Graduate Program in
Cell, Molecular and Developmental Biology

University Of California, Riverside

STUDENT AND FACULTY HANDBOOK

INTRODUCTION

This handbook is designed to provide you with information that will be helpful to you as a participant in the Cell, Molecular and Developmental Biology graduate program at UCR. We hope that you will read it carefully and consult with it as needed when you have questions about the program. In addition, please feel free to contact the Director, Graduate Advisors, and Graduate Student Affairs Officer for additional information or clarification.

The handbook includes the names and contact information for all participants in the program, provides an overview of the academic objectives and requirements of the program, and time-tables for the completion of degree objectives. It also contains information to help orient new students to the campus and it describes special features of our program and resources of our campus.

Because our program is interdepartmental, it provides a very broad framework for interactions and learning in the area of Cell, Molecular, and Developmental Biology. We hope that you will take full advantage of the opportunities that our program has to offer while you are at UCR.

Additional information about our Program and Faculty is available at our web-site: www.cmdb.ucr.edu.

Revised 09/06

CURRENT PROGRAM OFFICERS

Program Director – **Dr. Tony Norman** (5456 Boyce Hall) is responsible for overseeing and administering the CMDB program. E-mail Anthony.Norman@ucr.edu, x2-4777

Assistant Director – **Dr. Leah Haimo** (2352 Spieth) is responsible for assisting the Director in overseeing and administering the CMDB Program. E-mail leah.haimo@ucr.edu x2-5632

Graduate Advisor for Recruitment and First-Year Students – **Dr. Helen Henry** (5436 Boyce Hall) is responsible for overseeing the processing of graduate student applications and matters concerning first year graduate students. E-mail helen.henry@ucr.edu. x2-3796.

Graduate Advisor for Continuing Students (Second-Year through Graduation) – **Dr. Peter Atkinson** (339 Entomology) is responsible for matters concerning continuing graduate students. E-mail peter.atkinson@ucr.edu . x2-4782.

Graduate Student Affairs Officer – **Kathy Redd** (1001 Batchelor Hall) maintains graduate student files and responds to questions regarding graduate student policies and procedures. E-mail kathy.redd@ucr.edu. x2-5621

*The other staff in the **Biological Sciences Graduate Student Affairs Center** (1001 Batchelor Hall) can also assist you when Kathy Redd is not available.*

Financial and Administrative Officer – **Paula Southard** (1208 Spieth Hall) is the Administrator for the Biology, Cell Biology & Neuroscience, and the Natural Reserve System Units as well as the three interdepartmental programs and one Graduate Research Umbrella. She is responsible for trouble-shooting and problem solving in the department, for recruitment and evaluation of staff support personnel, and for major administrative transactions (space requirements, budgets, and other administrative matters). E-mail: paula.southard@ucr.edu. x2-5902.

CMBD Graduate Student Association – **(Students elected each September)** serves as a liaison between the faculty and the graduate students, both by disseminating information to the students and by soliciting student opinions regarding programmatic issues and policies.

Each department associated with the program will have a complete staff that will assist you in many ways during your years at UCR. **When you have selected a major professor, you should acquaint yourself with the staff supporting the department of your major professor.**

The Administrative Unit handling the budget of the CMDB Graduate Program is located in 1208 Spieth Hall. You may, at some time, need support from the staff of that unit. A partial list of staff follows:

Business Office (1208 Spieth Hall)
Hours for the Business Office are 7:30 a.m.-12:00p.m. and 1:00p.m.-4:30p.m, M-F.

Financial Operations Manager – Patti Baxter is responsible for financial management of Instructional and Research funds, Organized Research and Hatch Funds, Various Donors, Spieth Vivarium Funds, Interdepartmental Programs and the various Natural Reserve Funds. She assigns cost centers. Patti serves as back-up to the Department Administrator and is the main office supervisor. E-mail: patti.baxter@ucr.edu. x2-2965.

Administrative Assistant (Payroll/Personnel) – Lally Toledo is responsible for all payroll and personnel transactions for non-academic personnel, files, on-line transactions including hires, changes, terminations, leaves, benefit information, etc. Is also responsible for assistance with academic recruitments, with some accounting functions, and with administrative reports. E-mail: lally.toledo@ucr.edu. x2-4367.

Administrative Assistant (Departmental) – Charlene Chan is responsible for processing travel vouchers, check pick-up requests, key forms, petty cash and all on campus recharge applications. He is also responsible for mail distribution, photocopying requests, departmental clerical assistance to faculty and staff, and he supervises the office student help. charlene.chan@ucr.edu x2-5903.

Student Assistants – Student assistants are responsible for assisting with photocopying, mail distribution, campus errands, and other office assistance as assigned.

Vivaria

Hours are 8:00a.m.-12:00p.m. and 1:00p.m.-5:00p.m., M-F.

If you need to order, receive, or transport animals, you should work closely with your Vivarium Manager. Strict policies exist within the University with respect to guidelines and standards imposed by the National Institutes of Health (NIH) and the Animal Welfare Act.

Biology Vivarium – Leslie Karpinski is Manager of the Biology Vivarium (Spieth basement). E-mail: leslie.karpinski@ucr.edu. x2-5912.

Psychology Vivarium – Jim Sinclair is Manager of the Psychology Vivarium (LSP B418). E-mail: james.sinclair@ucr.edu. x2-4528.

Boyce Vivarium – Linda McCloud and Sally Scott serve as Managers of the Boyce Vivarium (Boyce Hall, 6th floor). E-mail: linda.mccloud@ucr.edu. x2-4620, sally.scott@ucr.edu x2-5319.

Campus Veterinarian – Dr. Akiko Sato, Ph.D. DVM. Is our campus-wide Veterinarian, in charge of overseeing all animal care on campus (215 Univ. Office Bldg). E-mail: akiko.sato@ucr.edu x2-5845.

CMDB Degree Requirements List 2006-2007

REQUIREMENT I

All students are required to take one graduate level course in each of the three categories:

CELL BIOLOGY

At least one course from the following:

____BPSC 237 –Plant Cell Biology(4) (Fall)
____CMDB 200 –Cell Biology(4) (Fall)
____NRSC 200A –Fundamentals of Neuroscience(3) (Fall)

MOLECULAR BIOLOGY

At least one course from the following:

____BCH 211 –Molecular Biology(3) (Fall)
____BMSC 202 –Molecular Basis for Disease(3) (Spring)
____BPSC 231 –The Plant Genome(4) (Winter)
____CMDB 201 –Molecular Biology(4) (Winter)
____NRSC 200B –Fundamentals of Neuroscience(3) (Winter)

DEVELOPMENTAL BIOLOGY

At least one course from the following:

____BPSC 232 -Plant Development(4) (Spring)
____CMDB 202 -Developmental Biology(4) (Spring)

REQUIREMENT II (Ph.D. Only)

Ph.D. students are required to take at least one of the following 3-or 4-unit courses or two of the 2-unit courses from the menu below. Alternatively, any course from the list above (other than the three used to fulfill Requirement I) may be taken.

____BCH 210 -Biochemistry of Macromolecules(4)
____BCH 212 -Signal Transduction & Biochemical Regulation (3)
____BCH 241 –Bioorganic Chemistry(3)
____BIEN 233- Computational Modeling of Biomolecules(4)
____BIEN 245- Floresense Methods in Biology & Chemistry (3)
____BIOL 203 -Cellular Biophysics(3)
____BIOL 221 -Microbial Genetics(4)
____BMSC 223 EZ – Themes in Human Bio and Disease (2-4)
____BPSC 201EZ -Methods in Plant Biology(1-2)
____BPSC 210 -Methods in Arabidopsis Research (3)
____BPSC 234 -Statistical Genomics(4)
____BPSC 239 –Adv. Plant Physiology(3)
____CEE 210 -Cell Engineering(4)
____CEE 230 -Biosensors(4)
____CHEM 284 –Biological Mass Spectrometry(2)
____CMDB 204 –Genome Maintenance & Stability(4)
____CMDB 205 –Signal Transduction Pathways in Microbes & Plants(4)
____CMDB 206 - Gene Silencing (3)
____CDMB 207 – Stem Cell Biology (4)
____CMDB 210 – Molecular Bio of Human Disease Vectors (3)
____CMDB 220 – Chemical Genomics Design Studio (2)
____CS 235 -Data Mining Techniques(4)
____CS 238 -Algorithmic Techniques in Computational Biology(4)
____GEN 240A-Advances in Bioinformatics and Genomics(4)
____GEN 240B-Advances in Bioinformatics and Genomics(4)
____ENTM 208-Biochemical & Molecular Host-Parasite Relationships(3)
____ENTM 232 -Insect Molecular Biology(3)
____ENTX 202 -Mechanisms of Toxicity(4)
____MCBL 201-Microbial Physiology(3)
____ME 272-Nanoscale Science and Engineering(4)
____PHYS 265-DNA Computation(2)
____PHYS 283-Techniques in Microscopy(2)
____PLPA 204 -Plant Viral Disease(4)
____PLPA 219 -Molecular Plant Virology(3)
____PLPA 231 – Physiology of Plant Disease (3)
____OTHER (with consent of Graduate Advisor)

All students are required to take the Graduate Seminars (257, 258) in *Cell, Molecular, and Developmental Biology* each quarter offered in residence.

