DEPARTMENT OF
GENETICS, CELL BIOLOGY AND ANATOMY

GRADUATE STUDENT HANDBOOK
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Introduction:

The department of Genetics, Cell Biology and Anatomy (GCBA) was formed in September 2003. Dr Vimla Band currently serves as the chair of the department. The department is comprised of research and teaching faculty. Research programs in the department include the broad areas of cell biology, developmental biology, genetics, neuroscience and cancer biology.

Graduate Committee:

The Genetics, Cell Biology and Anatomy Graduate Committee oversee all aspects of the program, within the guidelines and policies of the UNMC Graduate Studies Office. The Graduate Committee is comprised of a chair and five faculty members.

The committee is responsible for evaluating applications for admission and making administration recommendations to the Dean of Graduate Studies. The committee also makes recommendations to the departmental faculty as necessary with regard to program policies and requirements, course offerings, the enrollment status of students in serious academic difficulty, etc. The committee meets regularly to address any issues raised by departmental faculty or the department chair.

The duties of the Graduate Committee Chair include, but are not limited to, the following:
1. Serve as the primary advocate for GCBA graduate students regarding departmental activities and policies.
2. Coordinate the graduate committee’s evaluation of applications for admission, maintaining records on all applicants.
3. Serve as temporary advisor for each new student until his/her major advisor is chosen.
4. Provide reports or other data requested by the Graduate Studies Office.
5. Ensure that each student complies with GCBA and UNMC requirements, policies, procedures and deadlines.
6. Coordinate the arrival of new students, including assurance that each new student receives appropriate orientation regarding GCBA and UNMC policies.
7. Provide guidance/oversight for supervisory committees.
Email:
A UNMC email address is set up for all new students. This is assigned to you by the Graduate Studies Office. Because email is the primary means through which announcements and notices for graduate studies and department business are communicated, email should be checked on a daily basis.

ID Badge:
A photo identification badge is required for all students and should be carried at all times. ID badges are used to gain access to certain buildings and research areas. Badges must be returned to the administrative office upon graduation or withdrawal from the department. Any misuse of your ID badge regarding access control may result in your dismissal from UNMC. You can pick up your badge at the photo id office located in the student life center, first floor.

Vacation Policy:
Graduate students in the Genetics, Cell Biology and Anatomy program accrue vacation/personal time each year, in addition to seven fixed holidays (New Year’s day, Memorial day, July 4th, Labor Day, Thanksgiving and the day after, and Christmas day).

PhD students will receive 2 days of vacation leave upon start of “employment” (and upon each anniversary thereof) and 1 day each month thereafter, for a total of 14 days (112 hours) per year. Vacation time may be accrued up to a maximum of 28 days (224 hours).

MS students will receive 1 day of vacation leave upon start of “employment” (and upon each anniversary thereof) and 0.5 day each month thereafter, up to the maximum allowable accrual of 7 days (56 hours) per year. Vacation time may be accrued up to a maximum of 14 days (112 hours).

Students must confirm that they have an available balance prior to arranging for any absences. No vacation payout is received for any remaining hours at the time of graduation.

Vacation is subject to approval by the student’s supervising professor and the director(s) of any course(s) in which the student is enrolled. During rotations, vacation must be approved by the Chair of the Graduate Committee. An unpaid leave of absence is possible under special circumstances and is also subject to approval from the P.I. and the Graduate Committee.

Students must complete an absence slip for any vacation or sick time that is taken. Absence slips can be obtained from the department administrative assistant. Completed forms should be returned to this individual either before or promptly after time off is taken.

Travel:
Travel authorization paperwork, to be completed by the administrative office, must be in place for students to travel for work related purposes prior to their departure. Airfare arrangements must be made by the administrative office using UNMC’s designated travel agency, otherwise reimbursement can be denied. Itemized receipts for meals, taxis and other fees will be required for reimbursement.
UNIVERSITY OF NEBRASKA MEDICAL CENTER (UNMC) POLICIES AND PROCEDURES (Much of this information is taken directly from the UNMC 2013/14 Student Handbook)

UNMC’S Code of Conduct:
University of Nebraska Medical Center faculty, administrators, staff and students comprise an academic health science community. Within this community professionalism is displayed through interpersonal and discipline-specific skills. Professionalism involves developing and demonstrating skills while displaying mutual trust, respect, responsibility and educational accountability. Professionalism thrives in an environment that emphasizes supportiveness, high quality patient care and ethical conduct. Those in formal leadership roles should model the highest standards of professional conduct.

Professionalism embodies legitimate expectations among all members of the academic health science community. For example, the student or employee can expect the teacher or supervisor to provide instruction, guidance, and leadership. Leadership involves helping others to achieve their highest levels of performance, discerning those who need individual assistance, and then facilitating improvement. Similarly, the teacher or supervisor can expect the student or employee to make the necessary investment of energy and intellect to acquire the knowledge, understanding and skills concomitant with being a competent professional. The development of relationships characterized by professionalism is the duty of all faculty, administrators, staff and students. All members of the community can and should expect others to prepare appropriately for the accomplishment of tasks and the fulfillment of responsibilities.

