Students who take a leave of absence are no longer considered active students at Kent State and are no longer eligible for an assistantship. If the conditions for return are met by the student by the end of the leave, then the student is reinstated to the program.

Dismissals: Students may be dismissed from the graduate program for failing to meet program requirements, University policies, or professional and ethical standards of the field (e.g. NIH ethical standards, NSF ethical standards, Code of Conduct). Causes for dismissal include, but are

not limited to, the following: poor academic performance, failure to make timely progress through the program, failure to demonstrate professional behavior (e.g. disruptive, hostile, unresponsive, aggressive, physical or verbal harassment, disrespectful) or ethical violations (e.g. cheating/plagiarism, data fabrication, lying, etc.). The student will be sent a letter from the Director regarding the decision and reason for their dismissal and notify the office of graduate affairs at the College. The student will have ten weekdays to notify the Director in writing if they plan to appeal the recommendation and the grounds for appealing. If the student does not appeal, then the Director notifies the student and Dean of the College of Arts & Sciences of the dismissal decision. If the student elects to appeal the recommendation, the Director will set a date for the appeal to be reviewed by the executive committee. The student will be notified of the date and allowed to submit written materials before the hearing. The student also has the right to address the executive committee in person if they wish, but all grievances and supportive documentation must be provided in writing. A person or persons (not to exceed two) can accompany the student to serve as an advocate or provide guidance and/or support. The executive committee can elect to solicit additional written documentation from other individuals before making a recommendation, but every effort should be made to make a timely decision. The Director informs the student and Dean of the College of Arts and Sciences of the appeal decision by the executive committee. If the decision is for dismissal, the student has ten weekdays to submit a written appeal to the Dean of the College of Arts & Sciences in compliance of the appeal process.

Teaching Assistantships

Most students serve as teaching assistants (with the exception of those whose advisor's appointment is through the Lerner Research Institute, CCF) and this is a valuable chance to hone your communication abilities and to prepare for future employment.

In the Department of Biological Sciences, the TA coordinator, Shelley Jurkiewicz, does the teaching assignments for all BSCI courses. Before the start of each semester, you will get a note asking you to indicate any teaching preferences. Courses are assigned based on your background, interests, and need of the BSCI department. You should also talk with faculty who are teaching courses with which you would like to be involved.

Teaching assignments at NEOMED are determined by the NEOMED-BMS Committee. The committee collects requests for TAs needed from course directors – including the number, any pre-requisites (some of the classes require to have taken and passed the course before), and recommended students (if applicable). The students also fill out a form listing their preferences for classes to TA. Based on this information the committee assigns students to courses.

Teaching assistantships involve more than teaching labs. Students may also be assigned to serve as lecture aides on occasion, to assist in lab preparation, and to help with training. Some

are called on to serve as lab coordinators for the larger classes. The most important thing to remember is to take your responsibilities seriously but do not let them overwhelm you. You should do your job well, but it should not consume your time or jeopardize successful research progress.

Large classes with multiple lab sections typically require weekly TA meetings. The graduate student who is the Lab Coordinator or the faculty instructor may organize these. You should attend each meeting and participate fully. The key is communication. If everyone does their job, things will go smoothly. If you have any problems, speak to the faculty member in charge.

New teaching assistants are required to take a TA training course, scheduled for the beginning of the fall semester. Other students and faculty can also provide guidance when you have questions.

You must set aside time each week for office hours. You need an hour for each lab section. Once you have determined the days/times, email them to the graduate office. You also need to inform the students in **writing** of your office hours, office location, and how they may contact you (e mail, lab phone, or whatever suits you). Also make sure and tell them what to do with papers that they might have to turn in outside of class time. Papers should not be turned into the main office.

For more information about Teaching Assistantships, please refer to the BSCI Teaching Assistant Handbook.