____CMDB 257 (Fall) ____CMDB 258 (Spring)

In addition, if a laboratory holds regular lab meetings, students should enroll in 1-2 units of CMDB 250 per quarter. Please note that students are only allowed to enroll in one class per quarter which provides credit for lab meetings (for example, you may not take CMDB 250 and BCH 240 at the same time).

M.S. students are required to take one graduate seminar course in his/her area of specialization.

____BIOL/CMDB 281 or BPSC 240 or NRSC 289 ____ OTHER (with consent of Graduate Advisor)

Ph.D. students are required to take two graduate seminar courses in his/her area of specialization.

____ ____ BIOL/CMDB 281 or BPSC 240 or NRSC 289 ____ ____ OTHER (with consent of Graduate Advisor)

Ph.D. students must fulfill a two quarter teaching requirement. Course/Quarter_____ Course/Quarter_____

* indicates course may not be taught often

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Cell, Molecular, and Developmental Biology Graduate Program

ENTRANCE REQUIREMENTS:

____1 SEM or 2 QTRS Calculus (MATH 9A-B or equiv.)
____1 YR Physics (PHYS 2 A-C or equiv.)
____1 YR Inorganic Chemistry (CHEM 1A-C or equiv.)
____1 YR Organic Chemistry (CHEM 112 A-C or equiv.)
____1 YR Introductory Biology (BIOL 5A-C or equiv.)
____1 COURSE Biochemistry (BCH 100 or BCH 110A or B or C or equiv.)
____1 COURSE Genetics (BIOL 102 or equiv.)
____1 COURSE Statistics (STAT 20 or equiv.)
____2 upper division COURSES in cell, molecular or developmental biology (BPSC 135 or BIOL 111 or BIOL 107 or BCH 110C or equiv.)

Graduate Advisor Notes:

PROCEDURES FOR WAIVING COURSEWORK REQUIREMENTS

Enrolled students asking for exemption from program coursework requirements (or prerequisites to program) must submit a General Petition the CMDB Executive Committee with a statement of justification and supply documentation (transcripts, course syllabi, etc) for the committee's review.

GRADUATE DIVISION REQUIREMENTS

For information on specific Graduate Division requirements, please refer to the UCR Graduate Student Handbook (http://www.graduate.ucr.edu); to the Graduate Studies section of the University of California, Riverside General Catalog; and to the Graduate Division's World Wide Web site (http://www.graduate.ucr.edu).

CMDB General Student Petition

Name:_____

Request:

Reason for request:

Approvals:

Student:_____ Date:_____

Major Professor:_____ Date:_____

Graduate Advisor:_____ Date:_____

Protocol for a CMDB Student's

ANNUAL RESEARCH PROGRESS EVALUATION

Overview:

Each CMDB student is required, by both the Graduate Division and the CMDB Program, to have an Annual Research Progress Evaluation (ARPE). This will allow determination of whether the student is making normal and acceptable progress towards completion of her/his Ph.D. dissertation or MS thesis. Each student must hold an annual meeting with all the members of her/his Advisory /Dissertation Committee (ARPE) in the interval of June 1st – September 15th for each year the student is enrolled. Following the meeting, the student's major professor must prepare a written evaluation to be reviewed and signed by all the Committee members. A copy of this evaluation is to be promptly provided to the student, each Committee member, and also 2 copies are to be forwarded to the CMDB Student Affairs office (Ms. Kathy Redd). After review of the report by the appropriate CMDB Graduate Advisor, the CMDB office will forward the report to the Graduate Division. The ARPE should be conducted according to the following guidelines.

General Protocol for ARPE:

The ARPE will be initiated by the student preparing a written report (see details below) and scheduling, several weeks in advance, a time, date and location for the meeting of her/his Advisory Dissertation committee. The report must be distributed by the student to each committee member one week in advance of the scheduled meeting; also two copies should be delivered to the CMDB Student Affairs office (Ms. Kathy Redd). The meeting will be chaired by the student's major professor. At the meeting, the student will make a 25 - 45 minute presentation and answer questions raised by the Committee. The last phase of the meeting will be a private meeting of the Committee members where an evaluation of the student's annual research progress is conducted. The meeting will be concluded by the Committee sharing its conclusions with the student.

Student's Annual Written Research Report:

Page #1, Background and Introduction: There should be no more than 1 page of introduction that will allow the reader to understand the context and starting point for this year's research evaluation; literature citations are not needed. The Introduction should conclude with an enumeration of 2-3 key research questions (goals) that will be covered in this year's evaluation.

Pages #2-6, Research Data:, Summarize the key results (both positive and negative) as Figures and Tables using experimental data obtained over the past 12 months. Each Figure and Table should have a title and a legend that will permit the reader to understand the experiment; the extent of legend detail should be similar to that utilized by the Journal of Cell Biology. Also, under each legend, one or two sentences explaining the purpose of the experiment should be provided. The written report is limited to no more than 5 pages of data presentation; additional results may be included in the student's verbal

presentation. No narrative of the results, discussion or reference citations should be included in the report.

Page #7, Major Points: Following the Research Data pages, a list of the significant conclusions revealed or supported by the experimental data should be written. Each conclusion or point should be limited to no more than two sentences. These points may be verbally and graphically amplified and discussed in the student's oral presentation. Collectively, they should answer the question "What have you learned in the past 12 months?" This page should be concluded with an enumeration of 2-4 research goals for the following year.

Page #8, Additional Information on the Student: All information solicited here pertains to the previous 12 months. Provide the following information on a page titled "Additional Student Information". (a) List the courses you completed with their grades. (b) Indicate whether you completed your written qualifying exam (date) or oral qualifying exam (date). (c) List any scientific papers or abstracts that you authored or co-authored that were formally published; provide a complete citation using the reference style of the Journal of Cell Biology. (d) List any scientific meetings that you attended; list the name of the meeting and where it was held, the approximate number of attendees and describe your contribution(s) (platform talk, poster, observer, etc.). (e) List any awards you have received.

Instructions for Student Preparation of the ARPE Report

The ARPE document should be typed in font 11 or 12 (with each page numbered in the lower right corner). A Header for each page should list the students first and last name and the scheduled date and location of the Advisory/Dissertation Committee meeting. The ARPE report should be personally handed out by the student to each Committee member and to the CMDB Student Affairs office (Ms. Kathy Redd) at least one week in advance of the scheduled meeting. The student is responsible for scheduling the ARPE meeting and reserving a room for the meeting. Also the student should send an e-mail reminder to each Committee member 24 hours in advance.

ARPE Advisory Committee Written Report:

The student's Major Professor, acting as Chair of the Advisory/Dissertation Committee is responsible for preparing the required formal written report concerning the students Annual Research Progress Evaluation. It should provide the following information.

(a) The report should be in the format of a memo addressed to the student's Graduate Advisor.

(b) Date of the student's Research presentation and identification of the Committee members.

(c) A characterization of the student's research performance over the past year using one of the following four descriptors (Strong Performance Average Performance Room for Improvement Unsatisfactory Performance).

(d) A summary in 1-2 paragraphs of the strengths of the student, areas that need attention by the student, an assessment of the degree-of-difficulty of the research project, and any other information or issues that bear upon the Committees assessment of the student's research progress over the past 12 months.

(e) The report should also state whether the student is making 'normal progress to the degree' or whether there is some concern.

(f) All Committee members must sign the report.

(g) Copies of the signed report must be given to the student and each Committee member and two copies forwarded to Ms. Kathy Redd in the CMDB Student Affairs office.

THE ACADEMIC PROGRAM (M.S.)

To help you plan your program and monitor your progress, a Time Table Checklist for the M.S. Degree appears at the back of this section.

The M.S. degree is a research degree that requires the completion of a thesis. The CMDB Graduate Program does not offer a "coursework" M.S. degree. M.S. students generally concentrate on formal coursework during the first year and on research the second year.

The degree requires completion of 36 units of coursework. Twenty-four units must be in appropriate graduate courses (200 series), a maximum of 12 of 290-299 may count toward the degree. The remaining 12 units can be taken either in the 100 or 200 series. Students must take three CMDB core courses, the Seminar in Cell, Molecular; Developmental Biology (257) & the Graduate Student Seminar in CMDB (258) each quarter they are offered; plus one graduate seminar (see checklist for course requirements in Section 3 of the handbook).

CMDB 257 (a series of seminars presented by distinguished outside speakers) is normally offered in the fall quarter. **Students are required to register for CMDB 257 each quarter it is offered.** CMDB 258, offered every spring quarter, gives credit to graduate students presenting their research results at the annual student research symposium. **Enrollment in CMDB 258 and participation in the Annual Research Symposium is required each year in residence.**

CMDB 250 Special Topics in Cell, Molecular, and Developmental Biology provides students with a way to earn course credit for organized laboratory meetings. Students may enroll in 1-2 units per quarter. Please note that students are only allowed to enroll in one class per quarter which provides credit for lab meetings (for example, you may not take CMDB 250 and BCH 240 at the same time).