Professionalism is fostered by a supportive climate. All faculty, administrators, staff and students should strive to create an environment characterized by:

- avoidance of and no tolerance for sexual harassment, demeaning or derogatory remarks, threats, intimidations,
- no verbal or physical abuse;
- acceptance and understanding of individual and cultural differences in race, religion, ethnicity, age, gender,
- no discrimination based on sexual orientation or disabilities;
- openness in communication;
- truthful and positive feedback;
- constructive, corrective feedback in a private setting whenever possible;
- assignment of duties and assignments in an exemplary manner;
- an emphasis on solving problems and modifying systems, not blaming people.

Professionalism must be shown in all faculty-student relationships. Learning occurs best in an environment of integrity and mutual respect. As it is expected that students will learn to conduct themselves according to accepted professional standards, faculty must model appropriate professional behaviors in their interactions with students. Professionalism must be shown in all relationships.
Academic Integrity and Professional Conduct:
Freedom to learn depends upon appropriate opportunities and conditions in the classroom, laboratory, on campus and in clinical settings. Faculty, staff, students and visitors respect the conditions conducive to such freedom by conducting themselves in a responsible manner, abiding by federal and state laws and adhering to the rules and regulations set forth by the Regents of the University of Nebraska and University of Nebraska Medical Center. The University may take independent disciplinary action on those who violate criminal and civil law as noted in the University of Nebraska Regents Bylaws paragraph 5.5 Accordingly, the University of Nebraska Medical Center has developed the following general guidelines pertaining to academic integrity and personal conduct which provide and safeguard the right of individuals to exercise fully their freedom to pursue academic goals without undue interference from others.

Minimum Standards of Academic Integrity
In order to assure an understanding between students, faculty and staff concerning what types of activity constitute violations of academic integrity, several definitions and examples follow in the section on Academic Misconduct. These examples are not intended to be all inclusive and other actions not listed here may be considered violations.

Instructors, academic departments and colleges will also impose specific standards of conduct which may be more rigorous than the minimum standards cited here. Students are obligated to follow these guidelines and to ask instructors for guidance if they do not understand them or have questions.

Cheating
A general definition of cheating is the use or attempted use of unauthorized materials or information for an academic exercise.
Examples of cheating include but are not limited to:
- using unauthorized materials such as books, notes, calculators or other aids during an examination or other academic exercises;
- receiving unauthorized assistance from another person during an exam or exercise such as copying answers, receiving answer signals, conversation or having another person take an examination for you;
- providing assistance to another person during an exam or exercise, such as allowing your answers to be copied, signaling answers or taking an exam for someone else;
- obtaining answers and/or other information without authorization from someone who has previously taken an examination;
- including all or a portion of previous work for another assignment without authorization;
- appropriating another person’s ideas, processes, result, or words without giving appropriate credit, i.e. an appropriate attribution or citation (plagiarism). For example, a student who quotes verbatim the results of a previous student’s work in a required term paper, but fails to credit the individual through citation. The work is recent and thus cannot be considered common knowledge.

Academic Misconduct
Academic misconduct is defined as the falsification of official documents and/or obtaining records, examinations or documents without authorization. Several examples of academic misconduct are:
- the unauthorized acquisition of all or part of an unadministered test;
- selling or otherwise distributing all or part of an unadministered test;
- changing an answer or grade on an examination without authorization;
Research misconduct has been defined by the Federal DHHS Office of Research Integrity (ORI) and UNMC subscribes to this definition: “Research misconduct is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.” Research misconduct does not include honest error or differences of opinion. It is important that every student understand the meaning of fabrication, falsification, and plagiarism. 

**Fabrication** is making up data or results and recording or reporting them (i.e. indicating a laboratory experiment had been repeated numerous times or done in a controlled environment when it had not, thus leading to an invented or uncorroborated conclusion).

**Falsification** is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research or academic performance is not accurately represented in the research or academic records (i.e. altering an original source document, misquoting or misrepresenting a source to support a point of view or hypothesis or using computer software to change research images so they show something different than the original data).

**Plagiarism** is the appropriation of another person’s ideas, processes, results, or words without giving appropriate credit, i.e. an appropriate attribution or citation. An example is: In the methods section of a thesis, a graduate student describes a procedure used in research for the thesis. The procedure was developed by a fellow graduate student in the laboratory of their major professor; however, neither the student who developed this procedure nor the major professor was given credit in the thesis. This implies that the author of the thesis had himself developed the procedure.

Allegations of research misconduct should be reported to the Research Integrity Officer as outlined in UNMC Policy 8005, Research Integrity.

A violation of the standards of academic integrity is viewed as a very serious matter at UNMC. Such a violation will, in most cases, lead to disciplinary action.

**Compliance Training:**
The University of Nebraska Medical Center is committed to complying with mandatory state and federal regulations to maintain the integrity of its teaching, research, patient care and outreach mission.

Several regulations contain mandatory training requirements applicable to all individuals in the health care setting, including employees, students and volunteers. All students must complete the following compliance training requirements: Health Insurance Portability and Accountability Act of 1996 ("HIPAA"); Bloodborne Pathogens (OSHA); Safety (JCAHO); Privacy, Confidentiality and Information Security (Policy 6045); Cultural Diversity; and Student Payment. Additional training requirements may be assigned based on research and other activities in which the student participates. The training is accessible on the student web site http://net.unmc.edu/care or through Blackboard.