Policy on use of Artificial Intelligence (AI) and AI-assisted technologies

Academic and scientific integrity is essential to build a successful career. This includes being forthcoming and transparent about the use of artificial intelligence (AI) or AI-assisted technologies in scientific discourse. While the use of AI technologies can be beneficial to learn to write more effectively, improve readability, and generate appropriate language and syntax, these technologies should only be used with extensive human input and oversight. AI and AI-assisted technologies often result in inaccuracies, false citations, and bias arguments. They are also not up to date on recently published journal articles, fail to address scientific rigor or explain nuances in the scientific literature, and often neglect to mention alternative interpretations or hypotheses. AI and AI-assisted technologies should only be used to improve clarity in your writing and never used to pass ideas off as your own, develop a premise for a hypothesis, interpret data, or draw conclusions. Any use of AI in your academic or professional work is required to be disclosed.

Academic Integrity: Cheating and Plagiarism

Unethical activities by BMS students will not be tolerated. All students must take the BMS course: Responsible Conduct of Research, which characterizes such activities including cheating and plagiarism. The course professor is normally allowed to establish the punishment for cheating or plagiarizing in a course, but dismissal is encouraged. Cheating or plagiarizing in the scientific arena will always result in dismissal from our graduate program. The University's guidelines on these issues can be found at: https://www.kent.edu/policyreg/administrative-policy-regarding-student-cheating-and-plagiarism, which may be accessed through Flashline.

Unethical academic or scientific behaviors will have a negative impact on a developing career. Formal letters detailing cheating or plagiarism are kept in the student's file and are available to potential employers, as well as journal editors.

International Student Guide

International graduate students attend an additional orientation as well as graduate student orientation program before they start during the fall semester. More information is available at: https://www.kent.edu/globaleducation/orientation.

Information about Kent State's English as a Second Language can be found here: http://www.kent.edu/english/esl-center.

Off-Campus Housing

The Center for Student Involvement located on the first floor of the Kent Student Center can provide useful information regarding not only off-campus housing but also information regarding area utilities, banking, shopping, landlord-tenant information and much more. https://www.kent.edu/csi/resources-1. Additional housing information can be found here: https://www.kent.edu/globaleducation/housing.

Transportation

Transportation is an important issue given the distances between the various institutions that participate as members of the School. The Kent campus is approximately five miles from the NEOMED campus, and all students will travel between them. In addition, the Cleveland Clinic campus is about a 45-minute drive from the Kent campus. Most commonly, students use their own automobiles. However, students who lack autos can find rides with other students.

Students can book rides 2 days before the actual trip by calling 330-678-1287 and scheduled trip can be cancelled 2 hours before pickup time. It will cost $6 per trip and buses only go to places where city buses do not go.

For more information, contact:
www.partaonline.org
330-678-1287
TTY:330-676-5100

Campus and Local Environments

KSU, NEOMED and CCF provide unique and engaging environments for BMS students. KSU was established in 1910 on the banks of the Cuyahoga River. There are approximately 28,000 students on the main campus and 42,000 students on all eight campuses of the KSU system. It is ranked as one of the top 200 universities in the world and has 28 doctoral programs. The University offers a wide variety of educational, cultural, athletic, and outdoor activities, as might be expected of the second largest university in the state. These include intercollegiate sports, on-campus concerts, the Black Squirrel Festival, art and fashion shows, and the first-class Student Recreation and Wellness Center, which offers popular forms of recreation and athletics. Again, BMS students have free access to this Center.

The KSU campus is located in the city of Kent, Ohio, which has its own attractions and activities. The city sponsors a Heritage Festival in the summer and a nationally recognized Folk Festival in the fall. In addition, the Kent Stage draws top level folk and jazz artists throughout the year. The surroundings are pastoral and offer excellent opportunities for hiking, biking, kayaking and cross-country skiing. You may find more on the city of Kent at https://www.kent.edu/go/town .