The following is a timeline guide for students pursuing the M.S. degree:

1) **Meet with the Graduate Advisor as soon as possible** in your initial quarter of study. She will work with you to design an appropriate academic course of study for your degree plan and will help you select an appropriate major professor. You may undertake two research rotations during your first quarter of study. Once you have chosen a major professor, you will choose a Guidance Committee (3 member committee that includes your Major Professor) in consultation with your major professor and the Graduate Advisor.

2) **In the first year, take basic coursework** and complete the core requirements for the program. Students who are admitted to graduate standing lacking CMDB entrance requirement courses will be required to take appropriate undergraduate courses.

3) **Select a Guidance Committee** in consultation with your chosen Major Professor by the end of your second quarter.

4) **Plan and begin a research project during the second quarter**, select a major professor and prepare a brief description of the proposed research to present to your Guidance Committee.

5) **Make substantive progress on your research during the third quarter**. By the end of your first year of graduate school, your research project should be well planned and substantially underway.

6) **Participate in the Annual Research Symposium and give a presentation on your research or proposed research.**

7) **Meet with your Guidance Committee** during your third quarter in residence before the Annual Research Symposium, to discuss your progress in the program and complete the Annual Research Progress Evaluation .

8) Carry out your Thesis Research during the summer and the second year. Confer with your Major Professor regarding the format of your thesis. The format is somewhat flexible, but must meet with the approval of the Thesis Committee and the Graduate Division. Choose your Thesis Committee (3 member committee that includes your major Professor) in consultation with your major professor and the Graduate Advisor. Graduate Division must approve your Thesis Committee. Your Thesis Committee may be the same as your Guidance Committee.

9) File an Application for Candidacy for Master of Science Form the quarter you expect to graduate. You can get this form from the Biological Sciences Graduate Student Affairs Center. It requires a portion to be completed by you and your Major Professor and another portion to be completed by Kathy Redd and the Graduate Advisor.

10) Have your Thesis Committee review a draft of your thesis

11) Defend your thesis.

12) Provide Kathy Redd with a copy of your thesis for her to have bound for the program's library.

CONTINUING FROM THE MASTER'S TO THE DOCTORATE

Students who are enrolled in the M.S. program may petition to pursue the Ph.D. degree. To do so, they must have the recommendation of the Executive Committee. Approval by the Executive Committee is not automatic; the Committee determines on a case-by-case basis whether a student has the academic potential to succeed in the Ph.D. program. For

further information on the process of petitioning to the Ph.D. program, please see the Graduate Student Affairs Officer.

Satisfactory Academic Progress

Normative time to the M.S. degree in CMDB is two years (six quarters). Normative time is defined as the period of full-time registration required to earn the degree, assuming that the student enters with a bachelor's degree and has no course deficiencies or need to take any remedial work. As stated above, in the CMDB Program, the individual student's program of study is planned first in consultation with the Director and Graduate Advisor, then in consultation with his or her Guidance Committee, which supervises the student's progress prior to the appointment of the Thesis Committee. The Thesis Committee oversees the student's progress in the final stages of his or her degree program.

For all students, evaluations of progress are carried out each spring/summer. Students meet with their Guidance or Thesis Committee, and the student's Major Professor submits the Annual Research Progress Evaluation to the Graduate Advisor summarizing the discussion of the Committee. The Graduate Advisor is then responsible for making specific recommendations to the Graduate Division concerning the student's progress. The Graduate Advisor may also approve exceptions to the normal time schedule occasioned by unusual circumstances. Students are provided with a copy of the annual evaluation, and copies are forwarded to the Graduate Division.

Unsatisfactory Academic Progress

It is expected that students will make good progress in the CMDB degree program. The Graduate Division will block registration of students who fail to perform satisfactorily. In addition, unsatisfactory academic progress severely limits opportunities for receiving funding through the Program. Students are considered to be making unacceptable progress when:

- they fail to fulfill program requirements in a timely and satisfactory manner.
- the overall GPA drops below the minimum level of 3.50 for fellowship recipients; 3.25 for those holding TA appointments, or 3.00 for non-supported students;
- they have 12 or more units of "I" grades.
- the Major Professor feels that the student is not making normal progress in the laboratory.

TIME TABLE CHECKLIST FOR M.S. DEGREE

Name: _____ Quarter entered degree program:_____

Chair of Guidance Committee: _____

Members of Guidance Committee: _____

_____

	Target Date	Date Completed:
Year 1		
Meet with Director and Graduate Advisor	1st quarter	_____
Select a Major Professor	2nd quarter	_____
Select a Guidance Committee	2nd quarter	_____
Plan and initiate research project	2nd quarter	_____
Meet with Guidance Committee	3rd quarter	_____
Annual Research Progress Evaluation	3rd quarter/summer	_____
Present research results at Research Symposium	Spring Quarter	_____
Year 2		
Name Thesis Committee	4th quarter	_____
Submit thesis to Committee	5th or 6th quarter	_____
Meet with Thesis Committee	6th quarter	_____
Annual Research Progress Evaluation	6th quarter/summer	_____
File advancement to candidacy paperwork	6th quarter	_____
Present research results at Research Symposium	Spring Quarter	_____
Defend thesis	final quarter	_____

M.S. Guidance Committee

Form to be completed by the end of the *Second Quarter*

Name: _____

Committee Members (Please Print Names)	**Signatures**
_____	_____
Major Professor	
_____	_____
_____	_____

Approved:

Major Professor:_____ Date:_____

Graduate Advisor:_____ Date:_____

THE ACADEMIC PROGRAM (PH.D.)

To help you plan your program and monitor your progress, a Time Table checklist is located in the back of this section. The following list provides more detailed information on the steps you need to take to advance to candidacy.

The main goal of our program is to enable students to acquire modern perspectives and technical skills in Cell, Molecular and Developmental Biology and to foster initiative and imagination that will lead to productive careers in academia, government, and industry following graduation. The Ph.D. degree requires demonstration of broad knowledge in the area of Cell, Molecular, and Developmental Biology and substantive ability in original research.

The recommended normative time for completion of the Ph.D. degree requirements is fifteen quarters (5 years). During the 1st two years, emphasis is on coursework and completion of the qualifying examinations, as well as research. The remaining three years are devoted primarily to research and to the writing and defense of the dissertation, although students continue to participate in graduate seminars and may take additional coursework during this period.

Briefly, you are expected to achieve the following major goals during your time in the program:(1) complete core course work by the end of your 1st year (see Section 3 for course checklist for Ph.D.), (2) pass the Written Qualifying Examination before the beginning of your second year, (3) prepare a research proposal, pass the Oral Qualifying Examination, and advance to candidacy by the start of the seventh quarter, and (4) produce and file your dissertation by the end of your fifteenth quarter.

The following is a guide to achieving these goals:

1) **Schedule a meeting with the Graduate Advisor soon after arriving at UCR.** The Graduate Advisor will design a course of study which will: (a) make up any course deficiencies; (b) meet the Program's course requirements and (c) prepare the student for research in the student's chosen area of specialization. The Graduate Advisor will also assist the student in the selection of an appropriate Major Professor. The Major Professor will serve as Chair of the student's Guidance and Dissertation Committees and has the critical role of mentoring the student's scientific development. The Major Professor provides the research facilities and the intellectual guidance required to complete the dissertation. Students may select a Major Professor any time during the 1st three quarters of enrollment.

2) **Begin rotations in labs that interest you.** Students are strongly urged to complete at least two, five-week rotations during their 1st academic year at UCR. If a student has already chosen a laboratory for his/her dissertation work, rotations are not necessary. If a student is uncertain about the laboratory for his/her dissertation research, laboratory rotations are helpful. During a rotation, students

spend time familiarizing themselves with research questions and techniques utilized in the laboratory of a CMDB faculty member. Rotation laboratories are chosen in consultation with the Director and Graduate Advisor and individual faculty members.

3) **Select a Guidance Committee** in consultation with your chosen Major Professor by the end of your second quarter

4) **Complete course requirements.** These include 3 core courses and 1 elective, plus two additional 2-unit graduate special topics seminars (from an approved list). CMDB 257 (a series of seminars presented by distinguished outside speakers) is normally offered in the fall quarter. **Students are required to register for CMDB 257 each quarter it is offered.** CMDB 258, offered every spring quarter, gives credit to graduate students presenting their research results at the Annual Research Symposium. **Enrollment in CMDB 258 and participation in the Annual Research Symposium is required each year in residence.** Students who are admitted to graduate standing with deficiencies in preparation will be required to take appropriate undergraduate courses.