Each student is responsible for completing his/her compliance training prior to the assigned deadlines. Failure to complete compliance training requirements will result in being barred from attending any clinicals, labs or classes. Re-admittance will be granted when compliance training requirements have been met.
Background Check:
All students are required to complete a background check. To complete the background check, please go to: www.onesourcebackground.com and scroll over to the Student Login tab, select UNMC from the drop down box then select your college. Have your credit card available as there is a $30 fee. Students must also print out the Nebraska Adult & Child Abuse and Neglect Registry Release form and fax it to One Source at 402-333-3280 or toll free at 800-929-8117. Residents of Iowa need to fill out the two Iowa forms instead. If assistance is needed, please contact OneSourceBackground Check Company at www.onesourcebackground.com.

Guidelines for Graduate Assistant Work and Study:
(Appplies to Graduate Assistants/Graduate Research Assistants/Graduate Research Fellows)
Ph.D. students serving as Graduate Research Assistants, Graduate Assistants or Graduate Research Fellows are all engaged in academic programs where their primary role is that of a full-time graduate student. All Ph.D. students in these positions are required to maintain full-time status 9 credit hours in Fall and Spring semesters; and 7 credit hours for Summer sessions. In addition, students are not to hold other regular employment without the permission of their mentor, supervisory committee and Graduate Dean. Serving as a tutor for other students or other “light-load” special teaching experiences are typical exceptions to this “no other work” policy.

Graduate Assistant appointments are considered as “exempt” from the Fair Labor Standards Act (FLSA). This is due to the understanding that the positions are held by students and their education and training are their primary responsibilities. The exempt status has several implications, including no expectation of timecards and no overtime pay. In addition, students on Graduate Assistantships do not receive traditional employee benefits (retirement contribution, employee health insurance). Nonetheless, in keeping with their emerging professional role, the University has established some expectations that apply to both the student and the program.

1) Students are expected to devote an appropriate level of professional effort to work and study. The time spent on the research project(s) at UNMC and enrolled curriculum will comprise full-time efforts. [Note: The work of a professional in the sciences has noticeable variability in intensity. In all successful cases, the “work necessary to get the job done” describes how much time and effort is dedicated to a given project at a given time. Late nights and weekends work may be required, but are balanced by periods of less intense effort.]

3) Students will not be expected to work on traditional university holidays (holiday list: http://www.unmc.edu/gradstudies/gsb_academic_calendar.htm) unless required by the unique schedule of an experiment design.

4) Students may expect, on average, to be allowed at least 14 days of personal vacation in a given year. Students desiring longer break periods should expect to use the allowance accumulated over more than one year, as well as receive appropriate approval from mentor and graduate committee.

5) Students requesting maternity/paternity leave are required to get appropriate approval from the Associate Dean for Graduate Studies. Maternity/Paternity leave and other forms of personal leave may require the suspension of the stipend and must be discussed with the mentor before meeting with the Graduate Dean’s Office.
Doctor of Philosophy (Ph.D.) in Genetics, Cell Biology and Anatomy

Rotations and selecting a laboratory for dissertation research:
During the first year in the Ph.D. program, rotating GCBA students are required to complete two semesters of Research Other Than Thesis (GCBA 896). This involves conducting research in three different faculty laboratories during his/her first year, spending a period of 6-8 weeks in each of these laboratories. A list of laboratories accepting student rotations will be made available to each student and rotation selections from this list will be made by the students, in conjunction with the graduate committee chair, based upon the interest and background of the student. Following these rotations, the student will select his/her faculty advisor and laboratory for their dissertation research project.

Under certain circumstances, Ph.D. students may be admitted directly into a faculty member’s laboratory without conducting rotations (direct recruitment). Such arrangements must be requested by both the faculty member and the student and require approval by the graduate committee. Direct recruitment students should register for GCBA 999 rather than GCBA 896 for their research credits.

Requirements regarding the make-up of a GCBA supervisory committee:
The supervisory committee for GCBA students should be composed of at least five faculty members with expertise in the student’s area of research or in areas related to it. The thesis advisor is both a member of the supervisory committee and typically also functions as the chair of the supervisory committee. At least two committee members, one of which may be the thesis advisor, must be at the rank of associate professor or higher. At least two members of the supervisory committee must be faculty whose primary appointment is in GCBA. The other members of supervisory committee may be any member of UNMC faculty or a faculty member from another institution or consult with his/her thesis advisor to form the supervisory committee. The student may revise the composition of the committee, if need be, in consultation with the thesis advisor.

Establishing a supervisory committee:
Once the student and mentor agree upon the proposed committee members, the mentor or student should contact each proposed member and obtain their consent to serve. To formally constitute the supervisory committee, the student must obtain approval from the GCBA graduate committee. To obtain approval, the student’s mentor should send an email to the graduate committee members in which the proposed composition of the committee is described. The email should also provide a BRIEF description of why each faculty member was chosen, and a BRIEF description indicating how the committee satisfies the departmental guidelines (see above). Graduate committee members will communicate their approval or concerns regarding the supervisory committee to the graduate program chair.