NEOMED was founded in 1973 and is located in Rootstown, Ohio, about five miles from the Kent campus. It is a community-based, state university. It is located in a semi-rural area, which offers a relaxing environment. It houses medical and pharmaceutical education and research. You may learn more about the graduate program, the facilities, as well as find maps and directions at: https://www.neomed.edu. t In contrast, the Cleveland Clinic is located in an urban environment with its 41 buildings in proximity to University Circle in Cleveland, Ohio. CCF was founded in 1921 and is ranked as one of the top four medical centers in the country. The graduate faculty associated with BMS are housed primarily in the Lerner Research Institute,

which provides substantial contributions to the more than $258 million in NIH funds garnered annually by CCF researchers. You can find maps and directions, in addition to more information on the facilities and the faculty, at http:/www.clevelandclinic.org .

Nearby to the three main campuses you can find a myriad of cultural, social, athletic, and outdoor activities. For example, Akron, Ohio is located about 12 miles from the Kent campus. It is the fifth largest city in Ohio. It is the site of concerts and plays at Akron Civic Theater, E.J. Thomas Hall, Blossom Music Center and Lock Three. It also supports a minor league baseball team which plays at Canal Park, the Soap Box Derby, the PGA Championship, and various museums. You may learn more on the activities in Akron at: https://www.kent.edu/go/beyond .

There is much to do and see in Cleveland, one of the largest cities in the country. The city sponsors a world class Symphony Orchestra, as well as nationally known art and natural history museums. The city also supports professional baseball, football, and basketball teams, in addition to a variety of performing arts venues, such as Severance Hall, Cain Park and the Nautica Stage.

Career Development

Our graduate students must excel in courses, teaching, and research. Successful students attend classes and are not tardy. They focus on the lectures and assignments. Most commonly, the diligent students recopy notes shortly after each lecture and they read ahead, in order to more fully appreciate the presented materials. The best students also ask questions, and it is imperative to study in preparation for exams. Written assignments must be organized, well-written and turned in on time. Transcripts are part of every job application and, therefore, they must be excellent, in order to obtain desired positions in the future.

Teaching is an important aspect of career development. Experience in this area will become an important part of future job applications. It is expected that all BMS students will develop into excellent teachers. To do so, organize the material and present it clearly and in a logical fashion. Attend all prep sessions. Examine past notes, quizzes, and exams, in order to help you organize the materials, as well as gain understanding of what information is supposed to be transmitted to the students. Create detailed notes for every presentation and practice their delivery. Be sure to use visual aids and provide straight forward quizzes and exams. Written materials should be graded in an objective manner using a detailed key. Always be fair and understanding. Act like your favorite teachers. You will be evaluated by both your students and the faculty member in charge of the course. Take pride in your teaching.

Success in research is most important. What you do in the lab and how you disseminate your data will define your graduate career. Your future depends on the research you publish. There are a number of practices that will help you develop into a first-rate scientist. You must depend on the scientific method; asking pertinent questions that can be tested and, therefore, answered. You must master the literature in your area. This allows you to ask the pertinent

questions and define the methods necessary to answer those questions. Of course, those methods must be mastered. This requires planning and execution. It requires focus.

Success in research requires excellent communication skills. You must learn to write in a scientific manner, as well as provide clear and organized oral presentations. You may develop these skills by learning from good writing and speaking. Your advisor will help you with this. Finally, developing as a scientist requires engagement in the process. It is important to attend seminars and learn from them. It is important to join a society and attend its meetings, in order to present your work, learn about the research that is developing in your area and network with like-minded scientists. Of all areas that are part of your graduate experience, research is the most important. So, seek your advisor's help. Learn to experiment and communicate.

Helpful Hints

Here are some suggestions to help you succeed:

- Know your advisor's scientific legacy; read her/his papers and grants
- Check your email every day
- Question everything, but be polite
- Ask questions
- Know the literature
- Be dependable
- Work harder than everyone; it will be rewarded
- Never be late
- Do not wait to seek help if you are struggling
- Learn from every seminar, lecture, journal club and conference
- Start writing early; organize your prospectus, dissertation, and papers into sections; fill them in as you go
- Remember the Pi effect: everything takes 3.14 times longer than you think
- Use http:/www.kent.edu/biomedical ; it has all forms, course requirements, etc.
- Only you are responsible for your success