5) **Complete your teaching requirement.** A minimum of two quarters of service as a Teaching Assistant in cell, molecular, developmental or related-area courses is required regardless of whether financial support comes from Fellowship or Research Assistantships, etc. Teaching may be done at any time but it is recommended that it be done in the third or fourth years. All students are required to complete TA Training through the Teaching Assistant Development Program (TADP). Training consists of **Orientation** (offered at the beginning of fall quarter), **2 Prep Courses**, and **3 Workshops**. Please see the TADP website for more information http://www.tadp.ucr.edu

6) **Complete the Qualifying Examinations.** The qualifying examination is given in two parts: written and oral.

   The Written Qualifying Examination. The Program administers the written examination prior to the start of fall quarter. Students normally take this exam after completing their core courses and before beginning their fourth quarter. Additional information regarding this examination will be provided for students during orientation and later in the year. The examination is given by a committee made up of faculty, using questions solicited from all faculty participating in the program. The areas of cell, molecular and developmental biology are normally equally represented on the examination.

Protocol for a CMDB Student's
ORAL QUALIFYING EXAMINATION RESEARCH PROPOSAL

Overview:

The CMDB doctoral program consists of two stages. The first interval is spent by the student fulfilling course requirements of the CMDB program and certain general requirements specified by the UCR Graduate Division. This phase is culminated by completion of the Written Qualifying Examination before the start of the second academic year and completion of the Oral Qualifying Examination before the end of the second academic year. When these requirements are met, the student is officially 'advanced to candidacy' for the Ph.D. The second stage of the program is devoted to independent study and research that will permit the student to write an acceptable dissertation. The doctoral dissertation must be an original research work in the candidate's chosen area of specialization. The student's Dissertation Committee will determine the acceptability of the dissertation. The Doctorate -- the highest degree the University of California can award -- is a research degree conferred on the recommendation of the Dissertation Committee which is nominated by the CMDB Program faculty in consultation with the student and officially appointed by the UCR Graduate Dean.

Oral Qualifying Examination:

The Oral Qualifying Examination is conducted by the Oral Qualifying Examination Committee acting on behalf of the UCR Graduate Division[1] and in accordance with the formal regulations and requirements of the Cell Molecular and Developmental Biology Interdepartmental Graduate Program. The Oral Qualifying Examination is taken after successful completion of the Written Examination and should be scheduled to occur before the end of the second academic year[2]. The focus of the Oral Examination will be a Research Proposal written by the student that s/he proposes to carry out for her/his Ph. D. dissertation. This document serves as a basis for examination and assessment by the Oral Qualifying Examination Committee of the following: (a) the ability of the student to write a concise and clearly written research proposal, (b) the student's fundamental knowledge in the area of her/his research, (c) the student's ability to identify a meaningful research project, (d) the student's ability to design and carry out productive meaningful research, and (e) the student's sophistication in describing the scientific literature germane to the proposed project. The format of the Research Proposal

[1] See the UC Riverside Graduate Division's Graduate Student Handbook: http://www.graduate.ucr.edu/

[2] Domestic CMDB graduate students should plan to complete their Oral Qualifying exam no later than by the start of their second fall quarter (assuming that they matriculated in September). Foreign students who received Non Resident Tuition (NRT) support should complete the Oral Qualifying Examination by June 31st of their second year. Failure to do so may jeopardize or complicate NRT tuition costs for the fall quarter; see Ms. Kathy Redd or your Graduate Advisor for details.

will be based on NIH and NSF grant proposals; the specific details of the document are presented below. The Proposal should not exceed 18 pages.

The oral exam will be administered by an Oral Qualifying Examination Committee composed of five UCR faculty members appointed by the Graduate Dean from nominees formally proposed by the student and her/his Major Professor, and officially approved by the appropriate CMDB Graduate Advisor[3]. One member of the Committee, who is not a CMDB Participating Faculty member, will be designated as the 'outside member[4] while the other four members must be drawn from the roster of CMDB Participating Faculty Members. **The Oral Qualifying Committee should be nominated at least two months prior to the intended date of the Oral Qualifying Examination.**

The Oral Examination must be held on a single day. A passing performance requires that no more than a single Committee member vote to fail. If a student fails the Oral Qualifying Examination, the Committee should make a recommendation either for or against a second examination. Ordinarily a second exam is not administered until at least three months have elapsed and within six months of the original exam. A third examination is not permitted[5]. A student who does not pass the oral qualifying exam may be dismissed from the program or may be allowed to complete a M.S. degree. The CMDB Executive committee, in consultation with the student's Oral Qualifying Examination Committee, will determine if transfer to the M.S. program is recommended.

Specifications of the CMDB Student's Research Proposal

The candidate's Research Proposal should be prepared according to the following guidelines and include the stipulated A through G sections.

(a) The Proposal should not exceed 18 pages not counting the Title Page and the Literature Cited section. The space required for all figures and Tables is included in the 18 page limitation. The entire document should be typed single spaced in a size 12 font. The side, top and bottom margins should be set at 2.0 cm. Each page (including the title page) should be numbered consecutively in the bottom right corner. Each page, except the title page, should have a header that states in size 10 font, the student's first and last name followed by the words "CMDB Research Proposal", followed by the scheduled date of the Oral Qualifying exam; for example Scotty Bear, CMDB Research Proposal, March 25, 2007.

[3] The official Oral Qualifying Member Nomination form (a Graduate Division form) will be prepared by Ms. Kathy Redd in the Biological Sciences Graduate Student Affairs Center on behalf of the student, signed by the appropriate Graduate Advisor and forwarded to the Graduate Division.

[4] The 'outside' member of the Oral Qualifying Committee, must be a voting member of the UCR Academic Senate who does not hold an appointment as a CMDB Participating Faculty. This person represents the faculty at large and acts as a "third party ensuring fairness".

[5] See the UC Riverside Graduate Division's Graduate Student Handbook: http://www.graduate.ucr.edu/

(b) The Title page should include the following information:

(i) The following Statement must be placed at the top of the Title page in a size 12, bold font 'Research Proposal for CMDB Qualifying Examination on 'month, 'day', 'year'. This should be followed by the following items, spaced neatly down the Title page.
(ii) An informative title that captures the essence of the proposed research project; it should not have more than 120 characters + spaces and should be in a size 14, bold font.
(iii) The official UCR name of the Candidate.
(iv) The statement 'Major Professor' followed by the name of the candidate's Major Professor, followed by a signature line. Underneath the signature line the following should be typed "*Approved for distribution*".
(v) The full name and departmental affiliation of each of the five members of the Oral Qualifying Examination Committee.

(c) Section A: titled HYPOTHESIS AND SPECIFIC AIMS; it is limited to only one page that provides the following information:

(i) An Abstract (limited to 400 words) that includes the following:
(ii) A concise articulation of the dissertation's overall objectives and the specific goal(s) of the research proposed, e.g., to create a novel experimental design, to solve a specific problem, or to address a specific barrier in your field. You may choose to formulate your own hypothesis. This information is then immediately followed on the same page by the following;
(iii) An explicit listing of the titles of the Specific Aims in Section D of your Research Proposal. These titles should exactly match (word for word) the wording that is contained in Section D of the research proposal.

(d) Section B: titled BACKGROUND; this section is limited to no more than five pages. This section should provide the following background information to the proposed Research Proposal.

(i) A brief review of the literature that is appropriate to bring the Committee members up to speed with the 'state of the art' of recent research in the general area of your research proposal.
(ii) Appropriate citation of the available literature in this area. See comments on the bibliography formatting below.
(iii) This section may include figures and tables as are deemed to be helpful; their area must be included in the six pages allowable for this section.

(iv) All Figures and Tables should be separately numbered, in sequence, throughout the entire document.

(v) Each Figure and Table must have a title, and, if needed, a legend that provides appropriate further description to assist the reader in understanding the figure/table; e.g. reference to experimental methodology, that may or may not require reference citation(s).

(e) Section C: titled SIGNIFICANCE OF THE PROPOSED RESEARCH. This section can be up to one page in length. In this section, the Candidate should include the following:

(i) A concise description of the background leading up to the Research Proposal,

(ii) A critical evaluation of existing knowledge and identification of the gaps that the project is intended to fill.

(iii) A description of the importance of the proposed research by relating the Specific Aims to the long term direction of research in the field.

(f) Section D: titled RESEARCH DESIGN AND RESULTS OBTAINED TO DATE. It can be up to eleven pages in length. It should include a layout in a logical fashion of the method of prosecution of the overall research objective being proposed for your Ph.D. dissertation and, also, it should include the preliminary data you have already obtained. The section should contain the following.

(i) This section should be subdivided into as many primary sub-sections as the Specific Aims that were listed in section A.

(ii) Each primary Specific Aim may be broken down into as many or few secondary sub-Specific Aims as the candidate feels appropriate or necessary for the experiments being proposed.

(iii) Each Aim and sub- Aim should provide some kind of Rationale statement, followed by a brief introduction and then a section titled Experimental design(s).

(iv) The presentation of Preliminary Data should include appropriate Tables with titles and brief legends and Figures and with figure titles followed by informative succinct legends.

(v) Remember that <u>all</u> figures and <u>all</u> tables should be separately numbered sequentially throughout the entire proposal.