Once the student is notified by the graduate program chair that the committee has been approved, the student should set up appointments with each committee member to obtain his/her signature on the recommendation for appointment of a supervisory committee form. Members of the GCBA graduate committee are Drs. Karen Gould, Vimla Band, Runqing Lu, Shantaram Joshi and San Ming Wang. Link to form: http://www.unmc.edu/gradstudies/docs/requestsupervisorycommittee.pdf
A student’s supervisory committee should be constituted within three months of selecting a mentor. The first supervisory committee meeting should be held within one month of establishing the supervisory committee.

At the first meeting of the supervisory committee, the general dissertation area and program of study should be approved. The following form should be completed and submitted immediately following this supervisory committee meeting: http://www.unmc.edu/gradstudies/docs/phdprogramofstudies.pdf

**Degree Requirements:**
Completion of the Ph.D. requirements usually requires 5 to 5½ years; however, all work required for a Ph.D. must be completed within seven years from the date of initial registration as a Ph.D. objective student.

All Ph.D. students are required to maintain full-time status which is nine credit hours in the Fall and Spring semesters; and seven credit hours for Summer sessions.

**Didactic Training:**

**Academic Performance Standards:**
Students must maintain a grade point average of 3.0 (“B”) or better in all graduate level courses. Students failing to maintain this minimum academic standard will be placed on academic probation and are in danger of dismissal.

**Compulsory Core Curriculum:**

- BRTP 822 – Molecular Cell Biology
- BRTP 823 – Genetics and Gene Regulation
- GCBA 806 – Teaching/Research Presentation Skills
- GCBA 970 – Seminar (each fall and spring semester)
- GCBA 903 – Journal Club (each fall and spring semester)
- GCBA 826 – Human Histology OR GCBA 912 – Modern Approaches in Cell Biology and Genetics
- One Elective: Any graduate level course

The student’s supervisory committee will define additional course requirements based on the student’s background, goals and research interests.

**Sample Course Schedule for Ph.D. students:**

**Fall Semester, Year 1**
- BRTP 822 (REQ), 3 credits
- GCBA 903 – Journal Club, 1 credit
- GCBA 970 - Seminar Series, 1 credit
- GCBA 896 – Research other than thesis OR GCBA 999 – Doctoral Dissertation, 4 credits

**Spring Semester, Year 1**
- BRTP 823 (REQ), 2 credits
- GCBA 806 (REQ), 2 credits
- GCBA 903 – Journal Club, 1 credit
- GCBA 970 - Seminar Series, 1 credit
- GCBA 896 – Research other than thesis OR GCBA 999 – Doctoral Dissertation, 3 credits
Summer Sessions, Year 1 (There are three sessions: one 8-week and two 5-week)
Must register for the 8 week (4 credits) and 5 week session (3 credits) each summer
GCBA 896 – Research other than thesis OR GCBA 999 – Doctoral Dissertation,

Fall Semester, Year 2
Elective, 3 credits
GCBA 903 – Journal Club, 1 credit
GCBA 970 - Seminar Series, 1 credit
GCBA 999 – Doctoral Dissertation, 4 credits

Spring Semester, Year 2
GCBA 912 , 3 credits
GCBA 903 – Journal Club, 1 credit
GCBA 970 - Seminar Series, 1 credit
GCBA 999 – Doctoral Dissertation, 4 credits

Summer Sessions, Year 2 (There are three sessions: one 8-week and two 5-week)
Must register for the 8 week and one 5 week session each summer
GCBA 999 – Doctoral Dissertation, 4 credits (8 wk) and 3 credits (5 wk)

Remaining years
GCBA 902A – Journal Club, 1 credit
GCBA 970 - Seminar Series, 1 credit
GCBA 999 – Doctoral Dissertation, 1-7 credits

Research Training:
Graduate students seeking a Ph.D. must complete a research program that results in a dissertation of publishable quality with an oral defense and must register for the following appropriate course each semester for research credits.

- GCBA 896 - Research Other than Thesis (fall and spring semesters during the first year of graduate study)
- GCBA 999 – Doctoral Dissertation
  After choosing a major advisor Ph.D. students should register for this course each semester during which a portion of their time involves research activities.

Ethics Training:
Each graduate student is required to complete a four session ethics workshop (Responsible Conduct in Research) that is offered twice annually by UNMC. Students must complete this program at least once prior to graduation. Recommend completion as early in training as possible.

Seminar Program:
All GCBA students are required to attend the departmental seminar series held every Wednesday at 4:00 from September to May. Students must attend 2-3 lunch meetings with seminar speakers each semester. Exception to this requirement must be approved by the graduate committee chair.

It is required that students present in this forum after they have passed their oral comprehensive exam during their 3rd or 4th year.

Comprehensive Examination:
Deadlines:

Comprehensive exams are to be completed by December 21st following the end of the fall semester of the student’s third year of graduate school.

Although the comprehensive exam should be scheduled with the supervisory committee members as soon as is feasible after approval of the specific aims, a formal request for scheduling qualifying or comprehensive examination must be filed with the graduate studies office a minimum of 2 weeks prior to the comprehensive defense date. The request form for scheduling is available at the following link: http://www.unmc.edu/gradstudies/docs/phdcompqualexamreqform.pdf

Topic and Format:

The format of the written part of the exam is a grant proposal in the form of an NIH R01 application (research plan only—no form pages, biosketches, budget, etc) and is limited to 12 pages. If vertebrate animals and/or human subjects are to be used, the relevant sections of the PHS forms should be completed as part of the written exam. These pages are not included in the 12 page limit.

Typically, the topic of the exam/proposal is the proposed thesis topic/research area of the student. However, with the approval of the mentor, a student’s supervisory committee may consider a different topic at the request of the student or mentor.

The supervisory committee must approve the topic of the comprehensive exam as well as the specific aims page.

If a student is preparing an exam on his/her thesis topic, the aims of the proposal may be identical to that in the mentor’s grant. However, the remaining text of the application should be written de novo by the student. To ensure that this policy is adhered to, a copy of the mentor’s relevant grant application(s) must be provided to the supervisory committee.

The oral portion of the comprehensive exam will consist of two parts. First, the student will give a formal, open oral presentation. Following this presentation, a closed oral defense of the proposal will be conducted. The format of the oral portion of the exam MUST include questions from each member of the supervisory committee designed to evaluate the student’s broader knowledge and understanding of the general area of their research. The student will receive a grade or score for the oral presentation & defense.

The written portion of the exam must be handed out at least two weeks prior to the oral defense.

In the event that the student does not complete the exam by the above deadline (December 21st), the student will receive a “Fail” for the first attempt at the exam. A second and final attempt can be scheduled after three months’ time. Under extenuating circumstances, the GCBA graduate committee will consider requests for defined, short terms extensions of the deadline to complete the comprehensive exam.

The outcome of the comprehensive exam must be reported to the graduate committee using the exam report form: http://www.unmc.edu/gradstudies/docs/examreportform.pdf

Ownership of intellectual property created during preparation and defense of Comprehensive Examination shall be consistent with University of Nebraska Board of Regents Bylaw 3.10 and Policy 4.4.2. If the student elects to prepare their Comprehensive

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Examination on a topic that is a component of their mentor’s area of research, the mentor retains the first right to submit the material as an external grant proposal and the student will require the mentor’s approval to employ this material in an independent proposal. Conversely, if the student writes the Comprehensive Examination on a topic that is independent of their mentor’s area of research, the student retains the first right to submit the material as an external proposal and the mentor will need to obtain the student’s approval to incorporate this material into any future proposals.

**Admission to Candidacy:**

Once a Ph.D. student has passed the comprehensive examination and satisfied the course requirements of their supervisory committee and the GCBA Graduate Committee, they are recommended to the Graduate Studies Office for admission to Candidacy for the Ph.D. degree. To be admitted to candidacy, student must complete the following candidacy admission form, which is available at http://www.unmc.edu/gradstudies/docs/phdrequestcandidacy.pdf

**Publications:**

UNMC requires that the Ph.D. degree is awarded only after the student provides evidence that their research has been accepted for publication as a first author manuscript in a peer-reviewed journal.

**Formatting Requirements and Guidelines for the Doctoral Dissertation:**

A dissertation based on original research in the candidate’s chosen field of study is required. The dissertation proposal should be submitted to the Supervisory Committee in the format of a grant proposal for external funding. The candidate must successfully defend his/her thesis in an oral examination.

Information about formatting the dissertation, copies of required forms, and the timing of submission of graduate paperwork and dissertation can be found at http://www.unmc.edu/gradstudies/docs/2012-13_Graduation_Packet.pdf

**Stipends for Ph.D. Students:**

Stipends are awarded to all students accepted in the Ph.D. program in the department of Genetics, Cell Biology and Anatomy. The basic stipend for full time Ph.D. students is currently $24,000 annually, which is paid in monthly installments.

After your first year, it is expected that Ph.D. students submit applications for intramural funding, such as a fellowship/assistantship from UNMC Graduate Studies and extramural fellowships, such as American Heart Association or Department of Defense.
Master of Science (M.S.) in Genetics, Cell Biology and Anatomy

During the first year in the M.S. program, GCBA students are required to complete four graduate courses for two years.

Requirements regarding the make-up of a GCBA supervisory committee:
The supervisory committee for GCBA students should be composed of at least three faculty members with expertise in the student’s area of research or in areas related to it. The thesis advisor is both a member of the supervisory committee and typically also functions as the chair of the supervisory committee. At least two committee members, one of which may be the thesis advisor, must be at the rank of associate professor or higher. At least two members of the supervisory committee must be faculty whose primary appointment is in GCBA. The other members of supervisory committee may be any member of UNMC faculty or a faculty member from another institution. The student should consult with his/her thesis advisor to form the supervisory committee. The committee should serve the needs of the student. As projects proceed in new directions or perspectives change, the composition of the committee can be changed in consultation with his/her thesis advisor.