(g) Section E: LITERATURE CITED; the pages of this section are <u>not</u> <u>included</u> in the page limitation of 18 pages.

(i) The literature citations should be formatted in a size 10 font and numbered consecutively in the order of their citation in the Research Proposal. They should be formatted as specified by the *Journal of Cell* Biology except that <u>all</u> authors names must be

listed and should be in 'bold; 'go to the following URL http://www.jcb.org/misc/ifora.shtml#References

(h) Other information. The following standard sections of NSF and NIH grants should not be included in the candidate's Research Proposal: Table of Contents; Budget Information, Biographical Sketches; Available space and equipment; Animal use assurances; Checklist, and Appendix.

(i) Approval of Research Proposal by your Major Professor.

(i) Prior to distribution of your Research Proposal to your Committee, you must obtain your Major Professor's signature on the Title Page indicating that it is "*Approved for distribution*".

(j) Distribution of final Research Proposal. After signature approval has been obtained, a hard copy of your proposal should be given to all members of the Qualifying Exam Committee **at least one** week (7 days) before the scheduled examination. Also, deliver one copy of your Proposal to Ms. Kathy Redd's office in the Biological Sciences Graduate Student Affairs Center. Students are encouraged to speak with the Oral Qualifying Exam Committee Chair and members for advice on preparing for the exam.

7) **Work on your Dissertation.** Once a student has advanced to candidacy (passed the oral qualifying examination), a Dissertation Committee of three faculty members will be nominated by the student in consultation with the Major Professor, officially approved by the Graduate Advisor, and appointed by the Graduate Dean. The Dissertation Committee is chaired by the student's Major Professor. The Dissertation Committee will meet with the student every spring quarter to evaluate the student's progress. The Dissertation Committee has responsibility for the content of the dissertation. The dissertation must meet UCR's requirements for style, format, and appearance.

8) **Defend your Dissertation.** Before the dissertation is given final approval, the student must present a public lecture on the dissertation research to faculty and students in the program. Following the public lecture, the student will meet with the Dissertation Committee for an oral defense in accordance with the regulations of the Graduate Division. www.graduate.ucr.edu

SATISFACTORY ACADEMIC PROGRESS

Normative time to the Ph.D. degree in Cell, Molecular and Developmental Biology is fifteen quarters (five years). Normative time is defined as the period of full-time registration required to earn the degree, assuming that the student enters with a bachelor's degree and has no course deficiencies or need to take any remedial work. As stated above, in the CMDB Program, the individual student's program of study is planned in consultation with his or her Guidance Committee, which supervises the student's

progress prior to the appointment of the Dissertation Committee. After the student advances to candidacy, the Dissertation Committee oversees the student's progress in the final stages of his or her degree program.

For all students, evaluations of progress are carried out each spring. Students meet with their Guidance or Dissertation Committee and the student's Major Professor submits the Annual Research Progress Evaluation to the Graduate Advisor summarizing the discussion of the Committee. The Graduate Advisor is then responsible for making specific recommendations to the Graduate Division concerning the student's progress. The Graduate Advisor may also approve exceptions to the normal time schedule occasioned by unusual circumstances. Students are provided with a copy of the annual evaluation, and copies are forwarded to the Graduate Division.

UNSATISFACTORY ACADEMIC PROGRESS

It is expected that students will make good progress in the CMDB degree program. The Graduate Division will block registration of students who fail to perform satisfactorily. In addition, unsatisfactory academic progress severely limits opportunities for receiving funding through the Program. Students are considered to be making unacceptable progress when:

- they fail to fulfill program requirements such as exams or research in a timely and satisfactory manner.
- the overall GPA drops below the minimum level of 3.50 for fellowship recipients, 3.25 for those holding TA appointments, or 3.00 for non-supported students;
- they have 12 or more units of "I" grades.
- the Major Professor feels that the student is not making normal progress in the laboratory.

TIME TABLE CHECKLIST FOR Ph.D. DEGREE

Name: _____ Quarter entered degree program:_____

Chair of Guidance Committee: _____

Members of Guidance Committee: _____

_____

	Target Date	Date Completed:
Year 1		
Meet with the Director and Graduate Advisor	1st quarter	_____
Do Rotations	1st – 2nd qtr	_____
Select Major Professor and establish Guidance Committee	1st – 2nd qtr	_____
Meet with Guidance Committee (Annual Research Progress Evaluation)	Spring /Summer	_____
Present research results at Research Symposium	Spring Quarter	_____
Year 2		
Take written qualifying exam	Fall	_____
Nominate Oral Qualifying Exam Committee	Fall or Winter Qtr.	_____
Research Proposal to Committee	Winter or Spring	_____
*Take oral qualifying exam	Before the 7th quarter	_____
Meet with Guidance/Dissertation Committee (Annual Research Progress Evaluation)	Spring /Summer	_____
Present research results at Research Symposium	Spring Quarter	_____

Year 3

Meet with Guidance/Dissertation Committee (Annual Research Progress Evaluation)	Spring/Summer	_____
Present research results at Research Symposium	Spring Quarter	_____

Year 4

Meet with Guidance/Dissertation Committee (Annual Research Progress Evaluation)	Spring/Summer	_____
Present research results at Research Symposium	Spring Quarter	_____

Year 5

Write Dissertation	All quarters	_____
Meet with Guidance/Dissertation Committee (Annual Research Progress Evaluation)	Spring/Summer	_____
Present research results at Research Symposium	Spring Quarter	_____
Publicly Defend Dissertation	Final Quarter	_____

Ph.D. Guidance Committee

Form to be completed by the end of the *Second Quarter*

Name

_____

Name (Please Print Names) Signatures

_____ _____

Major Professor

_____ _____

_____ _____

Approvals:

Major Professor _____ Date _____

Graduate Advisor _____ Date _____

IMPORTANT PROGRAM INFORMATION

Annual Research Symposium: Each spring the program sponsors a two-day Research Symposium to give CMDB students an opportunity to present short (15-minute) talks on their research projects. **All students in the program are required to make a presentation and all students are expected to be present for the entire duration of the symposium.** CMDB 258, offered every spring quarter, gives credit to graduate students presenting their research results at the Annual Research Symposium. Meals are provided for attendees. Awards are given to students presenting the best papers. Award plaques are displayed in the CMDB display cases in the south corridor of Boyce Hall.

The CMDB Graduate Student Association (CMDB-GSA): Every CMDB graduate student is automatically a member of the CMDB Graduate Student Association (CMDB-GSA). The CMDB-GSA serves several purposes, such as promoting interactions among the graduate students, providing information about the program and the university to the graduate students, and representing graduate student concerns to the faculty and other campus organizations. Students become better acquainted with each other and with the CMDB faculty during social events that the CMDB-GSA organizes. CMDB-GSA is governed by an elected student advisory committee, which is composed of one representative from the first year students, one from the second year students, and three from the students third year and up. One student from this committee serves as the chair, and acts as a liaison between the faculty and the graduate students, both by disseminating information to the students and by soliciting student opinions regarding programmatic issues and policies. The CMDB-GSA facilitates unified action of the graduate students regarding issues that affect them. Issues of interest to our students are discussed during meetings held at least once per quarter, and these concerns are brought to the faculty's attention when appropriate. The CMDB-GSA also sends representatives to Graduate Student Association (GSA) meetings, who then report back to the other members.

CMDB Website and Display Cases: The CMDB program maintains an active web site with valuable information in addition to two display cases in the south corridor of Boyce Hall. Students can check either of these places for current news and events.
www.cmdb.ucr.edu

Keys: When you have selected a Major Professor, you will be able to obtain keys to access the building and rooms which you will be using. Your Major Professor will help you with this process.

Mailboxes: Graduate students are assigned mailboxes in their Major Professor's mailroom. Please see the Student Affairs Officer in Bio Sci Grad Student Affairs to locate your mailbox. The mail is delivered twice a day, in the morning and afternoon. It is very important to check your box daily. Personal mail is not to be delivered to or from the University and the University's name MAY NOT APPEAR ON PERSONAL CHECKS OR BANKING ITEMS.

FINANCIAL SUPPORT

Students admitted to the Ph.D. typically receive financial support for 5 years. During the first year, the main sources of graduate student support are Fellowships and Graduate Student Research Assistantships obtained through the Program. After the first year, the majority of a student's financial support comes from Graduate Student Research Assistantships obtained through research grants awarded to the Major Professor and Teaching Assistantships. Students who enter the Ph.D. program with strong undergraduate records are encouraged to apply for National Science Foundation, Howard Hughes Medical Institute, or other extramural fellowships. Students who have Advanced to Candidacy are also encouraged to pursue extramural fellowship funding. Other support is available through a variety of University, State, and Federal sources.

Important FAFSA Information: Fellowship/Grant awards are paid from a variety of funding sources, some of which require socioeconomic and parental educational history and financial data. Students who accept fellowship and/or grant awards are required to complete the *Free Application for Federal Student Aid (FAFSA).* FAFSA electronic filing is available at: www.FAFSA.ed.gov If you expect to receive financial support from UCR, you must file FAFSA every year (after you've prepared your federal tax return). **Continuing International Students are also be required to complete FAFSA**.