Establishing a supervisory committee:
Once the student and mentor agree upon the proposed committee members, the mentor or student should contact each proposed member and obtain their consent to serve. To formally constitute the supervisory committee, the student must obtain approval from the GCBA graduate committee. To obtain approval, the student’s mentor should send an email to the graduate committee members in which the proposed composition of the committee is described. The email should also provide a BRIEF description of why each faculty member was chosen, and a BRIEF description indicating how the committee satisfies the departmental guidelines (see above). Graduate committee members will communicate their approval or concerns regarding the supervisory committee to the graduate program chair.

Once the student is notified by the graduate program chair that the committee has been approved, the student should set up appointments with each committee member to obtain his/her signature on the recommendation for appointment of a supervisory committee form. Members of the GCBA graduate committee are Drs. Karen Gould, Vimla Band, Runqing Lu, Shantaram Joshi, Andy Dudley and San Ming Wang. Link to form: http://www.unmc.edu/gradstudies/docs/msadvisorycommittee.pdf

A student’s supervisory committee should be constituted within three months of selecting a mentor. The first supervisory committee meeting should be held within one month of establishing the supervisory committee.

At the first meeting of the supervisory committee, the general dissertation area and program of study should be approved. The following form should be completed and submitted immediately following this supervisory committee meeting: http://www.unmc.edu/gradstudies/docs/msadvisorycommittee.pdf

Degree Requirements:
Completion of the M.S. requirements usually requires 2 to 2½ years; however, all work required for a M.S. degree must be completed within five years from the date of initial registration as a M.S. objective student.
Didactic Training:

Academic Performance Standards:
Students must maintain a grade point average of 3.0 ("B") or better in all graduate level courses. Students failing to maintain this minimum academic standard will be placed on academic probation and are in danger of losing stipend support.

Compulsory Core Curriculum:
Any four graduate courses (letter graded)
GCBA 970 – GCBA Seminar (1 credit)
GCBA 903 – Journal Club (1 credit)

The student’s supervisory committee will define additional course requirements based on the student’s background, goals and research interests.

Research Training:
Graduate students seeking a M.S. degree must complete a research program that results in a thesis with an oral defense. Specific research training requirements are provided to facilitate this process by introducing the student to the research laboratories in the department, as well as helping to develop and advance the student’s research-oriented skills and ethical standards.

- GCBA 896 - Research Other than Thesis (fall and spring semesters during the first year of graduate study)
- GCBA 899 – Master’s Thesis/Research (remaining semesters)

After choosing a major advisor M.S. students should register for this course each semester during which a portion of their time involves research activities.

Ethics Training:
Each graduate student is required to complete a one day ethics workshop (Responsible Conduct in Research) that is offered twice annually by UNMC. Students must complete this program at least once prior to graduation.

Seminar Program:
All GCBA students are required to attend the departmental seminar series held every Wednesday at 4:00 from September to May. Students must attend 2-3 lunch meetings with seminar speakers each semester. Exception to this requirement must be approved by the graduate committee chair.

Comprehensive Examination: The comprehensive exam for M.S. students is typically a 7 page review style article on a subject related to the student’s dissertation research. For MS students, the comprehensive exam is typically completed in the semester prior to degree completion.

Although the comprehensive exam should be scheduled with the supervisory committee members as soon as is feasible after approval of the topic, a formal request for scheduling qualifying or comprehensive examination must be filed with the graduate studies office a minimum of two weeks prior to the comprehensive defense date. The request form for scheduling is available at the following link: http://www.unmc.edu/gradstudies/docs/phdcompqualexamreqform.pdf
The outcome of the comprehensive exam must be reported to the graduate committee using the exam report form: http://www.unmc.edu/gradstudies/docs/examreportform.pdf

**Thesis:**
A thesis based on original research in the candidate’s chosen field of study is required. The thesis proposal should be submitted to the Supervisory Committee in the format of a grant proposal for external funding. The candidate must successfully defend his/her thesis in an oral examination.

Information about formatting the dissertation, copies of required forms, and the timing of submission of graduate paperwork and dissertation can be found at the following sites:

http://www.unmc.edu/gradstudies/docs/Final_Oral_App_MS_Feb2013.pdf

http://www.unmc.edu/gradstudies/docs/MS_Completion_Form_Feb_2013.pdf

**Stipends for M.S. Students:**
Stipends are awarded to all students accepted in the M.S. program in the department of Genetics, Cell Biology and Anatomy. The basic stipend for full time M.S. students is currently $12,000 annually, which is paid in monthly installments.

**Switch to Ph.D. Program:**
M.S. students in good academic standing after completing at least two semesters of full time course work may petition the GCBA Graduate Committee for entry into the Ph.D. program.
General Information

Graduate Studies:

International Students:
The department of Graduate Studies will prepare and submit your request for a student visa. The department of Genetics, Cell Biology and Anatomy will be responsible for completing all your new hire employment documents upon your arrival. International students are required to apply for a social security card at the Social Security Administration. You must be in the USA for ten days before your application can be submitted to their office. Letters from both graduate studies AND the department will be issued and are to be taken with you at the time of application. It takes about 6-8 weeks to receive your social security card.

Direct Deposit:
All student stipends are set up for automatic deposit into a checking or savings account. If you do not have an account, you will need to set one up.