Graduate Student Research Assistantships (GSRs): These positions are supported either with funds that come from the Program or from the Major Professor's grant. Students with GSRs receive a partial remission of fees and payment of the Graduate Student Health Insurance Program Fee.

Teaching Assistantships (TAs): The type of work involved in TAing varies according to the class assigned. When a student is appointed as a TA, they receive a detailed letter explaining the duties for the position. Students with Teaching Assistantships receive a partial remission of fees and payment of the Graduate Student Health Insurance Program Fee.

NOTE: TAs and GSRs must be making acceptable progress toward their degree objective, must be advanced to candidacy within 12 quarters after entry, and must have fewer than 8 units of Incomplete grades. In addition, TAs must maintain a 3.25 GPA; GSRs must maintain a 3.00 GPA.

Summer support: Students in the Program are normally supported by their Major Professor during the summer.

Dissertation Research Grants provide funds to doctoral candidates for research expenses associated with the dissertation. Applicants must be advanced to candidacy and plan to be registered during the period of the award. Proposals may be funded up to a maximum of $1,000. These funds may not be used for preparing the dissertation copy or

as a stipend for personal support. You can download the application from the web at www.graddiv.ucr.edu/finsuptoc.html

Graduate Student Association (GSA) Minigrants help to pay the travel expenses of students who have been invited to present scholarly papers or posters at regional and national professional conferences. The program is administered by the Graduate Student Association and requires that Departments or Graduate Programs agree to provide matching funds. Contact the GSA, at x83740 or http://www.gsa.ucr.edu/, or the Graduate Student Affairs Officer for minigrant applications.

EXTRAMURAL SUPPORT

In addition to the fellowships, assistantships, grants, and loans administered by the University, graduate students may also be eligible for other types of support provided by federal agencies and private foundations. Organizations that have awarded fellowships and research support to UCR students include the National Science Foundation, National Institutes of Health, U.S. Public Health Service, U.S. Department of Education, Fulbright Program, Phi Beta Kappa Alumni Scholarships for International Scholars, and Sigma Xi. If students wish to explore these sources of support for study, they should consult the *Annual Register of Grant Support* and other similar directories either at the reference department of the library or through the Financial Support section in the Graduate Division. There are also many sites on the World Wide Web devoted to various sources of aid for graduate students.

BIOLOGICAL SCIENCES GRADUATE STUDENT AFFAIRS CENTER
(1001 Batchelor Hall)

Housed under the College of Natural & Agricultural Sciences, the Biological Sciences Graduate Student Affairs Center supports the graduate programs of Biomedical Sciences, Cell, Molecular and Developmental Biology, Entomology, Environmental Toxicology, Evolution, Ecology, and Organismal Biology, Genetics, Genomics and Bioinformatics, Microbiology, Neuroscience, Plant Biology, Plant Pathology and Statistics. We also provide services to the Departments of Biology, Botany and Plant Sciences, and Nematology. The Center's staff can assist you with class registration, program requirements, Graduate Division policies, and fellowship and employment matters (TA/GSR). You will deal most often with the staff member who supports your graduate program, but please feel free to contact any Center staff member when your Student Affairs Officer is unavailable.

CENTER STAFF MEMBERS

Kathy Redd, Director and Student Affairs Officer – oversees the operation of the Center. She is also the primary contact for the **Cell, Molecular, and Development Biology, Biomedical Sciences, and Microbiology** graduate programs.
E-mail kathy.redd@ucr.edu
Phone 827-5621

Andréa Rinderle, Assistant Director and Student Affairs Officer - is the primary contact for the **Plant Biology**, and **Genetics, Genomics and Bioinformatics** graduate programs and oversees the operation of the Center when the Director is away.
E-mail andrea.rinderle@ucr.edu
Phone 827-5688.

Michelle Bierman, Student Affairs Officer - is the primary contact for the **Biology** and **Plant Pathology** graduate programs and the **Nematology** Department.
E-mail michelle.bierman@ucr.edu
Phone 827-5913.

Perla Fabelo, Student Affairs Officer - is the primary contact for the **Neuroscience and Statistics** graduate programs.
E-mail perla.fabelo@ucr.edu
Phone 827-4716.

Deidra Kornfeld, Student Affairs Officer – is the primary contact for the **Entomology** and **Environmental Toxicology** graduate programs.
E-mail deidra.kornfeld@ucr.edu
Phone 827-4116.

GRADUATE DIVISION REQUIREMENTS

For information on specific Graduate Division requirements, please refer to the UCR Graduate Student Handbook, published by the Graduate Division; to the Graduate Studies section of the University of California, Riverside General Catalog; and to the Graduate Division's World Wide Web site. That address is:
http://www.graduate.ucr.edu/GSHndbk.pdf

GRADUATE STUDENT ASSOCIATION

All graduate students are automatically members of the Graduate Student Association (GSA), which seeks to represent their views and promote their interests with the faculty and administration, both at the campus level and systemwide. They are responsible for negotiating and reviewing healthcare insurance coverage. Their Grievance Mediation Officer acts as an advocate on grievance matters. GSA is supported by a separate $16 per quarter student fee, which it administers and allocates annually for various graduate student services. It also administers the Minigrant Program, to provide travel grants to graduate students who represent GSA at professional conferences. For a more detailed description of GSA activities and services, call (951) 827-3740.

EMAIL ACCOUNTS

When you enroll at UCR you are automatically assigned an account on the Student server. This account allows you to access your email account, and potentially to host your own web site. Along with your account you will also receive a machine generated login name. You cannot change your login name, it will stay the same throughout your time at UCR. However, you may choose to change your password at your own discretion. (Changes in your password will not affect your email address nor will they alter the URL of your home page.) Your initial password is your Permanent PIN number. If you forget it you can go to the Registrar's Office. However, we strongly recommend that you change your password as soon as possible. Occasionally, passwords are stolen and the amount of damage that can be done from a stolen password is considerable. If your password is your Permanent PIN number, the amount of damage increases greatly, because your academic information and financial aid records may also be accessed.

Please read your e-mail daily. Graduate Student Affairs Officers usually use e-mail to remind students of important deadlines or to pass on important messages. You are required to read your University-Assigned e-mail address. If you need help forwarding this address to another e-mail address, please contact your Student Affairs Officer.

MAILBOXES

Ask your Student Affairs Officer about the location of your mailbox. **Find out now where it is and check it daily.**

COMPUTER ACCESS AND OFFICE SPACE

Ask your Graduate Student Affairs Officer about computer access. Some programs provide **offices** for their graduate students, some only **desk space** in a lab. If your program does not have a computer room, there are computer labs on campus that you are free to use. **Find out now what's available to you.**

LABORATORY SAFETY TRAINING

As an employee of the University, you are required to attend Lab Safety Training provided by Environmental Health & Safety (EH&S). Please make arrangements

through EH&S at x25528 to enroll in a session. You may also enroll on-line via the EH&S website: http://www.ehs.ucr.edu/. Please attend this training as soon as possible.

UCR IDENTIFICATION CARD

The UCR Card is a multi-functional Campus ID card. It is the Official photo ID of UCR and it provides you with Library privileges as well as access to the Sports Recreation Complex.

Photos are taken at the Science Library, ground floor 9:00 am - 4:00 pm, Monday - Friday, for a fee of $20. Bring a valid form of ID, such as a driver's license or passport. Appointments can be made, but are not necessary.

Students: The cost of your card is billed directly to your campus (GROWL) student account, so you do not need to bring cash. For information on optional UCR card services see: http://www.ucrcard.ucr.edu/

ESTABLISHING CALIFORNIA RESIDENCY

Domestic non-resident students must establish California residency by the beginning of the second year of study. You must petition in person at the Office of the Registrar, Hinderaker Hall, for a change of classification from nonresident to resident status. All changes of status MUST be initiated before the first day of classes for the term for which you intend to be classified as a resident

ENROLLMENT

It is the student's responsibility to initially enroll in courses and to confirm course enrollment. Failure to enroll by scheduled deadlines may result in the lapse of student status or delay financial aid.

The GROWL system is the campus phone and web service for enrolling in course work. Using GROWL via the Web (http://www.growl.ucr.edu), students can enroll in classes, confirm course enrollment, view grades, check their financial aid, billing, degree progress, view their Student ID, change their address or PERM PIN number, and update privacy restrictions. To use GROWL you must enter your date of birth, Student ID number, and PERM PIN number.

THE PERMANENT PERSONAL IDENTIFICATION NUMBER

Your **PERM PIN** is a permanent six-digit number that is set by the Office of the Registrar once a student is admitted to the university. PERM PINs are required for any Web transactions.

CHANGE OF ADDRESS

Please keep your local address and phone number current. Let your Graduate Student Affairs Officer know when you move. **You must update your addresses (local, billing, next of kin) with GROWL.**

INFORMATION FOR TEACHING ASSISTANTS (TAs)

Teaching Assistant Development Program

UCR has a long history as a distinguished teaching campus and regards Teaching Assistant (TA) training as a crucial part of graduate instruction. Each new TA is required

to attend the Teaching Assistant Development Program's (TADP) orientation in the fall. Students are also required to attend either a departmental or TADP quarter long training program. TADP provides services to the more experienced TA as well, including a teaching resource library, teaching portfolio development and assessment consultations, and seminars on professional development. TADP also coordinates a Mentor TA program, in which, TAs of proven ability have the opportunity to work closely with their less experienced colleagues. Contact your department or TADP (951-827-3386, tadp@ucr.edu) for further information on training requirements and upcoming seminars.

The SPEAK Exam

To be appointed a TA, any student **whose native language is not English** must pass an English proficiency exam. This includes not only international students but also **any** student whose first language is not English (if you were born outside the US, you will either have to be waived from the test or take the test). The cost for the SPEAK exam is currently $35.00. The exam is administered by University Extension and students should register at the Student Services desk at the UCR Extension Center located at 1200 University Avenue (across from Starbuck's Coffee on University Avenue).

Those who score a conditional pass can be appointed as a TA but are required to participate in the appropriate English language classes at UCR Extension Center and retake the test. One class in English is free but if students do not pass the SPEAK after one class, they will have to pay for subsequent classes. Individuals with conditional passes may be appointed as TAs for up to three quarters (four under unusual circumstances) on a probationary basis with the approval of the Graduate Dean. For those students within the probationary range, a determination of their continuing eligibility to serve as TAs will be made by the Graduate Dean on the basis of:

- Departmental recommendation, including an assessment of the student's academic ability;
- Student teaching evaluations;
- Other evidence of commitment to/performance in teaching (e.g., faculty evaluations or statements of support, videotapes);
- Evidence of a good-faith effort to improve English skills; and Relative proximity to the level of competence represented by a clear pass

GRADUATE STUDENT FINANCIAL ASSISTANCE

Important FAFSA Information

Fellowship/Grant awards are paid from a variety of funding sources, some of which require socioeconomic and parental educational history and financial data. Students who accept fellowship and/or grant awards are required to complete the *Free Application for Federal Student Aid (FAFSA).* Electronic filing is available at: www.FAFSA.ed.gov If you expect to receive financial support from UCR, **you must file FAFSA every year** (after you've prepared your federal tax return). All fellowship recipients must complete FAFSA.

Funding Sources

Graduate Students are supported from a variety of sources. Here is information on the various types of funding and definitions of the commonly-used acronyms:

***Graduate Division Stipend**:* Usually awarded as part of a larger fellowship package, these dollars go directly from Graduate Division to the student through the Financial Aid System. The student receives "pay checks" at the beginning of each month starting in late September (for the October 1 stipend check).

***Graduate Student Researcher (GSR)**:* An employment title for graduate students conducting research (either independent or directed). Students may not be appointed at more than 49% during the academic year. During academic breaks and the summer a student may be employed up to 100%.

Year 1	GSR, Step II	$2,719/mo *at 100%*
Year 2 to Advancement to Candidacy	GSR, Step III	$3,015/mo *at 100%*
Advanced to Candidacy through Normative Time	GSR, Step IV	$3,257/mo *at 100%*

GSR appointments at 25% or more during the academic year are entitled to GSHIP and PFR (see below). Financial support for GSR employees is provided by faculty extramural grants and departmental general funds (supplemented by the College of Natural and Agricultural Sciences). Students are paid in arrears (just like other university employees) and receive their first check after their first month of work. (i.e. a student who begins work in fall quarter does not get a check until November 1)

***Teaching Assistant (TA)**:* Also known as ***Academic Student Employee (ASE)**.* This employment title is for graduate students who are teaching part of a course (normally labs or discussion sections) under the guidance of a faculty member/instructor. Students may not be appointed at more than 50% during the academic year. If they are appointed at 25% or more time during an academic quarter, they are entitled to GSHIP and PFR (see below). There are many rules that are associated with this title now that there is an employee contract. See the United Auto Workers Union Contract for more information. TA funds are distributed to the Departments by the CNAS Dean's Office. Students are paid in arrears (just like other university employees) and receive their first check after their first month of work. (i.e. a student who starts work in fall quarter does not get a check until November 1)

Block Grants/Discretionary Funds: Graduate Programs receive Discretionary funds from the College Dean at the beginning of each academic year (Summer) to help support incoming students. Departments may petition the Dean to use a portion of the Discretionary funds to support continuing students on a case-by-case basis. Because Non-Resident Tuition (NRT) cannot be paid out of TA and certain GSR funds, most Departments also petition to use a portion of their Discretionary funds to pay the NRT of some continuing International Students. Some Departments also use Discretionary funds to pay the difference (Fee Differential) in the students' fees so that individual students have no out-of-pocket expenses for fees. The Graduate Student Affairs Officer provides Graduate Division with a list of the students who are to receive these awards.

***Partial Fee Remission (PFR)**:* Students who are appointed at 25% or more time during an academic quarter as a GSR or TA are entitled to PFR. This entitlement pays part (but not all) of the students' mandatory university fees. The Graduate Student Affairs Officer provides Graduate Division with a list of the students who are eligible for this entitlement before the student bills are printed. If an award is placed on the system after bills are printed, the student's bill will not reflect the correct fees they owe.

***Graduate Student Health Insurance (GSHIP)**:* Students who are appointed at 25% or more time during an academic quarter as a GSR or TA are entitled to have their GSHIP fees paid for them. The Graduate Student Affairs Officer provides Graduate Division with a list of the students who are eligible for this entitlement before the student bills are printed. If an award is placed on the system after bills are printed, the student's bill will not reflect the correct fees they owe. The actual dollar amount of GSHIP changes as the insurance prices change from year to year. Students who have private Health Insurance comparable to the University's coverage can apply for waivers of the GSHIP fees. If a student has comparable health insurance coverage s/he may apply for an exemption of the GSHIP premium by filing the appropriate paperwork with the Health Center. Deadline dates for petitioning for exemption from GSHIP are firm. Contact the Student Health Insurance coordinator at ext. 2-5683 or 2-3031 for information.

***Non-Resident Tuition Remission (NRT or NRTR)**:* Non-residents of California (either Domestic or International) who are appointed at 45% or more as a GSR are entitled to have their Non-Resident Tuition paid for them. The Graduate Student Affairs Officer provides Graduate Division with a list of the students who are eligible for this entitlement before the student bills are printed. If an award is placed on the system after bills are printed, the student's bill will not reflect the correct fees they owe. International Students cannot ever establish residency and will owe Non-Resident Tuition for their entire student careers. However, when an International student Advances to Candidacy, his/her Non-Resident Tuition is eliminated for a period of 9 quarters. Domestic non-resident students must establish California residency by the second year of study. You must petition in person at the Office of the Registrar, Hinderaker Hall, for a change of classification from nonresident to resident status. All changes of status MUST be initiated before the first day of classes for the term for which you intend to be classified as a resident. Students planning to file for residence status after their first year should talk with the Residence Deputy well before the appropriate residence determination date, preferably during their first few weeks in California.

***Fee Differential**:* The left-over university mandatory fee amount for a student with a PFR and GSHIP and NRTR entitlements. This dollar amount changes as GSHIP and PFR go up. Most students are required to pay this.

***Departmental Grant In Aid (DGIA)**:* Departments or individual faculty members with unrestricted funds (many federal grants will not allow payment of student fees) can grant fellowship-like awards to individual students. This is most often used to pay the student's Fee Differential. The Graduate Student Affairs Officer provides Graduate Division with a list of the students who are to receive these awards indicating the account and fund information. Graduate Division then pulls the money out of the account and awards it to the student through the Financial Aid System.

CAMPUS FUNDING

Graduate Outreach and Preparation Programs
Dissertation-Year Fellowships

The Dissertation-Year Fellowship Program provides financial support during the final year of dissertation work. Recipients must demonstrate high potential, promise and the desire for an academic career. Faculty mentors assist fellows in acquiring skills

necessary to become candidates for faculty positions at major universities. Support is also provided to enable fellows to present their research at other UC and CSU (California State University) campuses. The fellowship provides a stipend of $ 15,000 plus payment of fees, $500 for research expenses, and $450 for travel expenses.

For more information on this program, contact the Director, Maria Franco-Aguilar at (951) 827-3680 or e-mail maria.franco-aguliar@ucr.edu.

Research Grants

Dissertation Research Grants

Dissertation Research Grants provide funds to doctoral candidates for research expenses associated with the dissertation. Applicants must be advanced to candidacy and plan to be registered during the period of the award. Proposals may be funded up to a maximum of $ 1,000. These funds may not be used for preparing the dissertation copy or as a stipend for personal support.

Deadlines to apply for Dissertation Research Grant funding are usually in October, January, and April. Please consult the Graduate Student Affairs Officer for the exact deadline to apply for funding and for applications and guidelines.