Graduate Student Association:
Information about workshops, social activities and link to other student resources at http://blog.unmc.edu/gsa/

UNMC Graduate Course Listing: http://blog.unmc.edu/gsa/resources-for-grad-students/

Contact Information

GCBA Department Chair:
Dr. Vimla Band
Durham Research Center 6005
402-559-4031

GCBA Graduate Program Chair:
Dr. Karen Gould
Durham Research Center 6052
402-559-2456
kagould@unmc.edu

GCBA Graduate Program Support:
Saralyn Fisher
Durham Research Center 6005
402-559-4031
sfisher@unmc.edu

Graduate Studies Office:
ARS Building
Admissions and International Students – Dan Teet 402-559-6531
Insurance – Pat Oberlander 402-559-7276
**GCBA PhD student requirements and milestones checklist**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Timing or Deadline</th>
<th>Documentation and authorization</th>
<th>Link to form and/or guidelines</th>
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<tbody>
<tr>
<td>Select Mentor</td>
<td>@ admission or following 3 6-wk rotations</td>
<td>accepted admission letter or email to GCBA grad committee chair</td>
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<tr>
<td>Complete individual development plan (IDP)</td>
<td>within 1 month of selecting mentor and annually thereafter</td>
<td></td>
<td><a href="http://myidp.sciencecareers.org/">http://myidp.sciencecareers.org/</a></td>
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| Form supervisory committee (SC)                       | within 3 months of choosing a mentor                    | Follow guidelines for approval procedure and submit signed form to Graduate Studies Office (GSO) | http://unmc.edu/genetics/docs/thesis_committee_guidelines_2013_update.pdf
<pre><code>                                                                                                     | http://www.unmc.edu/gradstudies/docs/requestsupervisorycommittee.pdf                          |
</code></pre>
<p>| 1st meeting of SC, draft of program of study &amp; approval of thesis area | Within 4 weeks of appointing SC | Submit draft to graduate committee chair and minutes to GSO | <a href="http://www.unmc.edu/gradstudies/docs/phdprogramofstudies.pdf">http://www.unmc.edu/gradstudies/docs/phdprogramofstudies.pdf</a>                                 |
| Regular SC meetings                                   | Every 6 months                                          | Submit finalized program of studies (1x) and minutes (biannually) to GSO |                                                                                             |
| Responsible Conduct in Research training             | ASAP, Offered each semester                             | Sign in sheets at training sessions. Email confirmation of completion will be provided |                                                                                             |
| Completion of coursework                               | Typically with 2 yrs. of matriculation                  | Transcript and program of study form approved by SC and GCBA grad committee chair |                                                                                             |</p>
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<td>Comprehensive Exam</td>
<td>After completing all (or nearly all) coursework AND end of the fall semester of the student’s 3rd year in PhD program</td>
<td></td>
<td><a href="http://unmc.edu/genetics/docs/GCBA_comprehensive_exam_for_PhD_students_Jan2009_revision.pdf">http://unmc.edu/genetics/docs/GCBA_comprehensive_exam_for_PhD_students_Jan2009_revision.pdf</a></td>
<td></td>
</tr>
<tr>
<td>Approval of Comprehensive Topic</td>
<td>~ 4 months prior to planned comprehensive exam</td>
<td>SC meeting minutes of emails indicating approval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule comprehensive exam</td>
<td>No later than 2 weeks prior to the exam</td>
<td>Scheduling form signed by GCBA grad committee chair and submitted to GSO and Saralyn Fisher</td>
<td><a href="http://www.unmc.edu/gradstudies/docs/phdcompqualexamreqform.pdf">http://www.unmc.edu/gradstudies/docs/phdcompqualexamreqform.pdf</a></td>
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<tr>
<td>Passing of the comprehensive exam</td>
<td>end of the fall semester of the student’s 3rd year in PhD program</td>
<td>Exam report form signed by SC and submitted to GSO</td>
<td><a href="http://www.unmc.edu/gradstudies/docs/examreportform.pdf">http://www.unmc.edu/gradstudies/docs/examreportform.pdf</a></td>
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</tr>
<tr>
<td>Admission to Candidacy</td>
<td>After completing all coursework AND passing comprehensive exam</td>
<td>Application signed by SC and submitted to GSO</td>
<td><a href="http://www.unmc.edu/gradstudies/docs/phdrequestcandidacy.pdf">http://www.unmc.edu/gradstudies/docs/phdrequestcandidacy.pdf</a></td>
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<tr>
<td>GCBA seminar</td>
<td>After admission to candidacy, in 3rd or 4th year</td>
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<td>Obtain approval from SC to write thesis</td>
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<td>Apply for Graduation (if you wish to participate in the formal graduate ceremony)</td>
<td>By Feb 1 (May graduation), Jun 1 (Aug graduation) or Sept 1 (Dec Graduation)</td>
<td>Complete on line registration through student services</td>
<td><a href="http://www.unmc.edu/studentservices/omaha.htm">http://www.unmc.edu/studentservices/omaha.htm</a></td>
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<tr>
<td>Distribute dissertation to SC</td>
<td>At least 4 weeks prior to oral defense date</td>
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<td>Schedule dissertation defense with SC</td>
<td>Must have 1st author research paper published or in press</td>
<td>Email link to publication or acceptance notification to GCBA graduate committee chair</td>
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<td>Application for Final Oral Defense</td>
<td>At least 2 weeks prior to defense data and if no serious objections are raised by SC</td>
<td>Signed application form submitted to GSO and Saralyn Fisher</td>
<td><a href="http://www.unmc.edu/gradstudies/docs/PhD_oral_exam.pdf">http://www.unmc.edu/gradstudies/docs/PhD_oral_exam.pdf</a></td>
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## GCBA PhD student requirements and milestones checklist

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<td>Make plans with mentor regarding lab notebooks, reagents, data files, etc.</td>
<td>Prior to submitting all final graduation paperwork</td>
<td>Email from mentor to grad committee chair that plan regarding data and reagents has been executed</td>
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<td>Submission of thesis and final paperwork</td>
<td>No later than 1 week prior to graduation ceremony</td>
<td>Submit copies of the dissertation and other forms according to instructions in graduate packet to the GSO and McGoogan Library. Pay Publication Fee. Return completed and signed Report on Doctoral Degree to GSO</td>
<td><a href="http://www.unmc.edu/gradstudies/docs/2012-13_Graduation_Packet.pdf">http://www.unmc.edu/gradstudies/docs/2012-13_Graduation_Packet.pdf</a></td>
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<tr>
<td>Awarding of the Ph.D. Degree at ceremony at the end of the semester in which student satisfies Ph.D. Degree requirements</td>
<td>Participation in the commencement ceremony is NOT required to receive your degree</td>
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<td>August graduates are invited to commencement ceremony in December (no ceremony in August).</td>
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<td>Select Mentor</td>
<td>@ admission</td>
<td>accepted admission letter</td>
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<tr>
<td>Complete individual development plan (IDP)</td>
<td>within 1 month of joining program and again after 1 yr</td>
<td></td>
<td><a href="http://myidp.sciencecareers.org/">http://myidp.sciencecareers.org/</a></td>
<td></td>
</tr>
<tr>
<td>Form 3-5 member supervisory committee (SC)</td>
<td>within 3 months of joining program</td>
<td></td>
<td><a href="http://unmc.edu/genetics/docs/thesis_committee_guidelines_2013_update.pdf">http://unmc.edu/genetics/docs/thesis_committee_guidelines_2013_update.pdf</a> <a href="http://www.unmc.edu/gradstudies/docs/msadvisorycommittee.pdf">http://www.unmc.edu/gradstudies/docs/msadvisorycommittee.pdf</a></td>
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<td>1st meeting of SC, draft of program of study &amp; approval of thesis area</td>
<td>Within 4 weeks of appointing SC</td>
<td>Submit draft to graduate committee chair and minutes to GSO</td>
<td><a href="http://www.unmc.edu/gradstudies/docs/msprogramofstudies_feb12013.pdf">http://www.unmc.edu/gradstudies/docs/msprogramofstudies_feb12013.pdf</a></td>
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<td>Regular SC meetings</td>
<td>Every 6 months</td>
<td>Submit finalized program of studies (1x) and minutes (biannually) to GSO</td>
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<td>Responsible Conduct in Research training</td>
<td>ASAP, Offered each semester</td>
<td>Sign in sheets at training sessions. Email confirmation of completion will be provided</td>
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<td>Completion of coursework</td>
<td>1-1.5 yrs. of matriculation</td>
<td>Transcript and program of study form approved by SC and GCBA grad committee chair</td>
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<tr>
<td>Comprehensive Exam</td>
<td>After completing all coursework</td>
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<td>Format is 7-10 page review article for MS students, typically on topic related to the student’s research area</td>
<td></td>
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<tr>
<td>Approval of Comprehensive Topic</td>
<td>~ 2-3 months prior to planned comprehensive exam</td>
<td>SC meeting minutes of emails indicating approval</td>
<td></td>
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# GCBA MS student requirements and milestones checklist

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<tr>
<td>Passing of the comprehensive exam</td>
<td>Semester prior to planned defense of MS degree</td>
<td>Exam report form signed by SC and submitted to GSO</td>
<td><a href="http://www.unmc.edu/gradstudies/docs/examreportform.pdf">http://www.unmc.edu/gradstudies/docs/examreportform.pdf</a></td>
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<td>distribute Dissertation to SC</td>
<td>At least 4 weeks prior to oral defense date</td>
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<td>Signed application form submitted to GSO and Saralyn Fisher</td>
<td><a href="http://www.unmc.edu/gradstudies/docs/Final_Oral_App_MS_Feb2013.pdf">http://www.unmc.edu/gradstudies/docs/Final_Oral_App_MS_Feb2013.pdf</a></td>
<td></td>
</tr>
<tr>
<td>Exam Report and Approval of Dissertation</td>
<td>Within 7 days of successful defense of dissertation</td>
<td>Signed exam report form submitted to GSO and grad committee chair Signed “title sheet” submitted to GSO</td>
<td><a href="http://www.unmc.edu/gradstudies/docs/MS_Completion_Form_Feb_2013.pdf">http://www.unmc.edu/gradstudies/docs/MS_Completion_Form_Feb_2013.pdf</a></td>
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