Intercampus Research Opportunity Fund
The Intercampus Research Opportunity Fund assists with travel, living expenses, and the research costs of doctoral candidates whose research or study requires the use of another campus' resources. Applicants must be advanced to candidacy. The program is administered by the Office of the Academic Senate. For more information, the Academic Senate Office can be reached by phone at (951) 827-5538.

Graduate Student Association Mini-grants
Graduate Student Association Mini-grants help to meet the financial needs of students who have been invited to present scholarly papers or posters at regional and national professional conferences. The program is administered by the Graduate Student Association and requires that departments agree to provide matching funds.

OTHER SOURCES OF FUNDING

Graduate students may visit the Rivera Library Reference Section for more information regarding references for extramural funding sources. All libraries on campus have computers with Internet access available in the Reference Sections for student use. You may visit the Reference Librarian in any campus library for help in searching the Internet for many more sources of financial support. One source is through the Office of Research Affairs web page. Using Netscape version 3 or higher, through their web site (http://www.ora.ucr.edu) you can access SPIN. You can search this database by sponsor's names, geographic area, and subject order. If you choose applicant type as "graduate level" you will weed out institutional funding. It is recommended that you narrow your search by deadline dates as well. Other excellent web addresses are:

* California Student Aid Commission Home Page: http://www.csac.ca.gov/

* Fellowship Office National Research Council: http://www.nas.edu/subjectindex/fel.html

* Financial Aid Information Page: http://www.finaid.org

(check FASTWEB)

* National Science Foundation: http://www.nsf.gov/

* U.S. Department of Education Student Guide, Financial Aid: http://www.ed.gov/prog_info/SFA/StudentGuide/index.html

* The Foundation Center's Home Page: http://www.fdncenter.org/

* Purdue University (includes general listings): http://www.purdue.edu/DFA/

Extramural Support

There are many opportunities for Graduate Students from outside funding sources from federal agencies and private foundations. UCR subscribes to several searchable databases listed on the Office of Research Affairs web site at www.ora.ucr.edu:
InfoEd International's SPIN
The Illinois Researcher Information Service (IRIS)
Community of Science (COS)
Texas Research Administrators Group (TRAM)
Cornell Fellowship Notebook http://cuinfo.cornell.edu/Student/GRFN/
UCLA also offers a comprehensive database called GRAPES (Graduate and Postdoctorate Extramural Support). The web address is
http://www.gdnet.ucla.edu/grpinst.htm

For information contact Karen Smith at karen.smith@ucr.edu

Computer Use Ethics

Computing & Communications endorses the following statement of principle about ethical use of computing by campus members, adapted from a similar policy created by the University of California, Santa Cruz.

Computing and Communications is committed to the highest level of computer ethics. Although it is not a written requirement, a majority of computer clients follow a set of ethical guidelines. Unfortunately, there have been incidents where a small minority display questionable behavior. Most often, these people are unaware of the gravity of what they are doing and of the possible consequences.

Ethical behavior comprises that class of actions that best respect the intended uses of the system for the good of the entire group of computer clients. Behavior is not ethical if it tends to restrict the access of others or gives higher priority or greater access to one client at the expense of the others. In other words, misuse of the system through attempting to become a super user, determining another person's passwords or running unnecessary jobs and printing are unethical.

Other examples are: gaining (or attempting to gain) access to privileged accounts; sending annoying messages to other users; using accounts for other than their intended purpose (e.g. playing games on an instructional or research account); using another person's account, and invading the privacy of others by accessing their files (even though these files may be publicly readable).

Computer system constraints, utility programs, and other controls are implemented to insure the widest available use of the system and the most efficient operation of the hardware. Attempts to defeat these controls are unethical and will not be tolerated.
The campus computing system is a resource for all users. Proper use of this resource depends upon each person displaying a conscientious and considerate attitude towards each and all other clients. Your cooperation is deeply appreciated. Specific to the ethical use of software, the following statement (developed by EDUCOM) has been endorsed by the university:

> Respect for intellectual labor and creativity is vital to academic discourse and enterprise. This principle applies to works of all authors and publishers in all media. It encompasses respect for the right to acknowledgment, right to privacy, and right to determine the form, manner, and terms of publication and distribution.

Because electronic information is volatile and easily reproduced, respect for the work and personal expression of others is especially critical in computer environments. Violations of authorial integrity, including plagiarism, invasion of privacy, unauthorized access, and trade secret and copyright violations, may be grounds for sanctions against members of the academic community.
From: **http://www.cnc.ucr.edu/policy/ethics.htm**

Web Pages of interest

Biological Sciences Graduate Student Affairs Center
http://www.bioscigrad.ucr.edu/

College of Natural and Agricultural Sciences Department and Program Seminars
http://cnas.ucr.edu/~cnas/deansoffice.html

General Catalog On-Line (saves you from buying one at the Bookstore!)
http://www.students.ucr.edu/catalog/

Graduate Division Student Handbook
http://www.graduate.ucr.edu/GSHndbk.pdf

UCR Graduate Student Association
http://www.gsa.ucr.edu/Home/home.html

Schedule of Classes
http://www.classes.ucr.edu

GROWL On-Line Registration
http://www.students.ucr.edu/paws/

UCR Libraries
http://library.ucr.edu/

UCR Housing Office
http://www.housing.ucr.edu/howzine/intro.html

City of Riverside (full of useful information about the city and area)
http://www.ci.riverside.ca.us/riverside/

How to be a Good Graduate Student (Composed by Marie desJardines at Indiana University) Contains a lot of valuable information about what it is like to be a Graduate Student, relationships with faculty, and the nature of graduate studies.
http://www.cs.indiana.edu/how.2b/how.2b.html

TAX INFORMATION FOR GRADUATE STUDENTS

Teaching Assistantships, Research Assistantships, and Fellowships are considered taxable income. Refer to the UCR Graduate Student Handbook for more information. Each year the Rivera Library and the Graduate Division have IRS publication materials available to students.

Tax Information for International Graduate Students

If you receive any salary from UCR during the year 2006, you should receive your W-2 form from the UCR Payroll Office. Your salary is reported on your W-2 form. The Payroll Office deducts federal and state tax from your monthly paycheck, unless you qualify for a tax treaty benefit (federal tax only).

If you receive a fellowship (for university fees or for a monthly stipend) during the year 2006, you will receive your 1042S form from the UCR Payroll Office. Your fellowship (including fees directly paid to your student account) will be reported on the 1042S form. According to tax regulations, you have to pay taxes for the amount of the fellowship which was paid in addition to a payment of your tuition and fees minus educational expenses. The Payroll Office does not deduct federal and state tax for fellowships. **If you received a monthly fellowship check in addition** to a payment of your tuition and fees, that amount must be reported as taxable income at the time of the tax return. In that case you will have to be prepared to pay additional taxes. You must file a federal **and** a state tax return and mail these forms with the appropriate W-2 and /or 1042S copy to the respective offices. All federal tax forms have to be mailed to the **Internal Revenue Service, Philadelphia, PA 19255**. The state tax form must be mailed to the Franchise Tax Board; the address is printed on the state tax return form.

If you received any salary, your tax return has to be mailed by:
April 15, 2007

Tax forms are available at the International Services Center, at the Rivera Library (Government Publications, 1st floor) and from the respective web sites. You can also contact the local offices at:

Internal Revenue Service
290 North D Street

State Franchise Board
215 North D Street, Suite 301

San Bernardino, CA 92401
Tel: 1-800-829-3676 **(forms)**

Tel: 1-800-829-1040 **(assistance)**
http://www.ftb.ca.gov/

San Bernardino, CA 92401
Tel: 1-800-338-0505 **(forms and assistance)**

http://www.irs.ustreas.gov/forms_pubs/forms.html

FEDERAL TAX: Students in F-1 and J-1 visa status are classified as **non-resident** aliens for the first **5 tax years** of stay in the U.S. and must file form **1040NR-EZ and form 8843**.
Non-residents cannot claim dependents (spouse and/or children) as exemptions, except for citizens of Canada, India, Japan, Korea, and Mexico **(who should file form 1040NR)**.
Tax Treaty Countries: If you are from a country which has an income tax treaty with the United States, and if your employment meets the treaty requirements, you may qualify for certain tax benefits. For UCR employment, tax treaty benefits should be reflected in your monthly salary deductions. If you do not owe any tax (no federal tax was deducted) due to the tax treaty benefits, **you still must file a federal income tax return**, or there will be a severe penalty: you will lose all your treaty benefits.

IRS Form 1098-T: If you received that form please disregard it**. You are not eligible for any benefits listed on that form.**

STATE TAX: As to the classification of non-resident aliens for tax purposes, the same rules apply as stated above for federal tax filing. Thus, most non-immigrant students and scholars are classified as **non-resident** aliens and should file form **540NR. However, non-residents can claim dependents (spouse and/or children who reside with them) as exemptions.** Tax treaties do not apply to state tax, therefore state tax has been deducted from your monthly pay, and you must file a state income tax return.

International Student Service Center will provide some support services for student preparing their taxes.